

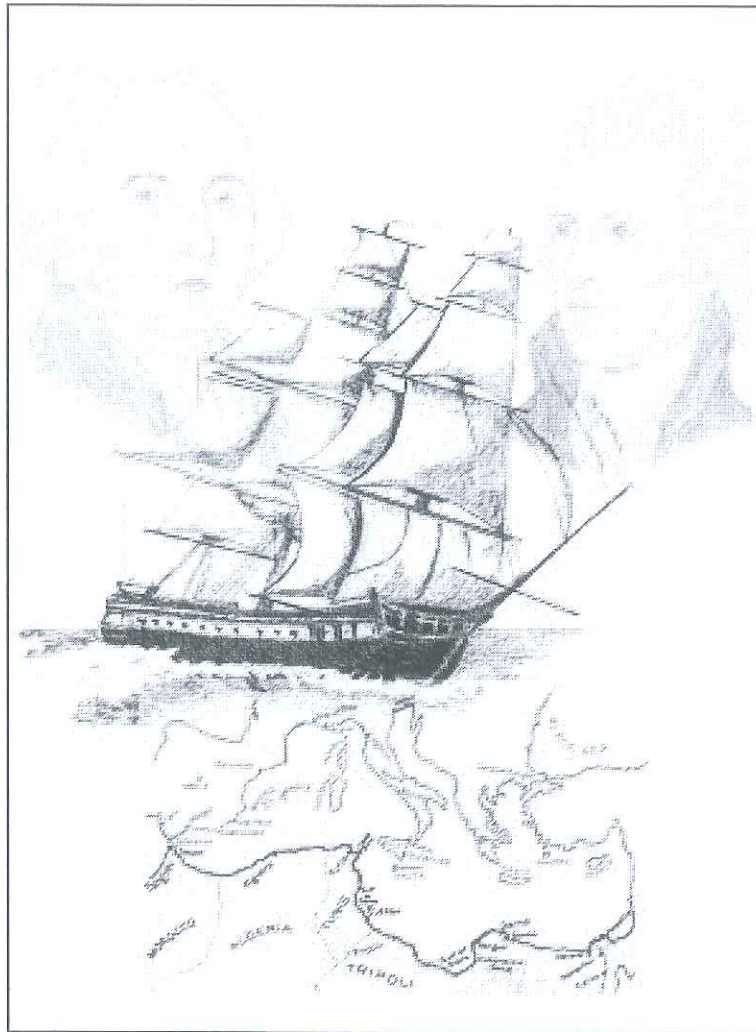
John Adams, Thomas Jefferson, and the Barbary Pirates: An Illustration of Relevant Costs for Decision Making

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ABSTRACT: The concepts of incremental cost, opportunity cost, sunk cost, and cost allocation are identified and discussed in the context of early U.S. foreign policy. The case is derived from an authentic exchange of views between Thomas Jefferson and John Adams about how the United States should protect its merchant shipping against the Barbary pirates. Both men compare the cost of waging war against the Barbary States with the cost of paying ransom for captured U.S. seamen and bribes to protect future shipping. Adams quantifies the opportunity cost associated with not taking any action. Jefferson articulates an incremental costing argument, on the assumption that the U.S. should build a navy regardless of U.S. policy toward the Barbary States. The case constitutes a brief introduction to management accounting by illustrating various cost concepts. The case lends itself to a discussion of how cost information can be chosen to support a particular course of action, and it can also prompt a discussion of the historical origins of management accounting.

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The beginning of wisdom in using accounting for decision-making is a clear understanding that the relevant costs and revenues are those which as between the alternatives being considered are expected to be different in the future. It has taken accountants a long time to grasp this essential point.

—R. H. Parker (1969, 15)

BACKGROUND

The Barbary Pirates

Throughout the seventeenth and eighteenth centuries, the North African Barbary States of Morocco, Algiers, Tunis, and Tripoli engaged in piracy of European merchant shipping. The Barbary pirates routinely captured and confiscated ships and cargo, and enslaved or ransomed their crews and passengers. England, France, and Spain entered into treaties with the Barbary States, in effect, paying “protection money” for their merchant shipping. These powerful European nations preferred bribery to war, in part because they perceived an economic benefit from the threat the pirates posed to the merchant shipping of other European nations.

