

# Defense News Shocks, 1889 - 2015: Estimates Based on News Sources

By Valerie A. Ramey\*

University of California, San Diego and National Bureau of Economic Research  
April 2016

**Note: This version extends the defense news series back to 1889 and up through 2015.**

This paper documents the construction of a series of expected discounted value of government spending changes due to foreign political events. The series was constructed by reading periodicals in order to gauge the public's expectations. For the most part, government sources could not be used because they were either not released in a timely manner or were known to underestimate the costs of certain actions. However, when periodical sources were ambiguous, I consulted official sources, such as the budget. I did not use professional forecasters except for a few examples in the paper because the forecast horizon was not long enough. **The text in red reflects my comments on the text and how it translates to the news series.**

The constructed series should be viewed as an approximation to the changes in expectations at the time. Because there were so many conflicting or incomplete forecasts, I had to make many judgment calls. In calculating present discounted values, I used the 3-year Treasury bond rate prevailing at the time. Before the early 1950s, I used the long-term government bond rate since the other was not available. Except for a few examples, such as the start of the Cold War with Korea, the moon mission, and the end with the fall of the Berlin Wall, I assume that uncertainty is such that the public does not look beyond three to five years when I calculate present values. Even for Korea and the fall of the Berlin Wall, I computed expected values for only 10 years, again because of the uncertainty (on the part of the public) about what the counter-factual would have been.

If the shock occurred in the last week or two of a quarter, I dated it as the next quarter, since it could not have much effect on aggregates for the entire current quarter.

I used the following formula in numerous cases: 
$$\sum_{i=0}^T \left( \frac{1}{1+i} \right)^i = \frac{1+i}{i} \left[ 1 - \left( \frac{1}{1+i} \right)^{T+1} \right]$$

I use the following abbreviations for articles:

*BW: Business Week*

*NYT: New York Times.*

*WP: Washington Post*

*FY: fiscal year.*

---

\*Ben Backes and Chris Nekarda provided outstanding research assistance. I gratefully acknowledge financial support from National Science Foundation grant SES-0617219 through the NBER. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation

## Narrative

(No apparent shocks in 1889q4, so news = 0 for that quarter.)

(Background: (Wikipedia) In 1890, Mahan's doctrine influenced Navy Secretary [Benjamin F. Tracy](#) to propose the United States start building no less than 200 ships of all types, but Congress rejected the proposal. Instead, the [Navy Act of 1890](#) authorized building three battleships, [USS Indiana](#), [USS Massachusetts](#), and [USS Oregon](#), followed by [USS Iowa](#). By around the start of the 20th century, two [Kearsarge-class battleships](#) and three [Illinois-class battleships](#) were completed or under construction, which brought the U.S. Navy from twelfth place in 1870<sup>[79]</sup> to fifth place among the world's navies.<sup>[80]</sup>)

Washington Post (WP) Jan. 25, 1890 p.7. \$300m asked for long-term program for building up the Navy – “an imperial ransom”.

WP Jan. 31, 1890 p. 4. Policy board of the Navy recommends 237 vessels costing \$349.5 million.

NYT March 30, 1890 p. The House Committee on Naval Affairs completed the Navy appropriation bill today. \$22m

WP April 11, 1890 p. 2. Proposed amendments knocked down, bill ready for approval.

WSJ April 15, 1890 p. 1. The House has agreed to the provisions in the naval appropriation bill of 3 ships costing \$4m each.

WP April 16, 1890 p. 7. House restores 3 battleships to bill.

(Wikipedia) On June 30, 1890, Congress passed the [Navy Bill](#), a measure which authorized the construction of three [battleships](#). The first three were later named [USS Indiana \(BB-1\)](#), [USS Massachusetts \(BB-2\)](#), and [USS Oregon \(BB-3\)](#). The battleship [USS Iowa \(BB-4\)](#) was authorized two years later.

Useful source on number of ships: <http://www.history.navy.mil/branches/org9-4.htm#1892>

Previously, fiscal year spending on the Navy had been around 15 to 16m. New contracts are around \$15m. Shiller series on long-term government bond yields (available on his website) shows interest rates were around 3.5%

<http://www.history.navy.mil/branches/org9-4.htm#1892> shows # of battleships jumps from 0 to 3 between Dec. 1894 and Dec. 1895, so say 5 years to complete – thus \$3m per year.

**1890q2: PDV = 0.003/.035 [1 – 1/(1.035)^5] = 0.014 billion.**

NYT Oct. 1, 1890 p. 3. Contracts amounting to \$15m will be divided up between two or three shipbuilding firms.

NYT Sept. 20, 1891 p. 11. There is little likelihood of any large warships being authorized in the next two years. This is known not only to the Secretary of the Navy but also to shipbuilders in general. Because of Democratic House.

NYT March 14, 1892 p. 5. No more battleships to be ordered now. New Naval appropriation bill \$23.7 million, which is \$8.8m less than last year.

WP Jan. 12, 1893 p. 4. Contracts awarded for cruiser Brooklyn and Battleship Iowa.

WP Feb. 8, 1893 p. 7. Economy is the word in the naval appropriations bill – no new cruisers or battleships.

NYT Oct. 27, 1893 p. 9 Oregon launched (compared to other two battleships; no mention of a fourth.)

WP Dec. 6, 1893 p. 2. Cost of new navy calculated. Since March 3, 1883 to October 31, 1893, amount appropriated is \$77.2 m and amount expended is \$65.2 m.

WP July 1, 1894 p. 3. Work suspended in shipyards because congress fails to pass naval appropriations bill.

WP Nov. 22, 1894. Naval appropriations for current year are \$25.585m, previous year \$22m, year before \$23 m. Secretary's estimates for coming year \$30.9m. Congress may decrease that by about \$2m.

WP Jan. 19, 1895 p. 7. Naval appropriation bill proposed is for \$31.9 m, which is an increase of \$5m over that of the current year. Propose 3 new battleships, plus 12 torpedo boats and other ships.

WP Jan. 26, 1895. New ships needed, revealed by engagement between Japan and china.

Several articles on why we need a bigger navy. Lots of debate.

WP June 8, 1895 p.6 Naval work at a standstill because appropriations bill not passed.

WP March 25, 1896. New bill for navy - \$31m, of which \$12m is for new ships. Last bill was \$29.3m.

Lots of concern about Cuba starting in early 1896.

WP June 14, 1896 p. Contracts will go out soon for new ships in naval appropriation bill – 3 battleships, 3 destroyers, 10 torpedo boats.

WP July 2, 1896 – Navy yards finally go back to work with new full appropriations.

(It was hard to get an exact number for what passed and to link it to a military event. This could be a date, but I didn't assign it.)

WP Dec. 8, 1896 p. 10 – President Cleveland speech – much attention devoted to Cuba. President says that U.S. might have to take action.

### **Spanish-American War timeline**

Feb. 15, 1898 – sinking of the USS Main in Havana harbor – it had been sent to protect U.S. interests in the Cuban revolt against Spain.

March 17, 1898 – Senator says war is the only answer.

April 11, 1898 – McKinley ends resistance to war and asks congress to send troupes

April 20, 1898 – ultimatum to Spain to withdraw

April 21, 1898 – Blockade of Cuba

Formal war declared a few days later.

May 1, 1898 – first battle between U.S. and Spain in Philippines.

With defeats in Cuba and the Philippines, Spain sued for peace. Hostilities halted on Aug. 12, 1898. 2 months of difficult negotiations. Treaty of Paris signed on Dec. 10, 1898.

War was financed by a tax on long-distance phone calls.

Washington Post (WP) Jan. 13, 1898 p. 4 House Committee on Military Affairs agreed on the Army appropriations bill: It carries \$23.2m against estimates of \$24.2 and an appropriation last year of \$24.2m.

WP March 9, 1898 p.4. Moved by patriotism, House unanimously votes millions for defense. \$50 million.

NYT April 1, 1898. Asst Sec. of Navy Roosevelt: current situation shows that spending \$25 million on the navy a few years ago would have prevented us having to spend \$50 million now.

NYT April 5, 1898 p. 3. War measure in the House of \$50 million.

NYT April 13, 1898 p. 2. Extra taxes and a \$500 million loan contemplated in case of war with Spain.

NYT April 29, 1898 p. 5. Debate on cost of war – some say \$500 million, others say could be less.

NYT May 17, 1898 p. 5. Senate finance committee estimates it will cost \$379 million to wage war for a year.

NYT May 28, 1898 p. 4. War would cost \$300 million to prosecute for one year, but no one expects the war to last that long.

WP June 16, 1898 p. 4 Deficiency bill for \$224m passed – largest since civil war. Provisions for war expenses this fiscal year and next 6 months. All but \$18m is for war expenses, but \$8m of that is for pensions.

**224 – 18 = 206 million.**

**1898q2: PDV = 0.206 billion**

NYT Aug. 14, 1898 p. 3. Although the war with Spain lasted only 114 days, it has cost \$150 million.

**War ended quickly, so only \$150 million**

**1898q3: PDV = -0.05 billion**

NYT Aug. 15, 1898 p. 5. President thinks Philippines will be most serious problem to solve. Currently, military believes the 16,000 troops are enough to secure Manila.

NYT Aug. 16, 1898 p. 5. U.S. currently fourth or seventh navy in the world. Manila and Santiago, and annexation of Hawaii have changed opinion on importance of navy. U.S. is building up to be third behind England and France.

NYT Aug. 18, 1898 p. 2 . London papers comment on proposed increase in U.S. Navy, operating out of Manila. “the new programme is startling in its immensity.”

WP Nov. 23, 1898 p. 3. Rep. Cannon calls for a standing army of 100,000 – 50,000 in Cuba, 50,000 in Philippines.

WP Dec. 7, 1898 p.4. Reappropriation of deficiency funds so that they can be used after 1898, during last 6 months of fiscal year. \$60.7m for army, \$5.5 million for navy.

**The war with Spain increased the U.S's interest in naval power, especially the idea of a base in Asia. Also, there were numerous articles in 1899-1901 about European nations, especially Germany, building up their navies.**

WP Feb. 2, 1899 p. 4. Army appropriations bill will be taken up by committee. 100,000 men, \$90 million.

WP Feb. 11, 1899 p. 3. Debate in senate. Democrats mad because they were told that Filipinos would be peaceful. Don't like the idea of our army shooting Filipinos, but say they will provide funds extending the present army through July 1900. They don't want a standing army in the U.S.

WP Feb. 11, 1899 p. 4. Army appropriations bill pared down to \$79m.

WP Feb. 12, 1899 p. 5 New naval bill complete - \$45 m, includes 3 new battleships.

WP Feb 17, 1899 p. 4. Compromise proposed on reorganization of army – continue through 1901 with nearly 100,000 soldiers.

WP Feb. 28, 1899 p. 4. Army bill passed with compromise in which all provisions expire July 1 1901. Many democrats decry the atrocities in the Philippines.

**\$79m for two years, but it is likely that people thought it could be extended permanently. Spending before Spanish-American war was \$50m. Thus, estimate an extra (79 – 50) for the army for four years.**

**1899q1:  $PDV = (.079 - .05)/.034 [1 - 1/(1.034)^4] = 0.106$  billion.**

WP March 16, 1900 p. 4 Naval committee will authorize 2 new battleships.

**It is clear that after the Spanish-American War naval appropriations increase significantly. Previously they were around \$25m per year, now \$45m. Assume they expect it to last 5 years.**

**1900q1:  $PDV = (.045-.025)/.034[1 - 1/1.034^5] = 0.09$  billion**

WP May 5, 1900 p. 4. Senate shows positive attitude toward increase in army. Army reorganization bill passed without formality of a roll call.

WP articles in Nov. 1900. Bills to reduce war taxation.

WP Feb. 5, 1901 p. 4. \$118m proposed for army. (Passed later in Feb.)

WP June 10, 1901. Naval appropriations bill being considered - \$78m

(Wikipedia) Fortunately for the New Navy, its most ardent political supporter, [Theodore Roosevelt](#), became President in 1901. Under his administration, the Navy went from the sixth largest in the world to second only to the Royal Navy.<sup>[84]</sup> Theodore Roosevelt's administration became involved in the politics of the Caribbean and Central America, with interventions in 1901, 1902, 1903, and 1906. At a speech in 1901, Roosevelt said, "Speak softly and carry a big stick, you will go far", which was a cornerstone of diplomacy during his presidency.<sup>[85]</sup>

NYT Dec. 4, 1901. In first presidential message, Roosevelt calls for building up the navy.

I use the difference between the previous figure of \$45m and the new \$76m – I assume it extends through 1912.

$$\begin{aligned} \mathbf{1901q4: PDV} &= \mathbf{(.076 - .045)/.034 [1 - 1/1.034^3] + (1/1.034^3)(.076 - .025)/.034[1 - 1/1.034^7]} \\ &= \mathbf{0.087 + 0.283 = 0.37 \text{ billion.}} \end{aligned}$$

WP Feb. 11, 1902 p. 4. Cost of the new navy. The U.S. has expended nearly \$100m for war vessels, another \$9.3m for repairs of completed vessels. These figures were supplied in a statement by the Secretary of the Navy. The statement covers the period from 1883.

WP April 12, 1902 p. 5. Of the 27 battleships, cruisers and monitors building for the navy, seven are over three-quarters completed.

WP April 23, 1902 p. 4. The largest warships ever in the American navy will be provided for the navy appropriations bill. Other ships as well. Total is \$76m.

WP April 29, 1902 p. 4. Head of House Committee says that Germany is quickly outstripping us in naval strength. The U.S. naval program of 1903 is of unusual interest. The total number of ships, built and building, in our navy is 138 and the total cost will be \$235m. Committee recommends more ships.

WP May 14, 1902 p. Naval appropriations bill. \$77.7m and contains provisions for two new battleships.

WP July 1902 – Naval bill passes, two new battleships named, other ships in bill as well.

WP Sept 9, 1902 p. 3. Navy wants \$80 m in appropriations.

Articles reporting a pushback on naval appropriations.

WP Feb. 4, 1903. P. 9 In 1883, the construction of our present navy was begun. Since that time, we have expended \$700m and yet the U.S. ranks below England, France, Germany and Russia.

WP July 1, 1903 p. 2. Administration calls for naval expansion – 5 battleships a year.

WP Feb. 5, 1904 p. 3. House Committee took Dewey's advice – new building program to cost \$28m. Total naval appropriation \$95.7m.

WP Feb. 12, 1904 p. 4 Naval appropriation for fiscal year ending June 30, 1905 aggregating \$96.3m.

After Debate and some pushback, naval bill is passed in Feb.

Previous shock assumed \$76m through 2012. Now appropriations increase to \$96m because of Roosevelt push. Use (96 – 76) through 1912. (This is probably an underestimate because of cost of keeping up a bigger navy.)

**1904q1: PDV = (.096 - .076)/.034 [1 – 1/1.034^8] = 0.087 + 0.283 = 0.45 billion.**

Race on dreadnoughts.

WP April 29, 1906 p.6 \$99.7 million for navy in naval committee recommendation.

WP Feb. 19, 1907 p. 4. Navy's friends jubilant over Senate bill with \$100.7 m appropriation - \$5m more than House.

(Didn't have time to look carefully for shocks between 1907 and 1914.)

### **Timeline of WWI (Wikipedia)**

June 28, 1914 – assassination of Archduke Ferdinand of Austria, heir to the throne of Austria-Hungary.

