

## Paying for the War

Have you ever wondered just how the British Government physically paid for all of the military hardware it ordered from British companies in WWII? They didn't just send a man round to the factory with the cash in a bag. Quite often they didn't have the money anyway.

With America it had been different. When buying aircraft etc. from the U.S. before America entered the war Britain paid in U.S. dollars or gold. When that ran out, the supplies dried up. Then, Lend Lease came into effect and America started up supplies again whereby Britain agreed to pay later after the war was won. That lasted for just a few months until the Japanese attacked Pearl Harbour and at the same time Germany declared war on America. From that moment Britain and America were fighting a common enemy and the U.K. received supplies from America free of charge under the Reciprocal Aid agreement.

You may have heard stories about Britain paying off the war debt to America for decades after the war ended. Payments did indeed take place post war, but it had been agreed from the beginning that Lend Lease would come to an end when the war ended, although at that time the end date was unknown. When it finally happened in August 1945 it came as a shock to the British government. They thought there would be talks and an agreement for gradual winding down of the arrangement. The fact was that Britain was still almost wholly dependent on these supplies from America and was in no position to see them halted.

In 1946 the U.S. and Britain negotiated a \$3.75 billion loan (equivalent to about \$60 billion today) to help Britain transition out of wartime economic dependency. This loan came with an interest rate of 2% with payments beginning in 1951 and lasting until 2006.

**Back to British companies** - During **World War II**, the British government used a combination of **direct contracts, financial incentives, and nationalisation** to pay companies for producing war materials. Here's how they did it physically and financially:

### **1. Direct Contracts & Payments**

The government issued contracts to private companies to manufacture military goods, such as planes, tanks, and ammunition. Payments were made using government-issued funds, often through:

- **Bank transfers** (via the Bank of England and commercial banks)
- **Paper cheques** issued to companies
- **War bonds and financial credits** to firms to cover initial costs

### **2. Cost-Plus Contracts**

The government often used "**cost-plus**" **contracts**, meaning companies were reimbursed for production costs **plus** a guaranteed profit. This ensured manufacturers had no financial risk. Payments were made periodically, based on completed work.

### **3. Nationalization of Key Industries**

Certain industries (e.g., aircraft production, coal mining) were **nationalised**, meaning the government took control and directly funded production. Workers were paid from government budgets.

#### 4. War Bonds & Deficit Spending

The government financed payments through **war bonds, loans, and taxation**. Large sums were borrowed from the **Bank of England** and international lenders, particularly the United States under **Lend-Lease**.

#### 5. Material and Resource Allocation

Instead of direct cash, some payments were made in the form of **raw materials**, such as steel and fuel, which the government controlled through rationing and allocation.

In summary, British companies were physically paid via **bank transfers, cheques, government credits, and direct resource allocation**, all backed by war-time financial policies.

#### Paying for the Army - Using Tank Production as an Example

Tank manufacturing for the British Army during **World War II** was heavily funded and controlled by the government. Here's how companies were **physically paid** and how the process worked:

##### 1. Contracts & Payments to Manufacturers

The British government, primarily through the **Ministry of Supply**, issued contracts to private firms to produce tanks. Payments were made through:

- **Bank transfers** (via the Bank of England and commercial banks)
- **Paper cheques** for milestone completions
- **Cost-plus contracts**, where the government paid production costs plus a guaranteed profit

##### 2. Major Tank Manufacturers & Their Payments

Several companies built tanks under government contracts:

- **Vauxhall Motors** → Churchill tank
- **Leyland Motors** → Cromwell tank
- **Birmingham Railway Carriage and Wagon Company** → Churchill and Valentine tanks
- **Harland and Wolff** → Churchill tanks
- **Metropolitan-Cammell** → Crusader and Centaur tanks

These companies received direct government funding, either upfront or in instalments as they completed production goals.

##### 3. Government-Owned Factories (ROFs)

The government also built and operated **Royal Ordnance Factories (ROFs)**, where workers were paid **directly by the state**. No private company was involved in funding these, as the government controlled them entirely.

##### 4. Lend-Lease & International Payments

Britain also **imported tanks** (like the Sherman) from the U.S. through **Lend-Lease**, meaning the British government didn't pay in cash but through deferred payments and gold reserves, and then reciprocal aid after the Japanese attack on Pearl Harbour.

## 5. Material & Resource Payments

Instead of just money, manufacturers often received **raw materials** (steel, rubber and fuel) directly from the government. These were allocated based on production needs rather than purchased outright.

### Conclusion

British tank manufacturers were paid through a mix of **direct government payments, contracts, and resource allocation**. The war economy meant profit was controlled, and efficiency was prioritised over private financial gain.

## SHIPBUILDING

Shipbuilding during **World War II** in Britain was a massive, government-funded effort. The British government, primarily through the **Admiralty (for the Royal Navy)** and the **Ministry of War Transport (for merchant ships)**, paid companies to build warships and cargo vessels using a mix of **direct payments, cost-plus contracts, and nationalisation**.

### 1. How Shipbuilders Were Paid

Shipyards were paid through:

- **Direct government contracts** issued by the Admiralty or Ministry of War Transport.
- **Cost-plus contracts**, where companies were reimbursed for materials and labour **plus** a guaranteed profit.
- **Lump-sum payments** for specific ship orders, paid in instalments as construction milestones were met.
- **Bank transfers or paper cheques** from the government via the **Bank of England** and commercial banks.