Until the Revolutionary War, merchant ships from the American Colonies were protected by the British Navy and by treaties between England and the Barbary States. American shipping lost this protection after the war. Within three years of the Treaty of Paris, which formally ended the war in 1783, three American ships were captured, one by Morocco and two by Algiers. Morocco soon freed the American crew in exchange for a ransom of 5,000 pounds sterling (about \$25,000).¹ The crews held by the Algerians were captive throughout 1786 and for some time thereafter. See Exhibit I.

Historical Background

The capture of American ships by the Barbary pirates created an early and important foreign policy crisis for the United States. The U.S. response to the Barbary crisis was strongly influenced by two factors: one military and the other financial. The military consideration was that the U.S. had no navy. The Continental Navy of the Revolutionary War was disbanded in 1784, and the navy was not reestablished until the Navy Act of 1794. During the intervening years, the U.S. had minimal naval power. Disbanding the Continental Navy was primarily a cost-savings measure. However, there were also important nonfinancial arguments for and against the navy. Some Americans who favored reestablishing close ties with England feared that the presence of a U.S. navy on the high seas would lead to confrontations with the British Navy. Other Americans, including John Adams, viewed a strong navy as the best national defense against foreign threats. Many Americans preferred the prospect of building a navy over an army due to their general distrust of standing armies—the result of their experience with the British occupation in America during the latter part of the Colonial Era.

The financial factor that influenced the U.S. response to the Barbary pirates was that any effective response would require a significant expense relative to the government's available funds. The U.S. government found itself in a precarious financial condition in the years immediately following the Revolutionary War. The Continental Congress and individual states borrowed over \$40 million to finance the war, including about \$6 million from France. From 1781 to 1788, the period during which the United States operated under the Articles of Confederation, the federal government did not have the power to tax its citizens, levy tariffs, or regulate commerce. The cost of operating the government during this time was about \$500,000 annually, not including funding the debt (Hicks et al. 1970, 103). Some income was generated by the post office and from sales of public lands, but the two principal revenue sources available to the government were requesting support from the states and issuing paper money. State contributions to the federal government constituted only a small fraction of what was needed, and issuing paper money was an inflationary measure that had already been used extensively during the Revolutionary War. The financial plight of the new nation was sufficiently acute that during this period, the government borrowed from foreign sources just to meet the interest obligations on existing foreign debt.

The ratification of the Constitution in 1788 greatly enhanced the powers of the federal government and allowed the new Congress to levy and collect duties and taxes. However, the ability of the new government to actually enact and enforce revenue-generating measures was untested, and evolved over time. In 1786, during the Confederation period, and again in 1794, during Washington's presidency, popular opposition to taxation led to civil unrest. The first incident, Shays' Rebellion, arose in Massachusetts when the State Legislature levied taxes to pay off the war debt. The second incident, the Whiskey Rebellion, occurred in Western Pennsylvania when the federal government imposed an excise tax on distilled liquor. Also, although the federal government had more potential resources under the Constitution than under the Articles of Confederation, it soon had more obliga-

¹ To provide a sense of the value of the dollar at that time: the U.S. Navy Office of Information reports that the cost to construct the U.S.S. *Constitution* in 1797 was approximately \$300,000, which is equivalent in purchasing power to approximately \$4 million today. Obviously, the *Constitution* is not comparable to a modern warship; the cost to build a *Ticonderoga* class Cruiser is about \$1 billion.

EXHIBIT 1
Timeline

Government under Articles of Confederation	Washington's Presidency	Adams's Presidency	Jefferson's Presidency	Madison's Presidency
<u>1781–1788</u>	<u>1789–1797</u>	<u>1797–1801</u>	<u>1801–1809</u>	<u>1809–1817</u>
1783: Treaty of Paris ends the Revolutionary War	1793: Algiers seizes more ships and hostages	1797: U.S.S. <i>Constitution</i> launched	1801: Start of Tripolitan War	1812: Jefferson and Adams resume correspondence after 12-year hiatus
1784–1785: Jefferson joins Adams in Europe; they are authorized to negotiate with the Barbary States; Morocco and Algiers seize three merchant ships; Continental Navy disbanded	1794: Congress passes Navy Act	1798–1801: Quasi-War with France	1803–1804: Heaviest naval action of the war	1812–1814: War of 1812
1786: Morocco signs treaty	1795–1797: Algiers signs treaty, hostages released		1805: Tripoli signs treaty favorable to U.S.	1815: Naval action against Algiers

tions. In 1790, under a plan advanced by Secretary of the Treasury Alexander Hamilton, the federal government assumed the remaining war debts that were owed by the individual states.