July 28, 1914 – Austria-Hungary invasion of Serbia, followed by German invasion of Belgium, Luxembourg and France, and a Russian attack against Germany.

August 4, 1914 – UK declares war on Germany.

From Wikipedia: At the outbreak of the war the United States pursued a policy of non-intervention, avoiding conflict while trying to broker a peace. When a German U-boat sank the British liner RMS Lusitania on 7 May 1915 with 128 Americans among the dead, President Woodrow Wilson insisted that "America is too proud to fight" but demanded an end to attacks on passenger ships. Germany complied. Wilson

unsuccessfully tried to mediate a settlement. However, he also repeatedly warned that the U.S.A. would not tolerate unrestricted submarine warfare, in violation of international law. Former president [Theodore Roosevelt](#) denounced German attacks as "piracy".<sup>[100]</sup> Wilson was narrowly reelected in 1916 as his supporters emphasized "he kept us out of war."

In January 1917, Germany resumed unrestricted submarine warfare, realizing it would mean American entry. The German Foreign Minister, in the [Zimmermann Telegram](#), invited Mexico to join the war as Germany's ally against the United States. In return, the Germans would finance Mexico's war and help it recover the territories of Texas, New Mexico, and Arizona.<sup>[101]</sup> Wilson released the Zimmerman note to the public, and Americans saw it as *casus belli*—a cause for war. Wilson called on antiwar elements to end all wars, by winning this one and eliminating militarism from the globe. He argued that the war was so important that the U.S. had to have a voice in the peace conference.<sup>[102]</sup>

[President Wilson](#) before Congress, announcing the break in official relations with Germany on 3 February 1917.

#### **U.S. declaration of war on Germany**

After the sinking of seven U.S. merchant ships by submarines and the publication of the Zimmerman telegram, Wilson called for war on Germany,<sup>[103]</sup> which the [U.S. Congress declared on 6 April 1917](#).

Allied counter-offensive began Aug. 8, 1918.

November 11, 1918 Armistice with Germany signed.

Treaty of Versailles June 1919.

NYT articles early in 1914 talk about cost of war for European powers, not U.S.

NYT, Sept. 13, 1914, President of National Association of Manufacturers says that American business should be optimistic about effect of war on business.

NYT, Sep. 25, 1914, War tax bill of \$100 million debated in house, Republicans against.

NYT, Nov. 1914, discussion of how the U.S. is unprepared for war.

NYT, Dec. 9, 1914, Pres. Wilson argues that we need more ships, that we have never wanted a large standing army.

NYT, January 7, 1915, naval bill debated – program would add \$56 million.

NYT, June 7, 1915, Navy League calls for Congress to spend \$500 million on navy and army to increase preparedness.

NYT, Oct. 3, 1915

## **CONFER ON DEFENSE TODAY**

**Guesses at Added Naval Appropriation Range from \$50,000,000 to \$200,000,000.**

ing Congress to grant.

The navy now costs the nation about \$150,000,000 annually. There has been much talk of adding \$100,000,000 or even \$200,000,000 to naval expenditures, but observers in Washington detect no signs that there will be any such increases. The conservative opinion is that the navy will be fortunate if Congress adds more than \$50,000,000 to the budget.

NYT Oct. 13, 1915, p.1. Wilson calls for tentative program to double navy in next 5 years. Adds 15-20 dreadnoughts, 100 submarines, and 70 destroyers. Estimated cost for first year with increase in personnel is \$248m. Article says this is a \$100m increase over last year, so the \$248 figure is a total.

NYT Oct. 14, 1915. Administration will ask \$400m to begin defense, an increase of \$140m over last year. Army's budget of \$110m last year will be increased by at least \$60m this year and Navy appropriation will increase by \$100m over last year's \$148m.

NYT Oct. 15, 1915, p. 1. Largest estimates of government expenditures ever submitted by a Sec. of Treasury – 1 ¼ billion by reason of the European war. Increase in national defense over last year will be \$150m. Government must have more revenue to finance it.

p. 4. President gave approval to army program, which increases spending by \$73 m over current year, and proposal to spend \$500m on new construction for navy program. Not sure about how spending will be spread out.

NYT Oct. 17, 1915 p. 1. Govt asks employers to assist in raising of citizen army – guarantee enlistees that their jobs are safe.

NYT Oct. 19, 1915. Wilson gives speech on making our shores impregnable – it means an expenditure of upwards of \$1 billion in next 6 years on defense.

NYT Nov. 6, 1915. Sec. of War and Wilson call for expenditures for defense appropriations of \$2 billion in next 5 years - \$1 billion for Navy, \$1 billion for army. “If no new projects were launched the army and navy, as they stand today, would cost \$1,000,000,000 for maintenance during the next 5 years. In a nutshell, the plans of the administration for national defense call for approximately an extra billion dollars during that period.”

NYT Nov. 26, 1915. McAdoo (Secretary of Treasury) calls for increase in revenue to finance higher defense spending. It includes increased taxation of personal and corporate income, reduction of income tax exemption, lower threshold for surtax on incomes, tax on gasoline and crude and refined oils.

**Shiller series shows interest rates on long-term govt bonds are around 4%. Assume the \$1 billion increase is spread evenly over next 5 years.**

**1915q4:  $PDV = \frac{2}{.04} \left[ 1 - \frac{1}{1.04^5} \right] = \$0.89 \text{ billion}$**

NYT Dec. 1915 and Jan. 1916 – lots of articles on war readiness. Wilson tours country giving speeches in support of his program to increase defense.

Defense

FY	1916	1917	1918	1919
Oct. 1915	\$258m	\$400m		
Nov. 1915	\$258m	\$400m	\$400m	\$400m
July 1916	\$258m	\$685.3m		

NYT June 27, 1916 p. 6. Huge army budget passed by house – total for army is \$182m. Increase due to Mexican conditions.

NYT July 2, 1916. Indications are that \$622m will be appropriated by Congress in the next two weeks for defense preparedness

NYT July 28, 1916. Senate adds to army bill – Defense total now \$685.3 million.

NYT Sep. 9, 1916. 1917 Defense cost to be \$685,709,823. Preparedness is the biggest item in record appropriations of Congress before its recess.

**I am not sure if they expected increased appropriations to last beyond FY 1917. I will assume not, so the shock is just:**

**1916q3:  $PDV = (0.6853 - 0.4)/1.04 = \$0.27$  billion**

NYT, March 25, 1917, how U.S. will finance war with Germany. A significant part of expenditure will be loans to the allies.

NYT, April 6, 1917, p. E3 Detailed article written by Edwin Seligman (professor of political economy at Columbia) on how much war will cost U.S. and how it will be financed. Warns against believing war will end soon. Suggests that army budget will not be much less than Britain's \$10 billion a year. Expenditure is likely \$10 billion the first year and \$10 billion the second year. Enough taxes should be levied to cover the interest on the war bonds. (There are many more interesting points on financing in the article.)

NYT May 1, 1917. House appropriations committee reports its budget for year of Great War - \$2,699,485,000 (2.1 b for military and 0.5 billion for navy). The numbers are for appropriations.

**Based on Seligman forecasts and tone of various articles, assume \$10 billion for next two years.**

**1917q2:  $PDV = (10 - 0.4)/1.04 + (10 - 0.4)/1.04^2 = \$18.11$  billion**

NYT, July 25, 1917, Stocks fall on news of Sec. of the Treasury had prepared new war estimates calling for the authorization of an additional \$5 billion. Business had been prepared for the new taxes that were written into the War Tax Revenue Bill to raise an addition \$1.68 billion. It is possible that an effort will be made to double the receipts collected through taxes. The cost of war is running up much higher than anyone expected three months ago – the fact that Great Britain is spending \$34 million each day suggests that the U.S. must prepare for an ever-increasing outlay.

Aug. 7, 1917. War revenue bill will be debated.

NYT, August 16, 1917. How the U.S. should finance its \$15 billion share of Great War.

NYT Sep. 11, 1917. Largest tax bill in history.

Dec. 3, 1917 p. 3. New estimates submitted to Congress indicate that during the second year of the war, FY 1919, the participation of the army would cost \$10 billion. (lots of detail about components of spending)

NYT Dec. 4, 1917 p. 1. During the second year of American participation in Great War, the estimated budget of the U.S. government will be \$13.5 billion (including sinking fund and postal), or \$13.0 billion without. But probabilities are that Congress will exceed these estimates in its appropriations. For the War and Navy departments, the FY 1919 totals will be \$11.150 billion. The original FY 1918 estimates for combined were 0.8 billion, but supplemental increases raised this to \$11.592 billion. Actual total appropriations for FY 1918 were \$9.1 billion.

**Account for the increase, as well as fact that they expect it to exceed. Estimate approx.. \$12 billion for FY 1918 and FY 1919.**

**1917q4: PDV = (12 – 10)/1.04 + (12- 10)/1.04^2= \$3.77 billion**

Several discussions of bottlenecks in spending the appropriations.

NYT April 7, 1918 p. 64. Recap of first year of war. U.S. had lent \$3.882 billion to allies by end of 1917 and that amount has since been raised to \$4.436 billion, for which we hold their bonds. Total expenses in past year for war have been \$9 billion. Enormous as this sum is, it is less than expected. We have greatly increased the income tax and other taxes.

NYT May 6, 1918 Redraft of record-breaking army appropriation bill of \$15 billion is before Congress.

NYT May 17, 1918 p. 8. Total appropriations for the next fiscal year (FY 1919) will reach \$29.2 billion, according to Chairman Kitchin of House, Ways and means. Not more than \$18 billion can actually be spent next year.

Chicago Daily Tribune, June 8, 1918. McAdoo proposing a war revenue bill of \$8 billion, the greatest tax levy in our fiscal history. Mr. McAdoo expects that during the coming year we will spend approximately \$24 billion (year ending June 30, 1919)

NYT June 10, 1918 p. 14. McAdoo says that next fiscal year spending will be twice this year. Rate will be \$2 billion per month during FY 1919

NYT June 30, 1918 p. 5 US gov closed its fiscal books on first full year of war. The US spent \$1.2 billion in the three months before FY 1918. It spent \$12.6 billion in FY 1918. So total has been \$13.8b. The total for just June 1918 was \$1.5 billion.

Defense

FY	1917	1918	1919	1920
Oct. 1915	\$400m			

Nov. 1915	\$400m	\$400m	\$400m	\$400m
July 1916	\$685.3m			
April 1917		10 b	10 b	
Dec. 1917		12 b	12 b	
May 1918			29 b	
July 1918				

**McAdoo's forecasts are \$24 b in spending for 1919, but never talks about year after or when war will end. Thus, I use the appropriations which increase 1919 estimate to \$29 b. from earlier \$12 b estimate.**

**1918q2: PDV = (29 – 12)/1.04 = \$16.3 billion.**

NYT July 23, 1918 p. 19. (I think the NY Times summary screwed up. The article also reports numbers in tables, and I use those.) Rep. Sherley: Total appropriations in FY 1918 were \$18.892 b (\$7 b of this was loans to allies) and actual expenditures were \$13.581 billion. Appropriations for FY 1919 are \$24.3 billion. (All of this includes non-war expenses as well.)

NYT July 24 1918 p. 17. Bankers' figures draw distinction between expenditures and appropriations. Total federal expenditures since start of war in April 1917 have been \$14.5 billion. Of that \$5.8 billion are loans to the allies, so actual expenses are \$8.7 billion. The normal expenditures for the govt in the 15 months before the war were \$1.2 billion, so net cost of the war so far has been \$7.5 billion. Funds advanced to the allies are loans and should not be counted as costs of the war.

NYT Aug. 1, 1918 p. 3. Current U.S. costs of war are running \$1.5 billion per month, including loans to allies.

NYT August 1918 – a number of articles on restricting consumer spending and home building.

NYT August 12, 1918 p. 10. The 5<sup>th</sup> year of the Great War has opened in a very auspicious manner for the allies. It is likely that next year's war needs will be \$25 b, not the \$30 b originally estimated.

NYT Sept. 4, 1918 p. 13 War expenditures were \$1.7 billion in August.

NYT Sept. 24, 1918. Cornell President goes to Europe and says that war's tide is turning.

NYT Sept. 26, 1918 p. 17 Spending in Sept. has been much less than August – will probably wind up at \$1.5 billion. It was \$1.8 b in August and \$1.6 billion in July.

**The July articles suggest that appropriations for FY 1918 were \$18.9 b rather than \$12 b. But then articles start making the distinction about which parts are loans that will be paid back. Aug. and Sept articles suggest turning point in war and decreased spending. Based on downward revisions, I will say \$5 billion less than expected.**

**1918q3: PDV -5/1.04 = - \$4.8 billion**

NYT Oct. 4, 1918. House appropriations about to pass war emergency bill for \$7.3 billion. This means a total expenditure of close to \$38 billion for FY 1919. The amount that had already been made was \$29.8 billion.

NYT Oct. 27, 1918. Discussion of Armistice terms.

NYT Nov. 4, 1918 pg. 24. War cost over-estimated. War expenditures are not as great as the Treasury estimated 5 months ago when it set the mark this fiscal year of \$24 billion. Expenses for Oct. amounted to \$1.66 billion. The total cost of the war is now calculated as \$20.561 billion, of which \$7 billion has been loaned the allies. Only a little more than ¼ of the expense has been raised from taxation.

NYT Nov. 8, 1918 page 19. Congress to move for curtailment when armistice is signed. Senator Martin said that appropriations for war purposes had aggregated to \$57 billion in the last two years

NYT Nov. 12, 1918 p. 20. End of hostilities today leads to call for cuts

NYT Nov. 17, 1918. P. 15. Navy bill calls for \$2.4 billion for 1920 but it will probably be cut because of peace.

NYT Dec. 3, 1918 p. 15. War expenses persisting in peacetime but falling off rapidly will make the gov't's outlay in FY 1920 \$7.4 billion, of which \$5.2 b will go to the War and Navy departments, \$0.89 for interest on the debt, and \$0.53 for continued building of the merchant marine. These expenses compare with \$24 b appropriations for the current fy, with the \$18 b that will probably be actually spent, and about \$1 b before the war. The advance estimates are rough and many departments are expecting to cut down in the coming months. A regular army of 500,000 is provided for in the estimates. The naval estimates include plans for a steady and rapid increase in the fleet. The total appropriation for the naval establishment is \$2.6 billion.

NYT Dec. 5, 1918. McAdoo's report. For 15 months ended last June, the actual cost of the war was \$13.2 billion, and nearly half of this went into permanent investments. Looking forward McAdoo found great difficulty in forecasting through end of FY 1919 on account of sudden coming of peace.

NYT Dec. 18, 1918 p. 18. Passage of \$6 billion war revenue bill.

NYT Dec. 29, 1918 p. 10 War taxes drastic in 1918, tabulations show.

**Clearly, these quotes indicate that the signing of the armistice is cutting the estimates of spending. However, it is difficult to figure out by exactly how much because of the confusion on appropriations vs. expenditures. The following is a very rough estimate.**

**1918q4: PDV = -11 billion**

NYT Jan. 3, 1919 p. 3 Disbursements by the Treasury from April 1, 1917 through Dec. 31, 1918 were \$24.589 billion. If the nation had been at peace the normal expenditures would have been \$2 billion. Thus, cost of war was \$22.589 billion. Of this \$7.685 billion was cash advances to allies. Thus, U.S. expenses were \$14.9 billion. Lists the loans by country.

