

Singapore

Two Financial Institutions currently invest or make available an estimated USD\$ 486.60 million in nuclear weapons companies.

Introduction

This document contains country specific information from the 2013 Don't Bank on the Bomb report. It identifies which financial institutions have significant financing relationships with one or more of the 27 nuclear weapons producers. There is also a brief summary of the nuclear weapons related work of each of the identified producers. This paper provides details about the nature and value of specific transactions and holdings of the financial institutions.

The financial institutions identified include banks, pension funds, sovereign wealth funds, insurance companies and asset managers. They have provided various types of financial services to nuclear weapon companies. The most important are loans, investment banking and asset management.

All sources of financing provided since 1 January 2010 to the companies listed were analysed from annual reports, financial databases and other sources. The financial institutions which are most significantly involved in the financing of one or more nuclear weapon companies are shown here. See the full report for both a summary and full description of all financial institutions which are found to have the most significant financing relationships with one or more of the 27 selected nuclear weapon companies, by means of participating in bank loans, by underwriting share or bond issues and/or by share- or bondholdings (above a threshold of 0.5% of all outstanding shares or bonds).

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Hall of Shame

This section contains the results of our research into which financial institutions are financing and/or investing in the 27 nuclear weapon companies. The analysis was performed according to the methodology and thresholds defined in the methodology explanations below. Each section provides the following information for each financial institution:

- The types of financial relations which the financial institution has with one or more 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 name of the receiving company, the amount, the date and (if known) the purpose for each financial relation. For loans and bonds the maturity date is given, as well as the interest rate.

DBS Group

DBS Group currently has an estimated USD\$ 456.60 million invested or available for the nuclear weapons producers identified in this report.

Loans

In November 2010, **Boeing** secured a one-year revolving credit facility with a value of US\$ 2,376 million. The proceeds were used to refinance the loan from November 2009 and for general corporate purposes. DBS Bank, a subsidiary of DBS Group, was part of the syndicate of 37 banks, participating with an estimated amount of US\$ 40.7 million.ⁱ

In December 2011, **Boeing** entered into a US\$ 4,600 million revolving credit facility. The facility was split in two tranches: a one-year US\$ 2,300 million tranche at a base rate of LIBOR+82.500bps, which replaced the loan secured in November 2010, and a five-year US\$ 2,300 million tranche at a base rate of LIBOR+79.500bps. The proceeds were used for refinancing bank debt and general corporate purposes. DBS New York, a subsidiary of DBS Group, participated in the syndicate of 35 banks, providing an estimated amount of US\$ 83.6 million.ⁱⁱ

In April 2011, **EADS** secured a five-year revolving credit facility with a value of € 3,000 million (US\$ 4,345.3 million), at a base rate of EURIBOR+37.500bps. The proceeds were used for refinancing and for general corporate purposes. DBS Bank, a subsidiary of DBS Group, participated in the 39 bank syndicate, committing an estimated amount of US\$ 111.4 million.ⁱⁱⁱ

In March 2011, **Honeywell International** secured a five-year revolving credit facility with a value of US\$ 2,800 million. The proceeds were used for general corporate purposes. DBS Bank, a subsidiary of DBS Group, participated in the 29 bank syndicate, committing an amount of US\$ 50 million.^{iv}

In August 2011, **Lockheed Martin** secured a five-year revolving credit facility with a value of US\$ 1,500 million at a base rate of LIBOR+100.000bps. The proceeds were used for general corporate purposes. DBS Bank, a subsidiary of DBS Group, participated in the 21 bank syndicate, committing an amount of US\$ 37.5 million.^v

In May 2011, Rolls-Royce & Partners Finance, a subsidiary of **Rolls-Royce**, entered into a US\$ 1,050 million term loan due May 2014. The proceeds were used for general corporate purposes. DBS Bank, a subsidiary of DBS Group, participated in the 19 bank syndicate, committing an estimated amount of US\$ 55.3 million.^{vi}

In October 2011, **Rolls-Royce** secured a five-year revolving credit facility with a value of £ 1,000 million (US\$ 1,543.2 million). The proceeds were used to refinance two existing syndicated facilities and for general corporate purposes. DBS Bank, a subsidiary of DBS Group, participated in the 23 bank syndicate, committing an estimated amount of US\$ 46.3 million.^{vii}

In March 2012, **Serco** secured a £ 730 million (US\$ 1,159.39 million) revolving credit facility due March 2017. The proceeds were used for refinancing the company's existing US\$ 500 million and £ 400 million credit facilities and certain other bilateral facilities, and for general corporate purposes. DBS Bank, a subsidiary of DBS Group, was part of the syndicate of 16 banks, participating with an estimated amount of US\$ 72.5 million.^{viii}

United Overseas Bank

United Overseas Bank currently has an estimated USD\$ 30.00 million invested or available for the nuclear weapons producers identified in this report.

