

# FIGURE 62

## CUMULATIVE COSTS OF THE WORLD WAR TWO ATOMIC PROGRAM (THROUGH DECEMBER 31, 1945)

	Nominal 1945 Dollars	Constant 2014 Dollars
OAK RIDGE	1,188,352,000	20,141,852,260
HANFORD ENGINEER WORKS	390,124,000	6,612,366,929
SPECIAL OPERATING MATERIALS	103,369,000	1,752,041,826
LOS ALAMOS PROJECT	74,055,000	1,255,188,183
RESEARCH AND DEVELOPMENT	69,681,000	1,181,050,779
GOVERNMENT OVERHEAD	37,255,000	631,449,290
HEAVY WATER PLANTS	26,768,000	453,701,849
<b>Grand Total</b>	<b>1,889,604,000</b>	<b>32,027,651,116</b>

Source: Brookings Institution, "The Costs of the Manhattan Project"

<http://www.brookings.edu/about/projects/archive/nucleonics/manhattan>.

Constant 2014 Dollars estimated from 1996 values reported in the Brookings Institution report, using the CPI available at Lawrence H. Officer and Samuel H. Williamson, "The Annual Consumer Price Index for the United States, 1774–2014," MeasuringWorth, 2015. URL: <http://www.measuringworth.com/usdpi/>.

defining feature of international relations in the post-war world.

To put it mildly, World War II disrupted the international economic system, and the foundation for reconstructing it in the postwar period was called the Bretton Woods system. The Bretton Woods system was primarily a set of rules for determining exchange rates: the new system made the U.S. dollar convertible into gold at a fixed price of \$35 per ounce, and it made other currencies convertible into the U.S. dollar. The conference at which these new exchange rate rules were created was held in Bretton Woods, New Hampshire, where the International Monetary Fund (IMF) and what would later be called the World Bank were both created. The IMF was responsible for monitoring exchange rates and lending to countries that were running trade deficits. The World Bank was responsible for providing capital to underdeveloped economies around the world. Both the IMF and World Bank continue to operate today, although the Bretton Woods exchange rate system ended in 1971, when President Nixon broke the link between the U.S. dollar and gold. Today, countries are free to choose their exchange rate systems (including allowing their currencies to float freely, adopting the currencies of other countries, or forming monetary unions).

Britain remained a powerful military force and an advanced economy after the war, but it never regained its nineteenth-century dominance. In 1949, Germany was split into East and West Germany. East Germany was a

satellite state of the Soviet Union while West Germany became part of the newly formed **North Atlantic Treaty Organization (NATO)** in 1955. The Berlin Wall, which was built in 1961, demarcated the two sections of Berlin and became perhaps the most symbolic representation of the new post-war tensions between the communist East and the capitalist West.

Benito Mussolini's fascist government in Italy was the first of the Axis powers to fall. It surrendered on September 8, 1943, weeks after Mussolini was deposed. Italy formally became a republic shortly after the end of World War Two, on June 2, 1946.

Japan was decimated by World War Two, but the victorious allies soon took to rebuilding the Japanese economy between 1945 and 1952. General Douglas MacArthur was responsible for leading the economic and political reforms. Consistent with economic theory, Japanese economic growth was remarkable in the post-war period, especially between the 1950s and 1970s, precisely because so much of the country had been destroyed during the war.<sup>54</sup> For instance, Japan's real GDP grew at an average annual rate of over 9 percent between 1946 and 1960; by contrast, the U.S. economy only grew at a 3.5 percent annual rate over that same period. The Japanese economic miracle was so astounding that by the 1980s, many Americans had become concerned that Japan was surpassing the United States as the leading economic power in the world.