One article discusses how \$400 million in food aid needed. Herbert Hoover organizes this.

NYT Jan. 21, 1919 p. 16. The Federal Reserve Board estimates that the govt still needs to spend \$18 b.

Spring through Fall 1919: NYT articles on a bill to require a national budget.

NYT unless otherwise stated

12/1/1919, p.21 “Peacetime Budget Nearly 5 Billions” “Greatest Amount Ever Asked of Congress will be needed in 1921, 5 times prewar expenses.” Army and Navy want \$1.4 billion.

12/6/1919, p.10. House conferees want to reduce budget – want to halve army and navy expenditures.

12/19/1919, p. 17. House rep wants to cut \$1 billion from the \$4.8 billion budget, with most of the cuts coming from army and navy.

5/28/1920, p.12. House and Senate conferees agree on budget for army and navy. Amount is \$436 million for Navy.

6/6/1920, p. 1 Congress adjourns without passing budget bill.

6/15/1920, p. Congress appropriates \$5 billion. \$433 million for Navy, \$392.6 for Army (total = \$825.6 million )

Mid 1920s, articles about Japan building up Navy.

12/2/1920, p. 9 Estimates for spending for 1921-22 are \$650 million for Navy and \$814 million for Army. (Comparison to Japan estimates).

Articles in 1921 talk about possible curtailment of U.S. naval expenditures.

[\\$750,000,000 SAVING SEEN IN NAVY CUT: Members of Congress Look for Reduction of One-Half in Maintenance Cost. TO CUT PERSONNEL IN TWO Kelley, of Michigan, Says 50,000 Men Would Be Adequate for Proposed Reduced Fleet. Cuts Maintenance One-Half. Would Reduce Personnel. Congress to Make Cuts.](#)

**The Washington Post (1877-1922)** [Washington, D.C] 14 Nov 1921: 4.

[NEAR HALF BILLION CUT IN U. S. BUDGET: Sum Will Be Larger if Naval Reductions Follow the Armament Conference. NONE NEED BE INCREASED Up to Congress and Emergencies, Dawes Says--Intimates He Will Retire Soon as Director. \\$3,224,875,592 Asked \\$431,754,000 for Navy. Need Not Be Increased. Dawes Tells of Faults. Announces He Will Retire.](#)

**The Washington Post (1877-1922)** [Washington, D.C] 06 Dec 1921: 8.

**1921q4: PDV = -0.75 billion**

September 1926 – still talking about cuts in army and navy.

WP: 1/13/1928 p. 2. Secretary Wilbur announces 20 year construction plan for Navy. \$2.5 billion spread over 20 years. (I don't think the big program passes.)

WP 3/18/1928 p. 1. House approves \$274 million naval program. Building between 1929 and 1931.

**1928q1**      **PDV = \$0.256 billion =  $\left(\frac{0.274}{3}\right)\left(\frac{1}{.035}\right)\left[1 - \left(\frac{1}{1.035}\right)^3\right]$**

WP 2/1/1932 p.1 Out of Sino-Japanese crisis may come a \$600 million naval construction budget.

Huge war budgets of Japan discussed frequently

NYT 1/5/1934, p. 17. FDR asks for more to build up navy. Asks for appropriation of \$454.8 million in FY 1935 as compared to \$337 m in FY 1934. Estimated actual expenditure in FY 1934 was \$337.2 and in FY 1933 was \$349.6. Budget also calls for gradual increase in enlisted personnel and pay raises.

There are numerous articles on Japan building up Navy, on their fears of the U.S. There is talk of war scares in Japan.

Jan. 23, 1934, p. 1. Roosevelt backs Navy bill. \$286.4 million asked for 1935. They want a full treaty navy by 1939. Carry-over funds from past and present would allow expenditures of \$314 million in FY 1935.

NYT Jan. 26, 1934, p. 8– Navy bill scheduled for passage today.

NYT Jan. 31, 1934, p. 1 – Vinson bill passes house. Calls for spending \$475 m to \$570 m. to bring navy to treaty strength.

NYT Feb. 14, 1934 – Tokyo house passes huge arms budget.

NYT March 7, 1934, p. 1. Vinson bill building up Navy to treaty strength passes senate. Cost estimated at \$750 million to \$1 billion. Has administration backing.

NYT March 28, 1934, p. 1 FDR signs Vinson Bill. Merely authorizes building Navy up to treaty strength. It doesn't appropriate. FDR says he hopes that 1935 naval conference will bring cuts.

**Take average of estimates:**

**1934Q1: PDV =  $(0.750 + 1)/2 = 0.875$  billion.**

Numerous articles on Nazis and Hitler and big budgets for armaments in Germany.

NYT Jan. 8, 1935, p. 5. National Defense seeks \$870.9 million. \$489.8 m for navy, \$381.1 m for army.

BW Jan. 12, 1935, p. 10. President's budget has Army and Navy budget increased \$180 m.

NYT Feb. 20, 1935, p. 1. House group votes a \$50 m rise in funds for army. \$378.7 m. bill sets in motion largest defense program since 1921. Gives President authority to expand forces.

All the major nations are raising their defense budgets.

March 28, 1935, p. 1. Bigger navy bills passed by house.

April 3, 1935, p. 1. Military costs will exceed \$800 m in the FY starting July 1. (looks like about \$876.6 m)

April 24, 1935, p. House navy bill asks \$457.8 m. with projections for \$555 m annual cost after 1941. \$457.8 m recommended spent on navy next fiscal year, with a rise to a continuing naval expense of \$555 m per year by 1941.

April 27, 1935, p. 1, House votes \$457.8 m for navy of treaty strength.

**(I think this is just annual appropriations for the Vinson bill.)**

NYT Jan. 6, 1938, p. 1. FDR calls for \$1 billion in defense spending in FY 1939. This is an increase of \$54.8 million over current FY.

BW Jan. 8, 1938. Bill for National defense is jumping up.

BW Feb. 12, 1938 – German shakeup. Arms industry in every country will be speeded.

NYT April 7, 1938 – military budget adds \$75.9 m over what was previously appropriated for this year.

**1938:2: PDV = 0.076 billion**

NYT October 15, 1938, p. 1. FDR electrifies press conference, saying events of the past month and studies mean that he will ask more for defense in January. “Moves to rush expansion of army and navy.”

**NYT 1/12/1939:** Roosevelt speech. Added \$0.552 billion to \$1.25 billion defense budget. ½ of extra will be spent in FY 1940, which starts in July 1939. [page missing]

**BW 1/7/39:** “National defense” was “spectacularly launched on its career by the President this week and scheduled to receive another boost in a separate message...” P. 5.

**BW 1/14/1939:** “Congress hopes that ‘the surest way to preserve peace is to be strong enough to discourage any thought of attack’.” In the 1931 fiscal year, the bill for national defense amounted to \$0.667 billion. In 1934, dropped to 0.494. 1938 fy was around 0.990. Estimated 1939 around \$1 billion, 1940 at \$1.326 billion. P. 7.

**BW 1/21/39:** “The \$0.552 billion blueprint of expenditures for immediate needs hardly bulks as a major business force. Certainly it cannot compare with the \$3.326 billion deficit spending that the Administration contemplates for the 1940 fiscal year, even though \$210,000,000 of that deficit will be accounted for by special military outlays.” “The greatest single item in the special military budget is \$300,000,000 for 3,000 Army airplanes and for plane facilities...Next largest item is \$110,000,000 to improve the equipment of the Regular Army and National Guard.” P. 14.

**BW 1/28/39:** “A sharp drop in the stock market, of about the same magnitude as the war crisis break of last September, has shaken the general confidence. Again, the originating impulse seems to have come from Europe.” P. 13. Commodity prices holding up better than stocks. “For the first time since the Munich crisis, a war scare this week caused a flurry of considerable proportions on world stock markets and among the foreign exchanges. It is only the first of several such scares which can be expected in Europe this year. But each crisis will probably pass without precipitating a major outbreak.” P. 14.

**BW 2/4/39:** “A rally in the stock market began at the end of last week and went further when Chancellor Hitler’s long-awaited speech proved milder than had been looked for.” “Pessimists are now voicing the fear that the stock market drop forecasts a decline in business of the 1937 type. Based on the evidence available, this worry should be laid aside.” “War remains unlikely, at least for the near future. And, if war does come, the effect may turn out to be more immediately constructive for American trade than had been feared.” The uncertainty about whether there will be war or peace is bad for business. P. 13.

**BW 2/11/39:** “American industry will again receive large new equipment orders, as Soviet Union arms itself and builds up heavy machinery, oil, and chemicals.” P. 17.

**BW 2/18/39:** Europe came into United States markets in a big way this week, brightening the outlook for several industries and altering the concept of the arms programs of several countries. Japan and Germany have also been buying in the U.S. since 1938. P. 46.

**BW 3/4/39:** “Congress seems apt to approve War and Navy Departments’ plans for key materials.” The Thomas bill provides for appropriation of \$100 million. P. 16 .

**BW 3/11/39:** “There is less talk of war and business in England picks up.” p. 50.

**Defense News Shock: \$0.5 billion with ½ spent in FY 1940. The long term rate was 2.5.**

**1939:1: PDV = \$0.5 billion**

**BW 3/18/39:** “Destruction of Czechoslovakia causes new fears and hurts stock prices. Roosevelt’s pronouncements also weaken confidence... President Roosevelt’s WPA appropriation that no reduction in the tax burden could be expected began to weaken public confidence in the appeasement program at home. Meanwhile, the business indexes continued their declines. “It was not until the second hour of trading Wednesday morning that the stock market wrote into the record its reaction to the latest phase of Hitler’s Drang nach Osten. In a deluge of selling – 500,000 shares between 11 a.m. and 12 – prices tumbled nearly three points on the New York Stock Exchange.”( p.14). “Dismemberment of Czechoslovakia brings Hitler new resources for conquest, changes trade map for U.S. Berlin expects further moves.” P. 46. “Appeasement gets harder.”

**BW 3/25/39:** “A series of sharp drops in the stock market has reflected fears growing out of the latest European crisis. By the end of last week the full implications of the first German conquest of admittedly non-German territory had been realized by British statesmen, and replacement of the appeasement program by high speed rearmament and a wide military alliance against Germany began to get under way...The week’s events seem to make more probable an eventual solution of Europe’s troubles through war.” P. 13.

“Cooperating with the European crisis in depressing financial and business sentiment has been the further weakening of Sec. Hopkins’ business appeasement program. The President’s press conference remarks have indicated opposition even to the quite moderate tax reforms on which faith had been pinned.” Move by SEC chair would be viewed by most business and corporation executives and private investors as the opposite of appeasement. P. 13.

“the financial world is convinced that war is inevitable. Not this year, most big brokers agree, but soon enough so that it is difficult to get enthusiastic over the outlook for either business or prices of American securities.” P. 56.

**BW 4/1/39:** At least the situation “did not deteriorate even further... Domestic business will show an appreciable pick-up in the second quarter.” P. 13. Stocks dropped 9% in March (after March 10<sup>th</sup> peak) due to Hitler’s move against Czechoslovakia. P. 40.

**BW 4/15/39:** “Either real warfare or a somewhat firmer peace would be constructive for business activity in the United States.” Hearings for revising the Neutrality Act. Debate on market’s weakness. Some argue that the weakness not due to war, but due to poor domestic business prospects. P. 12.

“Meanwhile signs are appearing that a sharp rally in business could take place if the European situation permitted. Two signs deserve special mention here. Retail sales of automobiles turned up sharply in the last third of March and continued their good showing in the first days of April. Secondly, construction contracts awarded were very high in the last half of March...Residential building led the way.” P. 12.

**BW 6/3/39:** “Bearish war, bullish arms.” P. 13.

**BW 6/10/39:** “Improvement continues in industrial activity and in security and commodity prices. United States should benefit by exports to the arming European countries and also neutrals.” British and French industry hitting new peaks. P. 13. British industrial activity even now far ahead of the 1929 high is likely to reach a new all-time peak. All Europe is asking for machinery. P. 46.

**BW 7/1/39:** “Despite military threats and political uncertainties, index of business activity advances for sixth straight week. Steel and auto production show contra-seasonal strength.” P. 11.

**BW 7/15/39:** “the Neutrality Law, as it stands on the statute books now, has since 1935 embargoed all shipments of arms, ammunition, and implements of war (mainly aircraft) to belligerents. All other items – such as copper, wheat, steel, dried fruits, machine tools, cotton, oil – are free to move in international trade... since the expiration on May 1 of the cash-and-carry clause ... deliveries can be made in American ships.” P. 15.

**BW 8/19/39:** “actual war, as well as anticipated war, can give business an upward impulse.” “Congress put \$2,000,000,000 into the expanding forces of army and navy to assure adequate defense. Industry feels the surging demand for war materials.” “The long term view shows 1940 multiplied by all the years to come, with cumulative expansion added in.” “The first real expansion of this country’s power following reduced armament after the war came last year when Congress authorized a billion-dollar increase in the composition of the fleet.” P. 18

### **September 1, 1939: Germany invades Poland. Britain declares war on September 3.**

**BW 9/9/39:** “Business makes quick adjustment to ‘certainty of war.’” “War this week gave business a new forward momentum and a new environment—and proved the old stock market saying that bad news is better than uncertainty. Faced with actual fighting in Europe, business men immediately adjusted themselves to a positive state of affairs. The result was an immediate rise in stock and commodity markets.” (graph shows commodity prices skyrocketed starting Sept. 1.) P. 9.

**BW 9/16/39:** “Prospect of profits ahead starts index climbing and puts capital to work.” Anticipation of increased business from Europe, South America, government armament orders, everywhere. Right now, business is definitely attuned to a long war, rather than a short one. A sudden peace would deflate commodity and stock prices.” “Indeed, in the months to come, business men will be susceptible to peace scares.” Stock markets attained a new high for the year. P. 13.

**BW 9/23/39:** “(Business Week) Index makes biggest single weekly gain in history as business figures on war orders, automobile production expands, and railroads purchase equipment.” “The broad upswing in business continued this week, as business men and the speculative markets proceeded on the assumption that the Neutrality Act would be speedily change by congress to suit the President’s requirements – thereby clearing the way for free and easy shipments of armaments to belligerents (meaning Britain and France).” “The early changeover in automobile production (as mentioned in this department time and again) has brought the fall peak of industrial activity back. Coming coincidentally with the burst of buying due to war, moreover, it has created the predicted industrial log-jam.” P. 13.

**BW 9/30/39:** “Expectation of foreign orders still main basis for upsurge, and momentum could carry through quarter. Much depends on exports increasing as expected.” P. 13.

**Defense News Shock: Previous estimate of defense spending was for \$1.3 billion after the 0.5 billion addition. Now it is up to \$2 billion, so it is \$0.7 billion more.**

**1939:3: PDV = \$0.7 billion**

**BW 11/11/39:** “World beats path to U.S. Market... Manufacturers overloaded with business.” “Washington authorities believe foreign government will place at least half a billion dollars of war orders in this country in the next few months, in addition to the \$1,000,000,000 of expanded arms buying by our own government.” P. 55.