Loans

In October 2010, **Alliant Techsystems** secured a US\$ 1,000 million five-year credit facility, comprising a US\$ 600 million revolver and a US\$ 400 million term loan. The proceeds were used for refinancing, to increase working capital and to finance capital expenditures and acquisitions. United Overseas Bank was part of the syndicate of 20 banks and provided US\$ 30 million.^{ix}

Hall of Fame and Runners-up

To identify financial institutions with a policy on nuclear weapons, we researched a variety of sources: NGO reports, screening-agency information, financial institutions' reports and websites, information from campaigners worldwide and other public sources. Based on these, a list of financial institutions was compiled which could possibly have a specific nuclear weapons policy. **This is not a comprehensive list.** Websites and other publications of these financial institutions were researched to check their nuclear weapon policy. In addition, each of the Hall of Fame institutions were contacted before this report was published to confirm their institution description and to clarify any outstanding questions on their policies or investments.

The financial institutions for which a nuclear weapons policy was actually found, were grouped in two categories. Financial institutions with a clear and comprehensive nuclear weapons exclusion policy are included in the "Hall of Fame", while financial institutions whose nuclear weapons policy is less strict or clear are included in the "Runners-up" category. To be included in the Hall of Fame, the nuclear weapons policy of the financial institution must meet the following criteria:

- The financial institution has published its policy and/or a summary of it;
- The policy excludes investments in nuclear weapon companies (withdrawing past investments and avoiding future investments)
- The policy has an 'all-in' comprehensive scope:
 - no exceptions for any types of nuclear weapon companies
 - no exceptions for any types of activities by nuclear weapon companies
 - no exceptions for any type of financing or investment by the financial institution

Financial institutions whose nuclear weapon policy does not meet all of the above criteria are included in the "Runners-up" category.

No financial institutions were identified with a clear and comprehensive nuclear weapons exclusion policy.

Methodology

Which financial institutions are involved in the financing of the selected nuclear weapon companies was researched by using 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). Used resources are clearly mentioned.

If the amounts per financial institution were known, these amounts were used. 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 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 participants.
- In the case of share- and bondholdings, the amounts are always known, so no estimate was needed.

All forms of financing meeting the specified criteria are identified, providing the following information for each form of financing:

- Name of the company receiving financing;
- Type of financing (loan, guarantee, share issuance, bond issuance, share ownership, bond ownership, other);
- Total amount;
- Date;
- Purpose (if known);
- For loans and bonds: Maturity and interest rate;
- Name and country of origin of the financial institutions involved;
- Amounts provided by each financial institution.

A full overview of all financial institutions involved in financing the 27 selected nuclear weapons companies is provided in a separate spreadsheet available upon request. In this report, we have focussed on the financial institutions which are found to have the most significant financing relationships with one or more of the 27 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 27 companies since 1 January 2010;
- All financial institutions which own at least 0.5% of the outstanding shares of at least one of the 27 companies.

Details on the loans and underwriting they were involved in since early 2010 and the shareholdings and bondholdings they own or manage (when above 0.5% of the outstanding shares or bonds) in relation to the 27 selected companies, are reported by financial institution.

Definitions

The following definitions are used in this report:

- **Financial institutions:** banks, pension funds, asset managers, insurance companies and other financial institutions from any country in the world;
- **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 loans and underwriting deals since 1 January 2010 are considered to be of substantive importance. Also loans which have been closed before that date but have not yet matured at the time of writing are included.
- Share- and bond holdings at the most recent filing date are considered to be substantive if they cross the threshold of 0.5% of the company's outstanding shares or bonds.
- **Nuclear weapon companies:** all companies involved in producing or maintaining nuclear weapons or significant, specific components thereof. Which share this activity constitutes of the company's turnover is not deemed relevant;

Nuclear Weapons Producers

Aecom (United States)

Aecom provides professional technical and management support services and along with Babcock & Wilcox, Northrop Grumman and CH2M Hill manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

Alliant Techsystems (United States)

Alliant Techsystems (ATK) produces rocket propulsion systems for Trident II submarine launched ballistic missiles. ATK was also responsible for refurbishing the Minuteman III intercontinental ballistic missiles to keep them operational until at least 2030.

Babcock & Wilcox (United States)

Babcock & Wilcox and its subsidiaries manage and operate several US nuclear weapons facilities including the Y-12 National Security Complex, Savannah River Site, Kansas City Plant, Los Alamos National Laboratory and Sandia National Laboratories. It also manages and operates the Pantex plant of the National Nuclear Security Administration where nuclear warhead modernisation takes place.

Babcock International (United Kingdom)

Babcock International is involved in the long-term technical engineering support and will provide the launch system for a new class of submarines equipped with nuclear missiles for the UK Royal Navy. It is also involved in the maintenance of the four Vanguard-class submarines of the British navy, each of which carries 16 Trident nuclear weapons.

BAE Systems (United Kingdom)

BAE Systems is involved in the development of a new class of nuclear-armed submarine for the United Kingdom to replace the Vanguard class. It was also part of a joint venture that produced nuclear missiles for the French air force.

Bechtel (United States)

Bechtel manages the Los Alamos and Lawrence Livermore national laboratories in the United States, which research, design and develop nuclear weapons, and monitor the "safety and reliability" of the entire US nuclear weapons stockpile as well as the Y-12 National Security Complex where nuclear weapons are produced and refurbished.