### 2. Major British Shipyards & Their Role

Several shipyards were critical to wartime production:

- **John Brown & Company (Clydebank)** → Built warships like HMS Hood and aircraft carriers.
- **Harland & Wolff (Belfast & Glasgow)** → Built battleships, destroyers, and escort carriers.
- **Vickers-Armstrong (Newcastle & Barrow-in-Furness)** → Built submarines, destroyers, and cruisers.
- **Cammell Laird (Birkenhead)** → Built battleships, aircraft carriers, and escort vessels.
- **Swan Hunter (Tyneside)** → Produced escort destroyers and merchant ships.

### 3. Royal Navy Warships vs. Merchant Ships

- **Royal Navy Ships (Battleships, Aircraft Carriers, Destroyers, Submarines)**
  - Funded by the **Admiralty**, often using **cost-plus contracts**.

- High-priority warship builders got direct **government material allocations** (steel, engines and armour).
- Payments made in **stages** (keel laying, launching, completion).
- **Merchant Ships (Liberty & Empire Ships, Cargo Vessels)**
  - Paid for by the **Ministry of War Transport** to keep Britain's trade and supply routes open.
  - Many were built in "**shadow yards**", private shipyards that were effectively government-run.
  - Britain also **leased ships from the U.S.** under Lend-Lease, deferring payment.

#### 4. Nationalisation & Control of Shipbuilding

- While most shipyards remained **privately owned**, the government **controlled** production priorities and materials.
- Some shipyards were **taken over by the state** if they were not producing efficiently.
- The workforce was also partly **conscripted**, meaning some workers were assigned by the government instead of being freely hired.

#### 5. Payment in Materials & Resources

Instead of just money, the government also **supplied raw materials** (steel, rivets and engines) directly to shipbuilders. These materials were rationed and allocated based on military needs.

#### Conclusion

British shipbuilders were paid primarily through **government contracts, direct financial transfers, and material allocations**. The state ensured shipyards had the resources they needed but controlled production tightly.

#### AIRCRAFT Production in Britain During WWII: How Companies Were Paid

Aircraft production was a **top priority** for the British government, especially after the Battle of Britain (1940). The government **directly paid manufacturers** using various financial models, controlled resources, and even nationalised some production.

##### 1. How Aircraft Companies Were Paid

The British government, primarily through the **Ministry of Aircraft Production (MAP)**, paid manufacturers using:

- **Cost-plus contracts** → The government covered production costs **plus** a fixed profit.
- **Lump-sum payments** → Paid in stages based on milestones (design approval, prototype completion, production runs).
- **Direct nationalisation** → Some factories were taken over entirely, and workers were paid directly by the government.
- **Resource allocation** → Instead of cash, companies received raw materials (aluminium, engines, fuel and rubber) from government-controlled supply chains.

Payments were made via:

- **Bank transfers from the Bank of England**

- **Paper cheques issued through government offices**
- **Credit extensions for continued production**

## 2. Major Aircraft Manufacturers & Their Government Funding

Several companies built aircraft under direct government contracts:

- **Supermarine (Spitfire)** → Funded by MAP, with the Castle Bromwich factory nationalised for mass production.
- **Hawker Aircraft (Hurricane, Typhoon, Tempest)** → Received direct payments for both design and production.
- **Avro (Lancaster, Anson, Manchester bombers)** → Funded under RAF contracts.
- **Bristol Aeroplane Company (Beaufighter, Blenheim bombers)** → Direct contracts plus government-managed material supply.
- **Vickers-Armstrong (Wellington, Warwick bombers)** → Paid via cost-plus contracts.
- **De Havilland (Mosquito, Tiger Moth)** → MAP paid for prototype development and mass production.

## 3. Shadow Factories & Nationalisation

- **Shadow Factory System** → To expand aircraft production, the government built and funded "shadow factories", which were **privately operated but state-funded**.
- **Examples:**
  - **Austin Motors (Birmingham)** → Built Spitfires under MAP supervision.
  - **Rolls-Royce (Derby & Crewe)** → Produced Merlin engines with direct government funding.
  - **Bristol Engine Company** → Mass-produced radial engines for bombers.
- Some **factories were nationalised** when private companies couldn't meet demand. The government paid workers directly in these cases.

## 4. RAF Contracts vs. Export Sales

- Aircraft for the **RAF** were funded **entirely by the British government** through military budgets.
- Some aircraft were built for **export sales** (e.g., Hurricanes for the Soviet Union), where payment came through trade deals or Lend-Lease agreements.

## 5. Lend-Lease & U.S. Aircraft

- Britain **imported** aircraft from the U.S. under **Lend-Lease** (e.g., P-51 Mustangs, B-17 bombers).
- No cash payment was required upfront—Britain initially provided gold reserves, and then **Reciprocal Aid** in return.

## 6. Payment in Materials & Labour

- Instead of direct cash, aircraft manufacturers received **priority access** to materials (aluminium, steel, engines and tyres).
- Skilled labour was sometimes **conscripted or assigned by the government**, reducing costs for manufacturers.

## Conclusion

Aircraft production was **heavily government-controlled**, with companies paid through **direct contracts, resource allocation, and nationalisation**. The state ensured that aircraft were built at any cost, even if it meant taking over private factories.