**BW 12/2/39:** “Pay-as-you-arm raises the important question of ultimate armament expenditures, not those for a single year alone. The fact is that Roosevelt has no idea what abnormal spending for national defense will be required over and above the extra \$500,000,000 that he will ask from Congress next session. FDR is thinking in terms of temporary additional taxes to cover those costs, but has not settled on whether he should ask for a large sum for one year or a larger sum spread over several years.” P. 7

**BW 1/13/40:** FDR’s new budget. Proposed new taxes and tells Congress to find them. “He proposed that Congress raise \$460,000,000 more in taxes, with national defense as the excuse.” P. 52.

**BW 1/27/40:** War increases some exports. P. 56.

**BW 3/2/40:** Cover story shows “Six Months of War.” After stocks surged in early September 1939, they stayed relatively constant through October, and gradually declined through the end of February. Business Week’s index of business activity is currently where it was Sept. 2. Other statistics show changes. Business men built up inventories, prices responded quickly, exports expanded. “When German soldiers crossed the Polish border, it was expected by people with long memories that stock prices would break, that there would be an instantaneous commercial freeze throughout the United States. Instead, stock prices jumped, commodities were in demand, new orders increased.” (P. 32) Unlike WWI, where business did not have the plant capacity to turn out the war orders, this time business organizations have extra capacity. Graph on page 33 compares different series across the two wars. Notable is how the increase in business activity since war started looks like it is just continuing a trend that started months earlier. P. 32-33.

**April 9, 1940: Germans invade several Norwegian ports and take Oslo.**

U.S. stocks start falling.

**BW 4/13/40:** “New turn in European war increases prospects of large-scale orders from Allies and may signal end of domestic business recession. Rise in commodity prices is corroborative, but stock market has its misgivings.” P. 13.

**BW 4/20/40:** “War once again dominates domestic business...Recession may be ‘rounding out a bottom.’” P. 13.

**BW 4/20/40:** Conflict spreads to Scandinavia, knocking out trade there. P. 56.

**May 1, 1940: Retreat from Trondheim.**

**May 10, 1940: Germany invades Belgium, France, Luxembourg and the Netherlands.**

**May 13, 1940: Churchill’s “blood, toil, tears, and sweat” speech in the Commons.**

**BW 5/18/40:** “Blitzkrieg in the Markets.” Chart shows 50 U.S. Industrial Stock index falling steadily from invasion of Norway, flattening from last third of April until German invasion of low countries, when it plummets. Commodity prices dive as well. Some think that the Allies may be on the brink of defeat or there may be an early peace which would hurt American business regardless of which side comes off best. Also, chances are greater that the United States may become involved, either in Europe or the Far East, and involvement suggests federal control over profits and regulation of prices. P. 55 and Cover.

**BW 5/25/40:** “FDR’s ‘house afire’ defense program – achieved bipartisan support for defense objectives. The program’s one solid feature to date is \$3.1 billion in cash and contract authorizations. The total includes regular appropriations already on their way through Congress when the German attack struck, plus the additional money requested by the President in his message May 16. The program doesn’t take the form of industrial mobilization for an actual war effort – after all, building a full-scale battle machine isn’t accomplished by the passage of one bill.”

Note on chart: “Here’s what war means: In the transition from peace to the World War, U.S. Army and Navy expenditures rose more than 3,000% - from \$317,000,000 in 1916 to nearly \$11 billion in 1919.” P. 15.

“The German drive to the English Channel this week assured quick adoption of the President’s program to speed up war preparations. But the proposed expenditure of less than \$3.5 billion in the coming fiscal year is only a small beginning; of that, business men can now be certain... In the 1919 fiscal year costs ran to \$11 billion. A major war effort in the ‘40s would come higher. Army officers testified before the House Military Affairs Committee this week that 25% to 40% of the German nation’s energies and resources have been turned into armaments during the last six years. With this country’s greater natural resources, manpower, and industrial advancement, a diversion of 25% to 40% of the national energy would not be necessary under ordinary circumstances to keep pace in an arms race. But since we have started six years behind, a vast outlay is required if we are to attain military parity with Hitler’s industrial machine. In a major war at least four times the \$3.5 billion we plan to spend in 1941 would be needed, and quite conceivably

five to six times that – or anywhere from 20% to 30% of the peacetime national income. However, it is not possible to jump immediately up from a \$3.5 billion to a \$14 billion military effort. It takes time to shift a nation from a peace economy to a war-preparation economy and thence to a war economy. Right now we are at the very beginnings of a war-preparation economy.” P. 60.

**BW 6/1/40:** “Uncertainty, more than anything else, must be held responsible for the divergent movement of business and stock prices. The duration and the outcome of the war constitute the major uncertainty. The quantity of war orders is part and parcel of that worry. The extent to which the United States preparedness program will sustain domestic business is another unknown. Then, too, there is the question of how much profit business will be allowed to make and how much of it must be taken away in taxes as America arms. And, finally, there is the probability of new government controls over industrial operations and over prices in many fields.” P. 42.

**BW 6/8/40:** “Ready to Pay Defense Price. Public sentiment, forged by pressure of events, supports Congress in boosting new taxes from first proposal of \$600,000,000 to maybe a billion.” After Belgium’s king surrendered, President asked for another \$1,227,000,000 for defense. P. 15.

“Hence, basic facts should be emphasized: The defense program calling for about \$4.5 billion (since a billion was added) carries \$2 billion of regular Army and Navy expenditures. All the hollering is over the extra \$2.5 billion, a sum large but not colossal. It applies to the fiscal year ending June 30, 1941, and the full force of the spending won’t be felt until well into next year. It will aid but not solve the unemployment problem. P. 51.

### **May 26 – June 4, 1940: Evacuation of Dunkirk**

#### **June 13, 1940: Paris falls**

**BW 6/15/40:** “With the Nazis at Paris and the Fascists at France’s back door, the tempo in Washington is reminiscent of NRA and World War Days.... It would be almost true to say that nobody here will be greatly surprised if Roosevelt soon declares a full national emergency.... Boosted to \$5 billion-plus this week, the money voted for defense is regarded by Roosevelt as plenty for the time being. The job is to get production... The House bill carrying \$1,004,000,000 in increased (tax) levies may be all that will materialize.” P. 15.

**BW 6/22/40:** Business Week Memorandum (written June 18, published in June 22 issue). “In the coming fiscal year the nation will spend more than \$4 billion on armaments, if our industrial plant can turn out that volume. ... But in the fiscal year that begins July 1, 1941, we can be sure that the defense bill will go up considerably – possibly to as much as \$10 billion – for by that time our factories presumably will have developed mass production techniques for airplanes, tanks, armored cars, and munitions.” P. 37.

**BW 6/22/40:** “National Defense has become the dominant economic and social force in the United States today. It has created a new industry – armament – the ramifications of which will reach into every phase of our business life, and bring increased employment, higher payrolls, widening demands for machinery, and the construction of new factories.”  
 ”But by the end of 1941 the ability of American manufacturers to turn out ships, airplanes, tanks, armored cars, cannons, guns, and shells outright to be well established. A government expenditure of \$10 billion a year on defense certainly would then be within the realm of accomplishment. Even if Great Britain were forced to give up the fight and cancel orders in this market, the presumption now is very much against a sudden slump. Just as the British took over most of the French business, so our government would take over most of the British business. Now a new \$10 billion armament industry is to be taken seriously as an industrial pump-primer.” “Capitulation of France this week certainly was a lusty wallop – and the effects wore off after only a few minutes of trading. Stock prices dropped violently on the news...almost at once heavy buying appeared, and losses were shaved to the vanishing point before the day was over.” P. 13.

**Defense News Shock: Roosevelt ups the previous \$2 billion to \$3.5 billion in May and then to \$5 billion in June for FY 1941. However, articles say that it can easily be 4 – 6x the 3.5 billion after. BW predicts \$10 billion a year starting in FY 1942. All talk about uncertainty of duration. I assume \$5 billion for fy 1941 and \$10 billion for 3 years after.**

**My assumptions of expectations in 1940:2**

<b>FY</b>	<b>1941</b>	<b>1942</b>	<b>1943</b>	<b>1944</b>	<b>1945</b>	<b>1946</b>
<b>Actual</b>	<b>6.6</b>	<b>24.5</b>	<b>63.8</b>	<b>77.4</b>	<b>83.3</b>	<b>47.6</b>
<b>1940:2 expectations</b>	<b>\$5</b>	<b>\$10</b>	<b>\$10</b>	<b>\$10</b>		

**Interest rate: 2.4%**

**1940:2: PDV = \$31.6 billion = \$(5 – 2) + discounted 10 for 3 years ( 9.8 + 9.5 + 9.3)**

**BW 7/6/1940:** “Consumer income, which turned up slightly in May, has now produced the predicted improvement in retail buying.” P. 13.

**BW 7/13/40:** “The Army and Navy started the present fiscal year with \$4.765 billion that could be spent before June 30, 1941. But that was not enough. Hitler has knocked out France, the Japanese are making eyes at the rich and orphaned possessions of the Dutch in the East Indies. So Congress is expected to give out again – to the tune of another \$5 billion.” P. 15.

**BW 8/3/40:** “Tax uncertainties and knots in defense program delay executive decisions but markets reflect strengthening confidence in underlying trend.” P. 13.

“Business worries about losses are eased by prospect that defense program probably would fill gap left by absence of overseas buying.” (worried about Britain falling.) P. 17.

Lots of uncertainty about taxes. “At the beginning of this year, federal tax rate on business was 18%. Rate increased in June to 20.9% on corporate incomes above \$25,000. An excess profits tax is still to come.” P. 48.

**BW 8/10/40:** Stock market has low evaluation of business activity because worries about excess profits tax. P. 56.

**BW 8/17/40:** Discussion of how to pay for defense in the long term. Substantial unanimity on the desirability of financing from income tax. P. 7.

**BW 9/7/40:** Stocks up some because of England’s determined stand. Overall, stocks are still down relative to Sept. 1939. P. 55.

**BW 10/12/40:** “In the current fiscal year, the government will spend about \$5 billion on armaments... But next fiscal year (ending June 30, 1942) Army and Navy outlays may reach \$10 billion. Congress is bound – politically and in the interest of national prudence—to raise some part of that amount in taxes. That means higher rates.” P. 13.

“It must be remembered that the \$5 billion expenditure on armaments during the current fiscal year is only a beginning. A two-ocean Navy and a fully-equipped Army would bring the total defense bill to \$25 billion at the very minimum. Expenditures in the 1942 fiscal year, for the Army and Navy alone, could run to \$10 billion.” P. 68.

**BW 10/26/40:** “With \$8 billion in contracts placed by commission, vital activity shifts to factories. Actual war would bring difference practices and controls....With the initial business of getting money and expediting legislation over with, the Defense Commission has cleared \$3 billion-odd in contracts for the Army and \$5 billion-odd for the Navy, out of \$12 billion so far appropriated by Congress for new weapons and the plants and facilities needed to produce them in volume. It expects to place the remaining \$4 billion by the end of November.” P. 15.

**BW 11/2/40:** “Of the \$15 billion which the United States has appropriated for defense, only \$8 billion has reached the contract stage.” P. 58.

**BW 12/14/40:** “According to preliminary calculations by Leon Henderson and his corps of economists in the Defense Commission, next year’s armament requirements will total \$15 billion. They figure \$5 billion for the Army, \$3 billion for the Navy, \$5 billion for the British, \$2 billion for possible aid to other countries and for miscellaneous defense needs such as roads and airports.” P. 7

“The effect of the national defense program on retail sales is clearly indicated in the above chart. As a result of expanding payrolls, farm receipts, dividends, and profits, consumer income payments have mounted to the highest level since May, 1930...This

expansion in purchasing power is duly reflected in sales in department stores which currently are running 6% above the best level attained in 1937.” P. 13. (However, chart shows big buildup in second half of 1939, huge dip until mid 1940, and then run up. It looks like it is just right on the trend line extending from 1939.)

**BW 12/28/40:** “In certain industries, like machinery and machine tools, the over-40-hour week was in force before the national defense effort began in earnest; and these industries are still operating on a long schedule. But in most quarters, the step-up from under 40 hours to over has been gradual-almost lackadaisical-as these figures of the National Industrial Conference Board demonstrate.” P. 48.

**Defense News Shock: Include increase from \$10 to \$15 billion for next fiscal year. (i = 2.1%)**

**1940:4: PDV = \$4.9 billion**

**BW 1/4/41:** “Last year, Congress had pushed the total [on defense spending and commitments] from \$1.8 billion to \$16 billion.” P. 15

**BW 1/11/41:** “During the fiscal year ending June 30, 1942, Mr. Roosevelt plans (or hopes) to spend \$10.8 billion on national defense.” P. 13 (Table makes clear that this is expenditures, not just appropriations.) Table says 1940 fy actual was \$1.580, 1941 FY estimated \$6.464, 1942 FY estimated is \$10.811.

**BW 2/15/41:** “War or no war, New Dealers hope to spend \$12 billion to \$15 billion yearly. That is the implication President Roosevelt’s forthcoming request for legislative authorization.” P. 7.

Lend-lease sure to pass.

Expectations

FY	1941	1942	1943	1944	1945
1940:2 appropriations	\$5	\$10	\$10	\$10	
1940:4 appropriations	\$5	\$15	\$10	\$10	
1941:1 expenditures	\$1.6	\$6.5	\$10.8		
1941 Feb. propr	\$16.6 (for Army & Navy) + \$4.2 bil for British = \$20.8	\$8 (for Army & Navy) + \$4.2 bil. For British = \$12.2	\$10		
1941 Mar. propr	\$16.6 (for Army &	\$8 (for Army &	\$10		

	Navy) + \$3.5 bil for British = \$20.1	Navy) + \$3.5 bil. For British = \$11.5			
--	---	--	--	--	--

\$24.6 billion appropriated for Army and Navy over two years. British aid will raise the total to \$33 billion. P. 7.

**BW 3/15/41:** Congress passes lease-lend bill. “Authorized release of American stocks of armament on hand for immediate delivery to Great Britain, and requested \$7 billion appropriation to carry out the provisions of the new law. Thus, British arms requirements will be superimposed on our domestic arms needs unfrustrated by such nettlesome financial details as dollar exchange...Clearly, the passage of the lease-lend bill makes this ‘our’ war.” P. 13.

“On top of a \$15 billion domestic defense program we are now adding a \$7 billion lease-lend effort.” P. 16.

**Defense News Shock: Lease-lend adds \$7 billion**

**1941:1: PDV = \$7 billion**

**BW 3/15/41:** “It has become something of a commonplace to remark that the stock market no longer forecasts business.” P. 100.

**BW 3/22/41:** The \$7 billion increase for British aid will come gradually. P. 7

Roosevelt appoints an 11-man board to cope with labor disputes in defense industries.

**BW 4/5/41:** “Here, in the first quarter of 1941, we will create more new manufacturing facilities than were produced in the entire years of 1932 or 1933.” P. 68.

**BW 4/12/41:** “United States war spending is estimated at \$17.6 billion this year against an estimation national income of \$88 billion.” 20 % of income. P. 7.

National defense expenditures continue to rise. Last month was \$0.745 billion. “It probably won’t be very long before they reach the billion-a-month mark.” P. 13.

**BW 4/26/41:** “The Treasury Department has submitted to congress a plan to raise approximately \$3.6 billion in new revenue next fiscal year.” P. 7.