However, despite financial tribulations at both the state and federal levels, economic conditions in the United States during this period were generally good. A short recession that occurred after the Revolutionary War was followed by a period of economic growth. The strong economy led to increased federal revenues, and that fact, combined with the success of American leaders in keeping the nation out of the growing conflict between England and France, enabled the government to become current on its obligations under the national debt during Jefferson's administration.

THE ADAMS–JEFFERSON CORRESPONDENCE

In 1786, John Adams was the leading U.S. diplomat in London, and Thomas Jefferson was the U.S. ambassador to France. A few years earlier, in 1784, the Continental Congress had authorized Adams and Jefferson to negotiate treaties with the Barbary States (Kitzen 1993, 10). Consequently, the responsibility to negotiate the release of the captured American seamen, and to establish U.S. foreign policy that would protect U.S. shipping in the Mediterranean, fell largely to these two men. Against this backdrop, Adams sent Jefferson a letter that included the following analysis:

Adams to Jefferson

Grosvenor Square June 6. 1786

Dear Sir

... The first Question is, what will it cost us to make Peace with all [of the Barbary States]? Set it if you will at five hundred Thousand Pounds Sterling, tho I doubt not it might be done for Three or perhaps for two.

The Second Question is, what Damage shall we suffer, if we do not treat.

Compute Six or Eight Per Cent Insurance upon all your Exports, and Imports. Compute the total

Loss of all the Mediterranean and Levant Trade.

Compute the Loss of half your Trade to Portugal and Spain.

These computations will amount to more than half a Million sterling a year.

The third Question is what will it cost to fight them? I answer, at least half a Million sterling a year without protecting your Trade, and when you leave off fighting you must pay as much Money as it would cost you now for Peace.

The Interest of half a Million Sterling is, even at Six Per Cent, Thirty Thousand Guineas a year. For an Annual Interest of 30,000 £ st. then and perhaps for 15,000 or 10,000, we can have Peace, when a War would sink us annually ten times as much. (Cappon [1959] 1988, 133–134)

In the last paragraph of the excerpt, Adams states interest expense in terms of guineas. A guinea was worth about one pound sterling. Jefferson responded to Adams a few weeks later:

Jefferson to Adams

Paris July 11. 1786

Dear Sir

... I ask a fleet of 150. guns, the one half of which shall be in constant cruise. This fleet built ... will cost 450,000 £ sterling. Its annual expence is 300 £ sterl. a gun, including every thing: this will be 45,000 £ sterl. a year. ... Were we to charge all this to the Algerine war it would amount to little more than we must pay if we buy peace. But as it is proper and necessary that we should establish a small marine force (even were we to buy a peace from the Algerines,) and as that force laid up in our dockyards would cost us half as much annually as if kept in order for service, we have a right to say that only 22,500 £ sterl. per ann. should be charged to the Algerine war. (Cappon [1959] 1988, 142–143)

Correspondence between Adams and Jefferson tapered off in the early 1790s, when their political differences became increasingly irreconcilable, and ceased altogether shortly after Jefferson defeated Adams in the Presidential election of 1800. However, beginning in 1812, after both men had retired from public life, they renewed their friendship and began an active correspondence that would continue for the rest of their lives. Adams and Jefferson both died on July 4, 1826, the fiftieth anniversary of the signing of the Declaration of Independence.

One of the letters from this latter period is relevant to the current discussion, because it reveals Jefferson's attitude toward the navy, and more specifically, his assessment of the economic life of a ship:

Jefferson to Adams

Monticello Nov. 1. 1822.