Bharat Electronics (India)

Bharat Electronics is involved in the development of the Akash, a mid-range surface-to-air nuclear-capable missile system developed by India's state-owned Defence Research and Development Organisation (DRDO).

Boeing (United States)

Boeing is involved in the maintenance of the Minuteman III nuclear intercontinental ballistic missiles in the US arsenal. It is responsible for guidance, flight controls, secure codes, weapons systems testing and engineering. Boeing also produces the B-52 Stratofortress, which is a long-range, strategic heavy bomber capable of dropping or launching nuclear cruise missiles.

CH2M Hill (United States)

CH2M Hill, together with Aecom, Babcock & Wilcox and Northrop Grumman, is a joint venture partner 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.

EADS (The Netherlands)

The European Aeronautic Defence and Space Company, or EADS, is a Dutch company that produces and maintains submarine-launched nuclear missiles for the French navy, and is part of a joint venture that built nuclear missiles for the French air force.

Fluor (United States)

Fluor is the lead partner in Savannah River Nuclear Solutions (SRNS), responsible for site management and operation, environmental management, management of the nuclear arsenal, the removal of excess nuclear materials, and environmental services. The Tritium Extraction Facility at the Savannah River Site is the only source of new tritium for the US nuclear stockpile.

GenCorp (United States)

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.

General Dynamics (United States)

General Dynamics provides maintenance, engineering and technical support for US nuclear-armed submarines. It built the Ohio-class submarines for the US navy, many of which are equipped with Trident nuclear-tipped missiles.

Honeywell International (United States)

Honeywell International produces approximately 85 per cent of the non-nuclear components for US nuclear weapons, as well as tritium production at the Savannah River Site. It is involved in simulated nuclear testing and the life-extension programme for the US navy's Trident II nuclear missiles.

Huntington Ingalls Industries (United States)

Huntington Ingalls Industries (HII) designs, constructs and maintains nuclear and non-nuclear

ships for the US Navy and Coast Guard. It is also involved in for site management and operation, environmental management, management of the nuclear arsenal, the removal of excess nuclear materials, environmental services, and tritium production at the Savannah River Site.

Jacobs Engineering (United States)

Jacobs Engineering Group owns a one-third share in the joint venture AWE-ML, the company that manages the UK Atomic Weapons Establishment, which designs, manufactures and maintains the nuclear warheads for the United Kingdom's submarine-launched intercontinental ballistic missiles.

Larsen & Toubro (India)

Larsen & Toubro is involved in designing and building the Advanced Technology Vessel, the future nuclear-armed submarine of the Indian navy. It is also responsible for developing the launcher system for the nuclear-capable surface-to-air Akash missile system

Lockheed Martin (United States)

Lockheed Martin is involved in the production and maintenance of nuclear weapons for both the United States and United Kingdom. It is responsible for the construction of submarine-launched Trident II D5 nuclear missiles.

Northrop Grumman (United States)

Northrop Grumman Corporation is responsible for the production and maintenance of the Minuteman III nuclear Intercontinental Ballistic Missiles (ICBM). It is also the managing partner of NSTec, the consortium that maintains the Nevada National Security Site (NNSS), previously known as Nevada Test Site.

Rockwell Collins (United States)

Rockwell Collins is involved in the Minuteman Modernization Program Upgrade. The company was selected to improve the satellite communications capacity of the Minuteman Launch Control Centers.

Rolls-Royce (United Kingdom)

Rolls-Royce is part of a joint venture in the United Kingdom to develop Successor, a new class of nuclear-armed submarine. It is also involved in the

maintenance of the existing fleet of Vanguard-class nuclear-armed submarines.

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.

SAIC (United States)

Science Applications International Corporation (SAIC) supports the development and deployment of production technologies for materials, production, purchasing, and inspection and testing of replacement parts used in nuclear weapons and ballistic missiles, and for joint test assemblies.

Serco (United Kingdom)

Serco owns a one-third share in the joint venture AWE-ML, which runs the British Atomic Weapons Establishment. It is responsible for manufacturing and maintaining the nuclear warheads for the country's submarine fleet.

Thales (France)

Thales is part of a joint venture to build the new M51 submarine-launched nuclear missiles for the French navy, which each deliver multiple warheads. EADS's subsidiary Astrium is the lead contractor, whereas Thales is a main subcontractor.

ThyssenKrupp (Germany)

ThyssenKrupp's division ThyssenKrupp Marine Systems (TKMS) is building the Dolphin submarines for the Israeli army. Construction is taking place in Germany, according to Israeli design specifications, hosting Israeli-developed command, control and combat systems including, according to various media reports, land-attack and cruise missiles capable of carrying nuclear warheads

URS (United States)

URS is a fully integrated engineering, construction and technical services organization responsible for managing the Los Alamos and Lawrence Livermore National Laboratories for the US. For both labs, URS is responsible for managing the labs' nuclear and other technically complex operations.

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