“The Balkan campaign has intensified the war-preparations aspect of our national economy. Some people, among them Secretary of War Stimson, are now talking of a struggle lasting five years. And the theory is that American troops will be in there fighting at the finish. This has not been said in so many words—but it is implicit in the actions of the Administration.” “Admittedly it is speculative. But what it means over

here is that American war output will increase steadily, month by month. Already there are estimates that actually defense expenditures will reach \$20 billion annually. This should be no surprise.” P. 13.

“What a Defeat Means. Even that, however, would not alter the business outlook. In fact, it might be said that it would intensify it.” P. 13.

“However, war-preparation is a terrific drain on the people. It means higher taxes, as this week’s tax proposals clearly delineate; it means an ultimate decrease in the supply of goods available for civilian consumption, as the 20% cut in automobile output for next year indicates.” P. 13.

Expectations

FY	1941	1942	1943	1944	1945
1941 Mar. appropr	\$20.1	\$11.5	\$10		
1941 April expend.		~\$12	\$20	\$20	\$20

**BW 5/3/41:** “Treasury determined to get more revenue from corporations by boosting both normal income and excess profits levies.” P. 15.

**BW 5/10/41:** Charts showing how different industries react. Many consumer goods industries look flat. Autos increased in late 1939, fell during first 2/3rds of 1940 and rose to new peak in early 1941. Defense industries go clearly upward. P. 26-27.

**BW 5/31/41:** “‘All Out’ Now Means All Out. Roosevelt speech is signal for clear track on armament, sidetrack for business-as-usual. Contraction in consumer goods is inevitable. Business Week Index rises to new high. This week marked a turning point in the country’s war effort....defense production is to be speeded up all along the line in a race against time and Germany...This week’s developments-the President’s speech, the battle of the Hood and the Bismarck in the North Atlantic, and the German attacks upon Crete...” P. 13.

“The consumers’ durable-goods industries are bound to suffer as a direct consequence. And don’t be taken aback if production of 1942-model passenger cars is cut 50%, or even more, instead of the announced 20%.” P. 13.

“Actually, however (auto) stocks are not being built up—for the obvious reason that car-owners, too, have been aware of the trend toward all-out war preparations. They have been getting new cars while the getting’s good, rather than wait for the 1942 jobs (BW-Mar. 22’41, p.14). Result: New cars are selling faster than the auto companies can make them.” P. 13.

“In the national defense effort, butter is losing in its battle with guns...Even so, American citizens will have a lot of butter. Out of a total national income of \$85 billion this year, our expenditures on defense will not reach much more than \$16 billion. Next year, out of

a \$93 billion income, defense is not likely to run as high as \$24 billion.” (Note this is clearly talking about calendar year) P. 64

Expectations

FY	1941	1942	1943	1944	1945
1941 Mar. appopr	\$20.1	\$11.5	\$10		
Actual expend	6.6	24.5	63.8	77.4	83.3
1941 April expend.		~\$12	\$20	\$20	\$20

CY	1942	1943	1944	1945
May 1941 expend	\$16	\$24	\$24	\$24

**Defense News Shock: Use change in expected expenditures less appropriations in March. Discounted with  $i = 2\%$**

**Thus, sum of May expected expenditures relative to March expected appropriations is  $(16 + 3*24 - 20.1 - 11.5 - 10) =$  Change in sum of expenditures versus appropriations in March.**

$$= (16 - 20.1) + (24 - 11.5)/1.02 + (24 - 10)/1.02^2 + 24/1.02^3 = - 4.1 + 12.3 + 13.5 + 22.6$$

**1941:2: PDV = \$44.3 billion**

**BW 6/28/41:** “The outbreak of the Russo-German war does not change either the pattern or the complexion of the business outlook. Indeed, if anything, it emphasizes them.” P. 13

“Hitler’s attack on Russia is tip-off to U.S. business that Nazis now expect long war.” P. 15.

“Leon Henderson’s Office of Price Administration and Civilian Supply is trying to keep prices down—by regulation.” P. 68.

**BW 7/12/41:** “Call it inflation or merely a big bulge in the cost of living, President Roosevelt is faced with the alternative of cracking down quickly or watching prices and wages go skyrocketing.” P. 7

Planning to raise some \$3.5 billion annually by new and increased taxes. P. 17.

**BW 7/19/41:** Roosevelt about to ask for another \$7 billion in lease-lend for British. P. 60.

**BW 7/26/41:** U.S. starts closely watching Japan's moves. "Battle of the Pacific has begun, with empires as the stakes." P. 49.

**BW 8/2/41:** U.S. freezes Japan's assets in the U.S. "A Long War or a Short One?" "But, if the German difficulties in Russia shift the balance of striking power in Europe, the end may come much faster than expected... In any event, a German-Russian standstill would certainly imply a shorter rather than a longer war... Instead of looking forward to four or five years of substantial defense orders, businessmen would have to consider an earlier letdown in armament production and adjustments to peacetime operations." P. 13-14.

Chart shows that price of Japanese government bonds plummet in mid July. P. 14.

**BW 8/23/41:** Roosevelt-Churchill meeting. P. 7

**BW 9/13/41:** "War Gives U.S. Two-Front Job. While Washington increases its commitments in Battle of Atlantic, business is getting first clear indications of part we'll be expected to play on Middle East front." P. 78.

**BW 9/20/41:** New tax act will become effective on Oct. 1. P. 15.

Defense outlays estimated at \$18 billion for FY 1942. But the end of FY 1942, expenditures will easily top \$2 billion per month (meaning \$24 billion per year).

**BW 10/4/41:** "Belts Tightened for a Long War. Drastic new rationing measures emphasize problems of Axis nations." Quote applies to European countries. P. 62.

**BW 10/18/41:** "Just when Congress is buckling down to the task of easing the Neutrality Act in order to allow United States freighters to mount guns for their own defense, and in the same week that the House approved the second lease-lend bill, which aims to provide another \$5.985 billion of defense aid to the democracies and Russia, a serious rift in Anglo-American trade relations has come to light." P. 18.

**BW 10/25/41:** "Expect dramatic developments in the defense program in the next few weeks. Plans were under way before the Kearny incident and the sinking of two more American ships but they have been speeded by this week's shocks and by the heartening reports on Russia's capacity to hold out, brought home by the Harriman mission. Beginning this week, war production –and it's 'war,' not 'defense' ...-becomes the No. 1 item on the business docket." P. 7

"Already, Washington is taking cognizance of the imminence of a shooting war... A year ago, the government thought of armament expenditures of \$10 billion a year; six months ago the goal was \$24 billion; as recently as last month \$36 billion was regarded as a desirable but hard-to-achieve outlay; but now an annual expenditure of \$50 billion is begin seriously discussed – not as the desirable goal, but as an inescapable necessity." P. 13.

**BW 11/15/41:** “U.S. set for Pacific Showdown.” P. 81.

**BW 11/29/1941:** P. 76 1941 table (in billions of \$) Assumes no price increase after 1941.

Calendar Year	National Income	Defense Output
1939	71	1.278
1940	76	2.618
1941	90	13
1942	100	28
1943	105	42 (footnote says a minimum figure)

**BW 12/6/41:** “War is up to Tokyo Hotheads.” P. 15.

**NYT 12/9/1941:** Govt board calls for spending \$4 billion a month on defense in 1942 and 1943. Its victory program calls for spending \$150 billion in next 24 – 30 months.

Americans must work 7 days a week.

**NYT 12/13/1941:** After passing emergency appropriations of \$10 billion, some Senators say final cost of the war could be \$200 billion. P. 1.

**BW 12/13/41:** “Outbreak of war pulled the whole defense organization in Washington up short... Both in eliminating all questions about the \$150 billion victory program.” Roosevelt in broadcast: “It will not only be a long war, it will be a hard war. That is the basis on which we now lay all our plans.” P. 7

Stepped-up program, for an output of \$5 billion a month by 1943. p. 8

“Henceforth, production will be dictated primarily by military and naval requirements.” P. 13.

“There were immediate business repercussions to the entry of the United States into the Second World War...Stock prices slumped when markets opened on Monday, but there was no panic.” P. 15.

“Until last Sunday it looked as though Congress would pass nothing more than a flaccid form of price control law-and that so tardily that inflation would have already made serious headway. Now, Administration leaders believe they will get about what they want, and a little sooner.” P. 15.

**NYT 12/9/1941:** Govt board calls for spending \$4 billion a month on defense in 1942 and 1943. Its victory program calls for spending \$150 billion in next 24 – 30 months.

Americans must work 7 days a week.

**NYT 12/13/1941:** After passing emergency appropriations of \$10 billion, some Senators say final cost of the war could be \$200 billion. P. 1.

Forecasts

<b>FY</b>	<b>1942</b>	<b>1943</b>	<b>1944</b>	<b>1945</b>	<b>1946</b>
Actual	24.5	63.8	77.4	83.3	47.6
1941 Aug expend	\$20	\$24	\$24	\$24	
1941 Sept expend.	\$20	\$36	\$36	\$36	
1941 Oct. expend	\$20	\$50	\$50	\$50	
1941 Dec. expend					
1941 Dec. expend.	Sum to \$200 billion				

**Defense News Shock: I had not previously coded the September change, since it was near the end of the month, nor the \$6 billion extra in lease-lend. Difference between October forecast and August forecast is \$78 billion.**

**The \$200 billion forecast means the change in expectations could be counted as (\$200 – sum (Aug 1941 forecasts) – 6.6 million in fy 1941) = \$200 - \$92 – 7 = \$101.**

**I use this second change.  $i = 2.3\%$ . Approximate discounting**

**1941:4: PDV = \$97 billion**

**BW 1/3/42:** “Already, Washington...is talking about a \$40 billion war expenditure in 1942....So, to attain a \$40 billion war outlay, the arms effort will have to almost doubled inside of 12 months. Assuming a persistent, regular rise, expenditures will have to reach \$3.2 billion monthly by June.” P. 13

And Business Week offers a tentative (but strictly conservative) estimate of about \$30 billion in war expenditures for 1942

Forecasts

<b>Calendar year</b>	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Jan. expend.	\$30 - \$40	\$60+			

**BW 1/10/42:** Roosevelt in state-of-the-union address called for formal program with \$24 billion in spending on defense items this fiscal year and \$53 billion in the 1943 fiscal year. P. 13.

Forecasts

<b>Fiscal year</b>	1942	1943	1944	1945	1946
--------------------	------	------	------	------	------

Actual	24.5	63.8	77.4	83.3	
1942 Jan.. expend.	\$24	\$53	\$200 – 24 – 53 = 123.		

(So far, this is in line with Dec. forecasts.)

**BW 1/31/42:** “We are now operating in a close-to-all-out managed economy.” Now price controls even on retailers. “At the same time civilian rationing has become unavoidable. Here is something that as recently as June, 1940, when France fell, was virtually inconceivable.” P. 13.

**BW 2/14/42:** “The War Picture Changes.” Japan’s gains on Singapore Island and the Malayan peninsula surprised the American public. P. 13.

**BW 2/21/42:** Due to fall of Singapore, total government control of economy, etc., stocks slumped to lowest level since 1938. P. 13.

**BW 3/7/42:** “ Plan to raise an additional \$7.6 billion in taxes.” P. 13.

**BW 3/28/42:** “Civilian passenger-car production has ceased; tires are rationed; housewives are painfully flattening out tin cans...” P. 80.

**BW 4/18/42:** “Unless one or both of the major Axis participants cracks, a several-years war is inevitable.” P. 13.

**BW 4/25/42:** “American bomber raids on four important cities (in Japan).” P. 13.

**BW 5/9/1942:** “Right now, we are turning out supplies for the armed forces at the rate of \$36 billion a year. By May, 1943, we’ll be turning out tanks, planes, ships, uniforms, ammunition, at a rate of about \$70 billion to \$80 billion.” Probably \$72 billion a year early in 1943. P. 88.

#### Forecasts

Calendar year	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Jan.. expend.	\$30 - \$40	\$60+			
1942 May expend	\$36	\$70 - \$80			

**BW 5/30/42:** “The potentialities of mass production have amazed even the experts in mass production... What this means is that American industry is learning how it can run with the wraps off.” P. 72.

**BW 6/20/42:** “Assurance of Victory Grows. The war is on its way out. At least, on the underlying balance of forces, Washington is now convinced that the war can be won in a reasonable time.” P. 5.

**Defense News Shock: Forecasts increase by (75 – 60) for 1943. Assume also true for 1944.  $i = 2.4\%$**

**1942:2: PDV = \$ 29 billion**

**BW 7/4/42:** “Since early this year all authorities have agreed that the outcome of the war would be decided in 1942 (BW-March 14, ’42). April and May were months of unwarranted optimism...But June...chalked up a string of dangerous Axis moves...These made even the layman realize that this war is likely to be long and serious.” P. 14.

**BW 7/18/42:** “It is plain now that the democracies have once more been the victims of overconfidence...” P. 54.

**BW 8/8/42:** “Pinch in some materials is temporary and in others is artificial, but cures are needed if arms production is to be pushed up to \$7 billion a month.” (goal for next year.) P. 15.

Forecasts

Calendar year	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Jan.. expend.	\$30 - \$40	\$60+			
1942 May expend	\$36	\$70 - \$80	\$70-80		
1942 Aug expend		\$84			

“The war outlook at the beginning of August is not good.” P. 53.

**BW 9/5/42:** “War Heads into Next Big Crisis. Axis continues to strike major blows.. but end of conflict’s third year finds United Nations more hopeful-and growing stronger.” P. 44.

**BW 9/12/42:** “The war hung like a black cloud over business this week.” P. 76.

**BW 9/19/42:** “With war expenditures at \$5.2 billion in August, we are well past the halfway mark in a production which envisages a peak of \$7 to \$8 billion monthly.” P. 13.

Forecasts

Calendar year	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Jan.. expend.	\$30 - \$40	\$60+	50?	50?	
1942 May expend	\$36	\$70 - \$80	70-80		
1942 Aug expend		\$84			
1942 Sept expend		\$84 - \$96	90	90	

**Defense News Shock: Forecasts increase by (90 – 75) for 1943. Also, the realization of length of war. I add (90 – 75) for 1944 and (90 – 50) for 1945, where 50 is the 1941 forecast for 1945. 14.6 + 14.3 + 37.3**

**1942:3: PDV = \$ 66.2 billion**

**BW 10/17/42:** “War expenditures in Sept. ... mounted to \$5.5 against an August figure of \$4.7 and \$4.1 at midyear.” P. 13.

**BW 11/14/42:** “American war expenditures hitting a \$66 billion rate in Oct.” P. 108.

**BW 12/12/42:** “...all war expenditures, including pay and subsistence, will run to \$53 billion this year, and the probable total for 1943 is something over 90 billions. Against that, consider that the actual November rate of war spending was more than 75 billions annually. Thus, if a peak rate of perhaps 100 billions is reached in late 1943, the prospective increase from current levels is about 33%.” P. 13.

Forecasts

Calendar year	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Aug expend		\$84			
1942 Sept expend		\$84 - \$96	90	90	
1942 Dec expend	\$53	\$90	90	90	

**BW 12/26/42:** Favorable war developments. “But unquestionably, dominant interest of business this week was in the possible relaxation of price control.” P. 13.