Dear Sir

... Yet a navy is a very expensive engine. It is admitted that in 10. or 12. years a vessel goes to entire decay; or, if kept in repair costs as much as would build a new one. And that a nation who could count on 12. or 15. years of peace would gain by burning it's navy and building a new one in time. (Cappon [1959] 1988, 584–585)

CASE QUESTIONS

1. Adams calculates costs under three alternative policies: (1) negotiate with the Barbary States; (2) wage war against the Barbary States; and (3) do nothing. Under the first two scenarios, his cost calculation represents projected cash outflows for the U.S. government. The “do nothing” scenario, however, includes some “costs” that would require no cash outlay by either the government or its citizens. What is the relevance of this third cost calculation, and what is the

- relationship of the cost of “doing nothing” to the other two costs calculated by Adams?
2. How does Jefferson derive the amount of 22,500 pounds sterling per annum, and what does he mean by the statement: “we have a right to say that only 22,500 pounds ... should be charged to the Algerine War”?
 3. Evaluate Jefferson’s reasoning in his 1822 letter. Do you agree with his logic? This letter does not specifically identify the cost of building the fleet, but it does compare the construction cost to the cost of maintaining the fleet. If the U.S. had taken Jefferson’s advice, and burned its fleet in 1822, the cost to build a new one might have differed from the cost of building the original fleet. What is the relevance of each of these costs in the decision of whether to burn the fleet?
 4. Calculate the annual cost of fighting the pirates, based on the information Jefferson provides, using the accounting technique of asset capitalization and depreciation. First calculate the annual depreciation expense of the fleet by capitalizing the cost of construction, and depreciating this cost over the useful life of the ships. (Ignore the possibility that the pirates might sink any ships.) Then add to the depreciation expense the annual operating costs.
 5. Adams advocates negotiating with the Barbary States, and Jefferson argues in favor of fighting them. In comparing Adams’s letter to Jefferson’s 1786 letter, where do these men agree, and where do they disagree? How does each man present cost data in a way that supports his position? Your analysis should distinguish between differences in underlying cost assumptions, and differences in the types of costs that each man proposes are relevant. Do you consider either man more “correct” in his analysis?
 6. A complete analysis of the alternative courses of action for responding to the pirates requires a consideration of noneconomic factors. What noneconomic factors can you identify that you think Adams and Jefferson should consider in weighing the pros and cons of fighting the pirates?

EPILOGUE

The negotiations between the United States and the Barbary States that began in 1784 continued through the 1790s. At times, tensions between the U.S. and the Barbary States ran high. Additional U.S. ships and crews were captured by Algiers in the early 1790s. In 1794, Congress authorized the construction of six ships—the birth of the United States Navy—in anticipation of fighting the pirates (Allen [1905] 1965, 48–50). Construction proceeded slowly, but three frigates were completed in 1797, including the U.S.S. *Constitution* (Old Ironsides) and the U.S.S. *Constellation*. In the meantime, negotiations again gained the upper hand. In 1795, Congress approved a treaty with Algiers that led to the release of the hostages the following year, but that cost the U.S. nearly \$1 million.

Diplomatic efforts ultimately failed. U.S. relations with Algiers, Tunis, and Tripoli deteriorated in the final years of the eighteenth century, when their leaders became increasingly bold in their demands and blatant in their disregard of diplomatic protocol. In May 1801, President Jefferson ordered a squadron to sail for the Mediterranean, and by the time the squadron set out, Tripoli had already declared war against the United States. The first naval engagement occurred in August 1801, and the campaign known as the Tripolitan War continued until 1805. The command of the U.S. fleet in the Mediterranean changed hands several times during the course of the war. The most successful and active period for the U.S. naval forces occurred under the command of Edward Preble, from September 1803 to September 1804. Preble achieved several daring and notable victories. In 1805, Tripoli signed a treaty favorable to the U.S. that ended hostilities with the Barbary States until 1815, when the U.S. launched a short and successful naval campaign against Algiers. The Tripolitan War played an important role in the early development of the U.S. Navy. It provided impetus for the construction of ships such as the U.S.S. *Constitution* and training and experience for men like

Stephen Decatur and Isaac Hull; men and ships that would later distinguish themselves against the British in the War of 1812. Also, it was from the Tripolitan War that the words of the Marines' Hymn "To the Shores of Tripoli" were derived.

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