**BW 1/2/1943:** “American industry is now nearly at its ceiling. War expenditures, in the neighborhood of \$5.6 billion a month is due to rise gradually to something like \$8 billion at the end of the year. Conversion to war is substantially complete...The prospect for 1943 is one of high, steady, and relatively smooth production at a level somewhat above that of the rest of the world combined.” P. 5.

Forecasts

Calendar year	1942	1943	1944	1945	1946
Actual	51.1	84.2	94.5	81.9	25.1
1942 Sept expend		\$84 - \$96	90	90	
1942 Dec expend	\$53	\$90	90	90	
1943 Jan. expend		81.6	90	90	

**BW 1/16/43:** “Roosevelt adopts war expenditure goal of 100 billion dollars for fiscal 1944 against 77 billion for the current fiscal year.” P. 13. However, it is clear that this is the peak and government outlays are leveling off. P. 82.

Forecasts

FY	1942	1943	1944	1945
1941 Oct. expend	\$20	\$50	\$50	\$50
1941 Dec. expend.	Sum to \$200 billion			
1943 Jan. expend.	~ \$26	77	100	

**BW 1/23/43:** “Germany is losing the war in Russia.” P. 32.

**BW 1/30/43:** “No matter when peace comes, government budgets will never get back to comfortable prewar levels. An annual outlay of \$20 billion isn’t at all improbable for the postwar years.” Discusses how to tax. P. 92.

**BW 2/13/43:** Conditions have changed radically for the better with respect to the war. “Whether or not strategists are right when they claim that it will be May or June before the Nazis are driven out of Tunisia and the Mediterranean supply route to the Middle East is opened, it is plain that London and Washington are preparing for large-scale action in Europe, and that business is going to feel the effects immediately.” P. 44

**BW 3/20/43:** ”How Soon the Peace?” “Our very strategy to take on Germany first and Japan later makes it likely that the war with Nippon will outlast fighting Europe. That would provide opportunity to define more exactly the timing of transition to peace.” P. 13

**Defense News Shock: Although war is going better, realization of cost rises. Use Roosevelt’s increase in FY 1944 of 100 – 77 = 23**

**1943:1: PDV = \$23 billion.**

**BW 4/3/43:** “If we win in Europe before we win in Asia, the war effort will be partially demobilized.” P. 13. Effort would shift from munitions to building ships.

“Wall Street Bets on Victory. Eleven-month rise in stocks, led by ‘peace’ shares....Wall Street now is confident of victory.” P. 15.

Chart shows stocks fell from 115 to 85 with fall of France, went up and down, then fell from 90 to 82 with Pearl Harbor, rallied a little in each 1942, hit a trough of 74 in July-Aug. 1942, and then started rising pretty steadily. Hit 115 in March 1943.

**BW 5/15/43:** “Economic Noose Tightened (on Hitler).” Hitler is now trapped on the continent. P. 42.

**BW 5/29/43:** “Pre-Peace Moves up to Stalin.” P. 74

**BW 6/5/43:** “Some time within a few weeks, the United Nations will breach the walls of Hitler’s European citadel—perhaps at several points.” P. 15.

**BW 6/12/43:** Wall Street jittery about coming invasion of continent. They worry about possibility that we land and don’t make a go of it. P. 104.

**BW 7/17/43:** “Beginning of the End. But peace in Europe seems a year away at the earliest, and meanwhile, pressure continues for ever-increasing munitions supplies.” The two month space between the Tunisian surrender and the Sicilian invasion indicates the time required, step by step, to the knockout blow. “Victory in Europe, therefore, hardly seems nearer than the approximate date previously figured – mid-1944.” P. 13.

**BW 7/31/43:** “Change in the Timetable? But even if an Italian collapse revises calculations on the date of victory, it can make little difference to the broad pattern that the war is imposing on business.” P. 13

**BW 9/4/43:** “Hitler’s Defense Tremble. Uprising in Denmark and tenseness of relations with Sweden complicate Nazis’ job.” P. 44.

**BW 9/11/43:** “Italy’s surrender this week precipitated another peace scare, but this time the stock and commodity markets, which usually sell off in the face of news that implies a shortening of the war, reacted only mildly to Wednesday’s news.” P. 15.

**BW 10/2/43:** “R’ Day is Drawing Nearer. Reconversion never was expected in 1943, of course, but now is the time to figure just when it will come and what it will entail – even while meeting new arms schedules.” P. 13. But 1944 may be different.

War production is climbing again. “War output is expected to push on to 1944 levels more than 20% higher, in dollar volume, than for 1943 – about \$76.5 billion against \$62.5 billion, exclusive of construction.” P. 15.

**BW 10/23/43:** “It is the considered opinion of high Washington production and military officials that, as soon as Germany quits, the Army and Navy will cut their overall demands at least 50% below present schedules. In some lines, production will stop dead.” P. 5.

**BW 11/13/43:** Two conflicting forces – the approach to victory and the immediate trend of the war economy. P. 13. Peace might “break out.”

**BW 11/20/43:** “Estimates of Allied governments indicate that first six months of liberation will cost \$2 billion for relief, and that almost half of this can be supplied by Europe itself.” P. 38.

**BW 11/27/43:** “Announcement of a War and Navy Dept. turnback of \$18 billion in unneeded appropriations and authorizations.” “Talk of cutback in the munitions program even before victory over Germany.” P. 13.

**BW 12/11/43:** “And now the Second Front?” Teheran conference. P. 2

**BW 12/18/43:** “War Output: 1944. Current cutbacks don’t mean rapid reconversion; arms production must go up 5 % over scheduled rate in present quarter.” P. 15.

**BW 12/25/43:** “1944--An Auspicious Year. War outlook is encouraging, even though there is now less talk of a quick end.” P. 65. Need to build cross-Channel invasion boats.

**BW 1/1/44:** Eisenhower will lead combined attack. “States flatly that Hitler will fall in 1944.” P. 5.

“Some time during 1944, the Far East is going to rocket into the limelight as the No. 1 front in the war. Though this will happen only after the defeat of Germany (not to be expected before the second half of the year), the battle tempo in the Orient has begun to speed up already.” P. 40.

**NYT 1/13/44:** Roosevelt projected total for federal budget for FY 1945 is \$97.769 billion. (According to 6/18/44 NYT, in Jan. Roosevelt said that if the war continued through June 1945, the total cost of the war could reach \$326 billion. That total includes everything spent and will be spent since the fall of France in June 1940.)

**NYT 1/14/44:** Roosevelt budget - \$90 billion for defense expenditures in FY 1945.

Forecasts

<b>FY</b>	1942	1943	1944	1945
Actual	24.5	63.8	77.4	83.3
1941 Oct. expend	\$20	\$50	\$50	\$50
1941 Dec. expend.	Sum to \$200 billion			
1943 Jan. expend.	~ \$26	77	100	
1944 Jan. expend				90

**BW 1/22/44:** “Reconversion—the real thing—is a lot farther off than most people have been thinking.” [page number missing]

Invasion plans are developing rapidly.

**BW 2/12/44:** “The longer the war in Europe lasts, the shorter will be the elapsed time between the fall of the Reich and the crushing of Japan. This telescoping of the time between the two armistices means simply that the ultimate reconversion is likely to be sudden, severe, painful.” [page number missing]

**BW 2/26/44:** “How much cutback at the end of the German war? Official viewpoint in WPB is maximum of 30%, minimum of 20% within a year if the event comes by Oct. ... There are some in the high places, meanwhile, who say the cutback will be 50-60%.” [page number missing]

**BW 4/29/44:** Axis-Europe becoming increasingly jittery. “France is likely to be blasted from the south as well as the west on D-day.” P. 111.

**BW 6/10/44:** “War production, January through April, averaged \$5.4 billion a month. To meet schedules, it must push \$6 billion for the last eight months of 1944.” P. 9.

**NYT 6/18/44:** The total cost of the war will reach \$200 billion by the end of the month. Expenditures in May totaled \$7.918 billion, which is above what would be expected from this time forward. Costs are expected to taper off when the axis is finally defeated in Europe. In Jan. Roosevelt said that if the war continued through June 1945, the total cost of the war could reach \$326 billion. That total includes everything spent and will be spent since the fall of France in June 1940. For fiscal year 1944, we will have spent \$92 billion on direct war costs, with another \$7 billion on other things such as interest service.

**BW 6/24/44:** “If Germany should be out of the war by late summer, the cut in military production within a year probably would be 40%. That’s what officials are now saying.” P. 10.

Invasion sends stocks higher (both war and peace stocks).

**Defense News Shock: Successful D-Day invasion. Optimism about earlier end to war. Talk of Germany falling late summer, cut in military production of 40% within a year after. Assume the expectation change is one year earlier end to European war.  $i = 2.5\%$**

**1944:2: PDV = - \$ 34 billion = - 90 x 0.4/1.025<sup>2</sup>**

**BW 7/15/44:** War in Europe systematically building up to a smashing climax. P. 111.

**BW 7/29/44:** “The war in Europe might quite conceivably end more quickly than most of us have allowed ourselves to hope.” P. 9.

**BW 7/5/44:** “Look for U.S. landings on the Philippines almost any day.” P. 111.

**BW 8/12/44:** “...the end of the war in Europe is not more than a few months away.” [page number missing]

**BW 9/2/44:** “When the German war ends, the Army and Navy will cut back their production program about 40%, but federal expenditures—now running around \$90 billion a year—will not drop abruptly.” Discuss discharge payments, etc. “And it might be six months after Japan’s fall before they sink to \$35 billion a year.” [page number missing]

V-Day in Europe is not far off.

**BW 9/9/44:** “The war in Europe is rapidly coming to an end.” [page number missing]

**BW 9/23/44:** “Both Washington and London now officially warn that there may be no formal surrender by the Germans.” P. 111.

**BW 9/30/44:** “Washington’s fright over reconversion was receding this week. Some officials now opine that it will be some time before the cutbacks come, whereas a fortnight ago they figured we might be caught altogether unprepared...Now, the equation is changed by the idea that we may not win the Victory in Europe before spring (Gen. de Gaulle), that Japan may last 18 months after Germany (Office of War Information). These guesses contrast with recent predictions of Oct. 31 for the Nazis, a year later for the Japs.” P. 9.

Previously: Germany out by Oct. 31, meaning we would need 60% as much stuff for war in the next year as producing now. And Japan would presumably be out of the war in the autumn of ’45.

“Now suppose the Reich falls at the end of Dec. instead of Oct, and the Japanese war proceeds on schedule. That means we have produced at 100% for two months more than was figured and have, therefore, piled up a surplus. Thus, we can, theoretically, cut back to 54% or 55% for the following ten months.” P. 9.

“The official assumption is that we shall cut back 30% in the three months following Germany’s fall, 10% in the next nine months. Change the timetable as outlined above, and it probably would mean a drop in war production of 35% in three months, 10% over the next seven.” P. 9.

“What V-E Day Means in Terms of Jobs” “Spread over a year, a 40% cutback of war work would release four million workers directly and perhaps one million more indirectly; and over two million servicemen might be demobilized.” P. 120.

**BW 10/7/44:** “War production averaged \$5.4 billion a month through August of this year. The schedules called, originally, for a 1944 total of \$72 billion; this has been stepped down to \$70, to \$69, and finally to \$67.3 billion. Yet, despite the progressive lowering of sights (due to shifts in the program), war plants would have to average \$6 billion a month, September through December, to meet quotas. This can’t be done...Krug says, however, that we shall miss the ’44 goal by only 2% to 3%.” P. 9

**BW 10/21/44:** Can’t rely on current estimates of the dept of post V-E day cutbacks. Since currently underproducing, the actual cutback will probably be 35% rather than 40%. P. 9.

**BW 11/4/44:** “This again emphasizes the dramatic shifts in the military timetable. Our generals have been warning for some time that the Nazis might not be defeated this year..

Meanwhile, the smashing defeat of the Japanese navy has materially shortened the probably length of the war in the Pacific.” P. 9.

“Business Week repeatedly has pointed to the possibility—not probability—that the two fronts might collapse within a few months of one another... Suppose Germany should not fall before June, and that it then appeared certain Japan would go within the year. Initial cutbacks would be accentuated; all war production, of course, would end shortly after Japan’s defeat. Thus, in the space of a few months, about 60 billion dollars of munitions expenditures yearly would be cut off. That’s quite a slice of present annual manufacturing volume of between 95 and 100 billion dollars.” P. 9

**BW 11/18/44:** Agreement that lend-lease will be cut 50% after V-E day.

**BW 12/9/44:** “For the first time since Pearl Harbor... it is necessary to increase war output in order to keep up with front-line consumption. It is no longer a job of building up our reserves of munitions.” P. 9.

“On V-E Day the ‘arsenal of democracy’ will be brimful... with munitions, most of which can be used in the Pacific. Consequently, business analysts find it hard to believe that the cutbacks will run to as little as 15% or even 25%, as Washington now says.” P. 9.

**BW 12/23/44:** German spectacular counterblow along the Belgium-Luxembourg front. P. 111.

**BW 12/30/44:** “America’s budget-money, manpower, and materials-now is based on the calculation of two wars running indefinitely. The unhappy turn of events on the German frontier is bound to alter all planning... Meanwhile, we have spent more than 244 billions of dollars on war since July 1, 1940... We now face the war’s leanest year for civilians. We gambled on reconversion by the end of 1944 and lost (BW-Mar. 11, 1944). P. 9

“Militarily, it is clear now that policy makers miscalculated the length of time that the Germans could hold out and the strength they could summon during the downhill struggle. This miscalculation led to the decision at Quebec to open the Philippine campaign, a major undertaking requiring vast numbers of ships to maintain long and rapidly extending supply lines. The unexpected prolongation of a major campaign in Europe at the same time that the Philippine battles are reaching massive proportions has created an unanticipated supply burden. Full-scale munitions production is not likely to be dropped again until German defeat is assured.” P. 95

**Defense News Shock: In June-July, predictions are that output declines by 40%, from 90 to 54, by a year after Germany’s fall. Output will decline to 35 by 6 months after Japan’s fall.**

**If Germany fell at end of summer, and Japan 18-mos later (end of 1946), average spending would be:**

90 at mid-year 1944

54 at mid-year 1945 (avg. of 90 and 54 is 72, for end of 1944)

35 at mid-year 1947

January 30, 1943 article said that after war, federal budget would still probably be around \$20 billion. Assume \$15 billion is from defense.

Oct – Dec. 1944, good news on Japanese front, but realization that Germany will last a lot longer. BW scenario is Germany falls in June 1945, Japan within the year. (Assume 6 months).

Date	1944:1-6	1944:12	1945:6	1945:12	1946:6	1946:12	1947:6	1947:12
44:6-7	90	72	54	54	54	54	35	20
44:10-12	90	90	90	72	54	35	20	15

#### Implied Average expectations for Calendar Year

Calendar year	1944	1945	1946	1947
Actual	94.5	81.9	25.1	18.2
June-July 1944	85.5	58.5	54	36
1944 4 <sup>th</sup> quarter	90	85.5	53.7	23.3

So difference between 4<sup>th</sup> quarter and end of 2<sup>nd</sup> quarter 1944 expectations is 18.5.  $i = 2.5\%$

$$4.5 + 27 - 12.7/1.025^2 =$$

1944:4: PDV = \$ 19.4 billion

**BW 1/13/1945:** “There will be no more guessing about victory over the Nazis by military leaders or by the White House. Yet this week’s budget, which is a sort of composite guess, would place the date in the summer or early fall. That may be deduced from the cut in war expenditures from \$88 billion for the current fiscal year to \$70 billion for the twelve months ending June 30, 1946. Washington is now thinking in terms of a 30% cutback in war output after Germany falls. Actual arms expenditures now are running at \$54 billion (exclusive of other war costs such as pay and maintenance of the armed forces, dismissal pay, and so on). With a 30% cutback, this will decline to something like an annual rate of \$40 billion. Incidentally, don’t confuse current annual arms expenditures of \$54 billion with WPB’s output estimates of \$63 billion. They are two difference yardsticks for the same thing: Treasury wants to know what it pays for arms but WPB wants to know much the forces get. WPB’s figures are based on the equipment

a dollar would buy in August 1943. We can make more tanks and guns and planes per dollar now due to increased efficiency.” P. 9.

“The key figure in the budget is that for war spending, of course. And as against the total of almost 90 billion dollars in both fiscal 1944 and 1945, the President projects for fiscal 1946 a level of 70 billions. This is a compromise of estimates ranging from less than 60 billion to more than 80 billions dollars, ‘depending on various assumptions which may reasonably be made with respect to the course of the war.’ ...Other expenditures rise from under 11 billions this fiscal year to over 13 billions for 1946-as a result of increased interest, tax refund, and veterans’ pension costs.” P. 120

“For the start of the war program on July 1, 1940, to the end of June 1945, almost 290 billions will have been spent for war.” Cost will be 360 by the end of the next fiscal year. “Bu the time final demobilization is completed, this will likely have proved a 400-billion-dollar war.” P. 120.

Forecasts

FY	1942	1943	1944	1945	1946	1947
Actual	24.5	63.8	77.4	83.3	47.6	
1941 Oct. expend	\$20	\$50	\$50	\$50		
1943 Jan. expend.	~ \$26	77	100			
1944 Jan. expend				90		
1945 Jan. expend			90	90	70	

**BW 2/3/1945:** Russian victories in eastern Europe. “the war in Europe might end almost overnight instead of dragging on through most of 1945.” P. 5.

**BW2/10/45:** “There have been about as many V-E Day cutback estimates as there are production and procurement officials in Washington. Late in 1943, the talk was of a 25% reduction in the year after Germany’s fall. It went up by stages to 30% and then to 40%--with some in WPB saying privately 60%-70%...The last few months have witnessed a tug of war all the way from 15% to 75%. These shifts in attitude portray all too clearly why you can’t bank on 17%, but the figure should be carefully examined just the same.” P. 9

**BW 2/17/45:** “Prospects of peace in Europe seemed more real, more substantial, this week than ever before. Stock prices responded by surging to higher levels than any attained previously during the way.” P. 9.

“Bets that the cutbacks will top 20% in the first 90 days after Germany falls and will total between 30% and 40% within a year, still are good.” P. 9.

**BW 3/3/45:** “[Washington] secretly believes that formal Nazi resistance will break down in the next three months.” P. 111.

**BW 3/17/45:** “Astute Wall Streeters...are saying that the war in Europe can end any day now; some art willing to bet that it won’t run beyond the end of April.” P. 9.

**BW 3/24/45:** “Don’t miss the significance—and inevitable, long-term repercussions on business—of the drastic changes that have been made in Pacific war plans... The U.S. obviously intends to utilize a huge land army to help specially trained Chinese forces drive Japanese troops from the Asiatic mainland.” P. 111.

**BW 3/31/45:** Stock prices fall. Investors realize that the time between V-E day and end of Pacific war will be short, so reconversion difficult. P. 118.

**BW 4/7/45:** Byrnes report puts us back to estimate of 40% reduction in arms output within a year after Germany is gone. P. 9.

**BW 5/5/45:** Germany collapses.

**BW 6/2/45:** “It still seems likely that war output will be cut by 40% or more within a year.” But initial pace might be slower. P. 9.

**BW 6/16/45:** “The best guess now is that the government’s postwar budget will have to run somewhere between \$20 billion and \$30 billion. A Brookings Institution study, published this week, guesses that expenditures in 1949 will be \$18.9 at a minimum, \$25.8 at a maximum, with \$22.3 the most probably mean.” P. 5.

**BW 6/30/45:** “It’s likely to require another year to fight Japan to its knees.” P. 107.

**Note: Germany falling by summer 1945 was anticipated in 1944:4. Certainty of this gradually built up until eventuality.**

**BW 7/28/45:** “Along about the end of the first week in August, this war will have cost us \$300 billion...But the end of this year, however, the annual rate of expenditure for munitions will be down by about \$16 billion; by the end of March 1946, the cut will be around \$27 billion.” Japan will probably be crushed by next June. P. 9.

**BW 8/11/45:** “Enter: The Atomic Age. For industry, as for all mankind, implications of the bomb dropped on Japan far transcend its immediate war use....Most immediate prospect was the termination of the Japanese war.” P. 16.

“The war with Japan can end any day.” P. 111.

**BW 8/25/45:** “Since July 1, 1940, Congress has appropriated \$417 billion for war, of which an estimated \$290 billion has actually been spent...Not all of the \$127 billion will be recapturable. Despite munitions cutbacks, the 1945-46 program still may take as much as \$50 billion, largely because expenditures for nonmunitions (food, clothing, fuel, aid to liberated Europe) must go on. On top of that, there will be another \$20 billion to \$30 billion to settle terminated contracts, to allow for postwar munitions commitments,

and the like. All told, winding up of the war may take about two-thirds of the unexpended balance.” P. 5.

**BW 9/8/45:** “The first thing to understand about the revised federal budget just announced for the fiscal year ending June 30, 1946, is that it is not a peace budget, but still a war budget...Of the over \$66-billion total expenditures, more than \$50 billion is still ticketed for war activities. And most of the other \$16 billion is for the “aftermath of war”-almost \$5 billion for interest on the debt, about \$3 billion for veterans’ pensions and benefits, over \$2 billion for excess-profits tax refunds, and over \$2 billion more for contributions to the new international financial institutions outlined at Bretton Woods.” P. 120

“The principal war expense for 1946, servicemen’s pay and subsistence, will begin to flatten out in mid-1946 at much lower levels.” P. 120.

“But if we get no extraordinary post-war government spending programs, federal expenses, all in all, should be running in the neighborhood of \$30 billion a year when the major demobilization has been completed some time around mid-1946. A lower, final post-war level of perhaps \$20 billion a year can be reached only gradually over the following postwar years.” P. 120.

(Note: Actual expenditures between July 1940 and June 1946 were \$303.2 billion. Much of the \$417 appropriated was probably for veteran’s benefits, foreign aid, designed to stretch over many years.)

**Defense News Shock: I use estimate that (1/3) of appropriated but unspent funds will be saved:  $(1/3) \times 127 = 42.3$ .  $i = 2.4$**

**1945:3: PDV = - \$41 billion**

**BW 7/13/46:** “Costs of winding up war effort have been boosted \$2 billion.” P. 9

**BW 8/10/46:** Evolution of a budget. For fiscal year 47. Revised estimate for defense (exclude. Veterans) is 18.5 rather than the 14.8 estimated in January. P. 16.

**Defense News Shock: Cost estimate increase.**

**1946:3: PDV = \$3.7 billion**

**BW 11/16/46:** Defense is expected to drop from 18.5 in FY 1947 to 15 in FY 1948. P. 31.

**BW 3/8/1947:** “Business around the world will be profoundly affected by foreign policy decisions which Washington is forced to make in the next few months. With almost no warning, London has called on Washington to take over its economic and military

obligations in Greece – beginning Apr. 1....Observers familiar with the Near East know that this commitment can't stop with Greece.” (p. 103)

“Truman’s draft decision was made before he got the British S.O.S. He let it stand, anyway. So, the draft dies Mar. 31.” P. 5

**BW 3/15/1947:** “Truman is forcing a showdown with Congress as well as with Russia. He could have had his \$400 million for Greece and Turkey with little opposition if he had based his appeal solely on relief and rehabilitation. But he decided that a short-of-war showdown with Russia was too important to weasel into...Truman chose to make it unmistakably plain that Greece is only the first move to block Russia all over the world.” P. 5

“Executives should keep two points clearly in mind in appraising this week’s dramatic foreign policy developments: (1) the proposed \$400 million loans to Greece and Turkey are only the first of a series which this country will make to support governments now threatened by Communist minorities. China is likely to fall into this group as soon as Chiang Kai-shek makes his government more representative...Engineers familiar with the reconstruction jobs to be done, and with the problems of creating industries...believed that at least \$1 billion will be required during the next five years.” P. 111.

**BW 3/29/1947:** “As details of this country’s bold new foreign policy unfold, executives are getting a glimpse of the important role U.S. business must play if the program is to be successful.” Discussed increased demand for transportation equipment, engineers, etc. P. 99.

**BW 4/12/1947:** “Whatever strings may be attached by Congress, the \$400-million loan for Greece and Turkey is virtually assured. More important, it is clear now that the country generally will support the Truman Doctrine. This means more loans for the Middle East when pending funds are exhausted. There will also be a broad program of lending in other parts of the world to combat the spread of Communism. The proposed \$500 million loan to Korea, and inevitable credits to Iran, indicate how widely dollars will be dispersed.” P. 111.

**BW 4/19/1947:** “Total cost of the ‘stop Communism’ program will easily pass \$10 billion in the next two years.” P. 107.

**BW 5/3/1947:** “Truman’s foreign policy is in deep trouble. Republicans in Congress... have been losing stomach for the program week by week.” P. 5.

**BW 5/10/1947:** “The Truman-Marshall foreign economic program is running to serious difficulties. Trouble started with the drastic slashing of the foreign relief bill by the house.” P. 99.

**BW 5/17/1947:** “The Administration has taken another look at the world and decided that the U.S. may have to boost its international financial aid from \$5 billion to \$8 billion a

year...Economic reconstruction is a bigger task than the Administration originally bargained for...Job immediately ahead for Truman and Marshall is to sell this policy to an economy-minded Congress.” P.103 Exports soar to help Europe rebuild.

**BW 6/7/1947:** “Administration’s new program, now shaping up, will estimate \$11 billion in next three years to avert world’s dollar shortage. Object: to avoid slash in U.S. exports, rise of Communism...Estimates are that for the next three years, starting July 1, it will be necessary for the world to have rightly \$11 billion in addition to the commitments the U.S. has already made. Since the World Bank is expected to provide \$2 billion in long-term loans and the Monetary Fund \$1 billion on short-term, the direct U.S. contribution would be around \$8 billion.” P. 113.

**Defense News Shock: U.S. part is \$8 billion, spread over 3 years. I = 2.2**

$$1947q2: PDV = \$7.8 \text{ billion} = (8/3) \cdot \left[ 1 + \frac{1}{1.022} + \frac{1}{1.022^2} \right]$$

**BW 7/5/1947:** “The Kremlin is now casting the die for a divided world.” P. 83. Previously coup in Hungary, etc.

**BW 7/12/1947:** “The Marshall plan is moving ahead with unexpected speed.” P. 91

European demand for U.S. exports bring rich profits. P. 93.

**BW 9/13/1947:** “The Paris version of the Marshall Plan will be out next week. Western Europe will ask the U.S. for at least \$20-billion over the next four years.” P. 111

**Fall 1947 – Communists lose in France.**

**BW 1/10/1948:** “The European Recovery Program looks better to business now that the Administration has dropped the \$17-billion price tag.” P. 95

**BW 1/17/1948:** “Marshall Plan expenditures are the main reason for the jump in the total budget that Truman forecasts. Expenditures for international affairs are \$5.5 billion for fiscal 1948. Truman’s proposals would boost them \$1.5 billion to a total of \$7 billion in fiscal 1949. The biggest single item in the new budget still is national defense. This is scheduled for \$11 billion in fiscal 1949, up about \$300 million over the current year.” P.

**BW 3/6/1948:** “The April 18 elections in Italy could bring a decisive East-West showdown.” P. 107

**BW 3/13/1948:** “Marshall Plan passage in time to influence Italy’s April election is now the target.” P. 15.

**Defense News Shock: The increase over the previous 1947q2 shock is 1.5 billion in foreign aid and \$0.3 for defense. The long-term government bond rate was 2.4%.**

**1948q1: PDV = \$1.8 billion**

**BW 3/20/1948:** Truman asks for the draft. P. 15.

**BW 3/27/1948:** “Biggest increase in military spending that we’ve heard seriously talked about runs between \$4-billion and \$5-billion-despite some high flying newspaper guesses. Of that, about half would be the housekeeping costs of the extra men Truman wants.” P. 15.

**BW 4/10/1948:** “Air power is one form of war preparedness on which Congress is determined to go further than Truman is now... You can count on Congress to vote a start toward the 70-group air force demanded... Dollarwise this adds only \$500-million or so to the increased military budget for fiscal '49; the big cost would come later. But the draft of men still will go through, too.” P. 15

**BW 4/17/1948:** “Manpower requirements for handling Truman’s \$3-billion step-up in military spending...” p. 15

**BW 5/8/1948:** “Truman’s extra \$3 ½ billion...Of the \$14 1/2 billion that Congress is going to give Defense Secretary Forrestal, about \$2 billion is for new airplanes. Another \$2-billion is for a scatteration of shells, trucks, ship modernization, and miscellaneous fighting gear. The rest is for pay and for housekeeping.” P. 15.

**BW 5/22/1948:** “Moscow is calling off the cold war and turning on a peace offensive. The new line will probably last into next year, maybe longer.” P. 115

**Defense News Shock: Truman’s extra \$ 3.5 billion for defense.**

**1948q2: PDV = \$3.5 billion**

**BW 7/3/1948:** “Truman’s cabinet is split on how to handle the Berlin situation.” P. 71.

**BW 7/24/1948:** “A Berlin showdown is being shaped in Washington...The Berlin Air Lift is going to put the squeeze on U.S. domestic airlines.” P. 15

**BW 8/7/1948:** “There’s a temporary easing of the war-scare tension.” P. 103

**BW 8/14/1948:** “War won’t come over Berlin.” P.15

**BW 9/4/1948:** “Washington thinks the Berlin crisis is about over.” P. 103.

**BW 12/4/1948:** “Truman’s \$15-billion lid on defense spending isn’t going to stay put...The pressure to blow the lid off is rapidly building up.” P. 15

**BW 12/11/1948:** “Guns ahead of butter? That’s the grim choice Washington is putting to the national again. Last week we told you that Congress is going to vote the military more money than Truman’s \$15-billion ceiling...Forrestal intends to make one last attempt to swing Truman back onto the course the Pentagon contends was set last spring by the draft act and the 70-group Air Force. Minimum price tag for this program in fiscal ’50 is \$17.5 billion.” P. 15

**BW 12/18/1948:** Truman turns down Forrestal request – sticks to \$15 billion lid. P. 16

**BW 2/12/1949:** “From Cold War to Cold Peace? There’s some evidence that Stalin’s “peace offensive” is serious...As things stand, the prospect over the coming years is for a constantly increasing military budget. But suppose the pressure of these military expenditures were relieved some time fairly soon.” P. 19.

**BW 9/3/1949:** “Louis Johnson’s cost-cutting in the military establishment is real enough...but...total expenditure for national defense is not coming down – not this year, or next. Total it all up... “ Table shows fy150 is \$15.9 billion and fiscal 1951 is \$15.950 billion (includes arms aid to Europe of 0.5 billion.) p. 15

**BW 10/1/1949:** “Russia’s Atom Bomb does change things...the West has been organizing its half of the world in the belief that it alone had the bomb until around 1952. Now the other half of the world has the means for making the bomb, too...Already you can see the speedup toward completing the West’s program of alliance. The House effort to cut arms aid to Europe melted away...Similarly, Senate opposition to the House-approved extra \$800-million for plane procurement will melt away. Next year, even Truman may abandon his efforts to keep the air force at less than the magic 70-group strength.” P. 15

**BW 11/26/1949:** “Defense Chief Johnson’s publicized announcement that he is cutting \$2-billion from next year’s military spending means no more than this: The Pentagon has acquiesced to a Truman-imposed \$13 billion ceiling fixed weeks ago.” P. 16

**BW 12/10/1949:** “The draft will die when the present law runs out next year.” P. 15

**BW 12/24/1949:** “Less fear of early war is reflected in defense planning. The military budget is to be held to the \$13 billion ceiling set by Truman... Arms aid to Europe: at least a half billion more.” P. 16

**Defense News Shock: Tensions easing, drop of \$15 billion ceiling to \$13 billion**

**1949q4: PDV = - \$2 billion**

**BW 2/11/1950:** “U.S.-Russian relations are tense, but are not regarded as alarming.” P. 16

**BW 2/25/1950:** “No quick rise in arms money is likely as a result of U.S.-Russian tension.” P. 16

**BW 3/4/1950:** “Aid to Europe after 1952 now is taken for granted, both here and abroad. You can see the beginnings of the campaign to educate Congress to the idea that dollars will have to be kept flowing after ECA’s end.” P. 16

**BW 3/11/1950:** “Defense Secretary Johnson...forced the Army, Navy, and Air Force to accept the \$13.5 billion military budget.” P. 16.

**BW 4/1/1950:** “A rise in defense spending is in the making. The timing is uncertain. But you now have the first sign that Truman is starting to weaken on his \$13.5 billion ceiling on the military budget. The tip-off is in a new survey of how much more hard goods the economy can produce without a return to inflation... Doubt about future unemployment favors the military, long-term...Now it’s deflation that is the economic worry, and Russia’s actions are a war threat... p. 16.

“A Russian cold war offensive throughout western Europe is scheduled for late spring.” P. 99.

**BW 4/15/1950:** “Pressure for more government spending is mounting. And the prospect is that Congress will give in – a little now, then more next year. The reason is a combination of concern over tense Russian relations, and growing fear of a rising level of unemployment here at home. More money will be provided for defense, from a half-billion dollars to \$1-billion, primarily for new aircraft. That’s for this year. Another rise next year seems certain, both in the level of U.S. defense and in foreign arms aid.” P. 15.

Upcoming London conference on an Atlantic Union. P. 127

**BW 4/22/1950:** “New U.S. military and economic commitments to Europe are brewing. Already you can begin to see the long-range implications. Arms aid will be stepped up to mesh with an over-all plan to strengthen the Atlantic Pact nations in the cold war with Russia. U.S. military strength will shift. More emphasis will be put on air and sea power, less on ground forces. Economic aid will continue.” P. 15

**BW 4/29/1950:** “Here’s the official position: A shooting war still is not in sight. But the cold war is being stepped up by both sides, with harsh words and roughhouse tactics... Watch Berlin in May...And watch the May London conferences.” P. 15

**BW 5/6/1950:** “The arms race will be stepped up by the U.S. and its allies... Truman has lifted the \$13.5 billion budget ceiling to allow at least \$350-million more for war planes. The draft machinery will be retained...Rearmament will be costly...The plans to boost the U.S. Air Force and Navy, though, will show up fairly soon. Arms to Europe under the existing aid program will flow faster. But the big bulge won’t come until next year.

That’s when officials think the rise in arms spending will really begin-and amount to extra billions.” P. 15.

**BW 5/27/1950:** Commitments made at the London conference. “Direct financial aid, to be continued beyond mid-1952, when the Marshall Plan expires, at the rate of at least \$1-billion a year. On the military side, the U.S. will boost its own strength and contribute more in arms aid to Europe...The rise in arms orders will be gradual...it will be 1952 before actual cash spending jumps...The rise is talked of in terms of a billion or two.” P. 15.

**BW 6/10/1950:** Lack of candor from Administration on future defense spending. P. 15

“Administration asks for \$1.2 billion more for allied arms aid...The figure was down from last year’s \$1.3 billion. Acheson warned, though, that next year the ante might be raised. (Something around \$2 billion seems likely.) And the program is sure to go on at least until 1954.” P. 22.

**Defense News Shock: \$2 billion a year for allied arms, for at least 4 years. i =2.3%.**

**1950q2: PDV = \$7.7 billion** =  $2 \cdot \left[ 1 + \frac{1}{1.023} + \frac{1}{1.023^2} + \frac{1}{1.023^3} \right]$

**Korean War.**

**1950:3: On June 25, 1950, North Korea invades South Korea.** By June 30, 1950, the US commits forces. Things are going well in October 1950, with S. Korean allies pushing north past the 38<sup>th</sup> parallel to the Chinese border. November 9, 1950, the Chinese enter the Korean War. The U.S. takes this as a Soviet threat

**Buildup forecasts:**

**BW 7/1/1950:** “We are no longer in a peacetime economy. Even if the Communists should back down in Korea, we have had a warning of what can happen any time in all of any of the Asiatic nations bordering on the USSR. The answer will be more money for arms.” They also predicted that an end to hostilities in Korea would not slow the pace of spending. P. 15.

**BW 8/5/1950:** Before Korea, \$15 billion (this includes aid to allies), 2 weeks ago, \$27.5 billion, now \$33 billion. The boom will last 2 – 3 years assuming no big war. In the future, 25-30 billion to keep defenses up. p. 15.

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56 on
<b>Pre 6/30.50</b>	15	15	15	15	15	15
<b>Mid 7/50</b>	27.5	27.5	27.5			
<b>8/5/50</b>	33	33	33	27	27	27...

**BW 8/19/1950:** “Another bulge in defense spending is ahead.” Forecast spending of \$33 billion in FY 1951, \$40-\$50 billion in FY 1952. p. 16

**Washington Post 8/23/1950:** “Secretary of Defense Louis Johnson estimates the Communists can be pushed back out of South Korea by Late winter, but that America must count on spending 25 billion dollars annually for defense for some years to come.” Defense secretary says that defense spending should level off in 1955 at \$24.6 billion, not counting foreign arms aid. (I add in foreign arms to bring up to \$27 billion.) p. 2.

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56 on
Pre 6/30.50	15	15	15	15	15	15
Mid 7/50	27.5	27.5	27.5			
8/5/50	33	33	33	27	27	27...
2 <sup>nd</sup> half of 8/50	33	45			27	27

**BW 9/2/1950:** “Another \$10 to \$15 billion defense program is in the making. The plan is to send it to Congress either this fall or in January. That’s on top of the \$30-billion-plus scheduled for the next 12 months, and will push defense appropriations into the \$40- to \$45-billion range. The total is more than can be spent by next midyear. But most of it will be committed by letting contracts...” p. 15

**BW 9/16/1950:** “Truman calculates that by next June 30 the military share of the economy will climb to some \$30-billion. That’s a swift rise and indicates civilian cuts not later than winter.” “But odds are that defense production goals will be upped by January, which means a still bigger diversion from the civilian side.” “The estimated extra still to come is placed at \$10-billion to \$15-billion.” P. 15

**BW 9/23/50** –“The cost is sure to go above the \$30-billion program now scheduled, and many officials think it will exceed \$50-billion a year later on. As to time, officials can only guess-‘maybe for a decade, maybe a generation.’” P. 15

**BW 9/30/50** – “A quick end to the fighting in Korea won’t make any real difference in these figures.” Pentagon says by June 30, 1951, spending will hit \$36 billion a year rate, by mid 1952, it will hit a peak of \$60 billion annual rate. After 1953, spending will level off at around \$4.2 billion a month (\$50 bil a year). (See graph p. 19)

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56 on
Pre 6/30.50	15	15	15	15	15	15...
Mid 7/50	27.5	27.5	27.5			
8/5/50	33	33	33	27	27	27...
2 <sup>nd</sup> half of 8/50	33	45			27	27...
Sept 1950	(15 + 36) /2 = 25.5	(36 + 60) /2 = 48	50	50	50	50....
Avg. 1950q3	28.7	38	38.8	34.7	34.7	34.7...

**Defense News Shock: Based on quotes, I assume increased spending is expected to last a decade, through fiscal 1960. Interest rate is about 2.3%. The change in the expected present discounted value is PDV of sum of last row minus first row**

**1950q3: PDV: \$179.4 billion**

**BW 10/28/1950:** “Then upwards of \$50 billion annually is the target for the next several years.” P. 15

**WSJ 12/1/1950:** “the Administration is planning to expand a Foreign Arms Program, which is now costing \$5 billion a year... During fiscal year 1952 the arms budget is expected to approach \$45 billion and present planning could carry the figure even higher. By 1952, mobilization planners expected spending to be between \$3,500 million and \$5 billion a month on arms, and to taper off at that point.” P. 1.

**WP 12/2/1950:** “Counting military aid and atomic spending the total is about 50 billions...” Increase in strength of forces is what was previously planned. P. 1.

**BW 12/2/1950:** “The danger of World War III is acute... The threat is Russian, not China.” “The home-front impact of the bigger war will be a faster defense pace. Indecision has been bottleneck No. 1... The chokepoint is the Pentagon.” P. 13.

**BW 12/2/1950:** “It will be midyear before defense plans are firm-maybe longer. The decision on whether to continue the buildup over two or three years, gambling that Russia won’t strike, or make a rapid switch to a war basis is supposed to come by January. Then it will take at least six months to translate the program into men and materials.” P. 16

**BW 12/9/1950:** “Actual spending is not going to rise nearly so spectacularly. The way spending has been moving so far, the total for defense in fiscal ’51 can’t exceed \$20-billion... “\$45-billion-So defense spending for fiscal ’52 – under severe prodding-can total as much as \$45-billion. The rate at the end of the year, of course, will be higher, in the \$50-billions.” (Based on Jan. 20, 1951 article, it seems clear that these numbers exclude foreign aid and “other” defense.) p. 20

**WSJ 12/14/1950:** “Military spending to build up defenses here and abroad will be around \$60 billion a year for the next three years. Several weeks ago ... not more than \$45 billion a year.” P. 1.

**BW 12/16/1950:** “Half-scale mobilization is probable. The plans now in the mill for arming ourselves and our allies indicate a program that will take some \$60 billion annually when it’s going full blast. That’s about 20% of all goods and services, against the earlier post-Korea plan, which called for a diversion of only about 10%.” P. 15

**BW 12/23/1950:** “Coasting on mobilization is over. Henceforth you can expect a more rapid buildup, both in industrial readiness and military power.” P. 15

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56 on
Oct 1950	25.5	48	50	50	50	50...
Dec 1950	26 (I added in foreign aid,other)	52 (I added in foreign aid, other)	60	60	55	50...
Avg. 1950q4	26	50	55	55	52.5	50...
Avg 1950q3	28.7	38	38.8	34.7	34.7	34.7...

**Defense News Shock: I use PDV of difference between average 1950q4 forecast and average 1950q3 forecast. I assume it is still expected to last through fiscal 1960.**

**1950q4: PDV: \$124 billion**

**BW 1/20/1951:** “The Administration has finally fixed the dimensions of the U.S. mobilization: roughly 40% of an all-out effort.” President says Treasury will actually pay for defense plus foreign aid: \$27 billion in FY 51 and \$52.5 billion in FY52. The President is asking for commitments much greater than those figures show, but they are for later years. Contracted for 51-52 is \$74.1 billion. Table in BW shows:

Actual spending	Fiscal 1951	Fiscal 1952
Armed forces	\$21 billion	\$41.4
Foreign aid	\$4.7	\$7.5
“Other” defense	\$1.3	\$3.6
Nondefense	\$20.2	\$19.1

Actual spending	Contracted for in 51-52	Delivered in 1951-52
Armed forces	\$60 billion	\$21
Foreign aid	\$11	\$7.1
“Other” defense	\$3.1	?
Nondefense	\$19.5	\$19.1

Of the foreign aid money, \$5-billion to \$6-billion will go for procurement of military equipment. The rest will pay for the Marshall Plan, Point 4, and direct aid to other countries. P. 24

**BW 1/27/1951:** “ the production hump will be reached in late 1952 or early 1953. Thereafter, defense demands will ease off.” P.16

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56
Dec 1950	26	52	60	60	55	50...
Jan 1951	27	53	60	55	50	50...

**BW 2/10/1951:** “Shortages and controls will begin to ease in late 1952 and early 1953.” P. 16.

**BW 3/3/1951:** “Lethargy is creeping back into mobilization. The big push for arms that came when China sent us reeling in Korea is starting to peter out....It’s a letdown, all along the line.” “In January, Truman asked a \$60-billion military program for fiscal 1952... And he scheduled actual expenditures for the period at \$41.5 billion. But it will be April, maybe as late as May, before the Pentagon can detail for Congress how the money will be used.” P. 15

**BW 3/17/1951:** “The defense buildup, which will take another two years, is aimed at halting Russia in Europe.... And after rearmament reaches a peak by mid-1952, national defense will put on a maintenance plateau that will cost roughly \$50-billion a year for years to come..” p. 15

**BW 3/24/1951:** “Mobilization uncertainties are piling up, and barring fresh trouble it will be midyear before you get firm answers for the long pull. The size of the defense effort still is up in the air. Truman’s program is for \$71-billion between now and June 30, 1952. The services want more. And Congress threatens to vote less, not that war fears are diminishing.” P. 16

**BW 3/31/1951:** “The letdown in Washington is reaching near-epidemic proportions.” P. 15.

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56
Jan 1951	27	53	60	55	50	50...
March 1951	27			50	50	50...
Avg. 1951q1	27	53	60	52.5	50	50
Avg. 1950q4	26	50	55	55	52.5	50...

**Defense News Shock: I use PDV of change from averages in 1951q1 and 1950q4.**

**1951q1: PDV: \$4.1 billion**

**BW 4/7/1951:** “About \$3-billion more for this year, the fiscal period ending June 30, is programmed. That’s a scale-down from \$10-billion planned in January. Then, about \$70-billion for fiscal 1952, the 12 months starting July 1. That’s a rise over the \$62-billion Truman scheduled in January. But it doesn’t mean an expansion in the program. The extra for 1952 actually is a carryover of projects that the military failed to get going this year.” P. 16. (Comparing these numbers to Jan., I think this is mostly talking about contracts, not spending.)

**BW 6/30/1951:** “The defense program already is behind schedule...A measure of the lag is that it will take 30 months to do the job that had been planned for 24 months... the mathematics of it is that it’s a 25% delay. The reasons: The military is uncertain about

what kind of war it may have to fight. So it's slow with specifications. The politicians want defense, but they are slow to disturb easy peacetime living... Signs of the delay are unmistakable. And now that cease-fire talk is out in the open, the defense pace may become even slower." P. 17.

**WP 6/30/1951:** Ass Dir of Budget Staats said after defense build-up completed, it may require 40 billion dollars annually to keep going. (Note this does not seem to include foreign aid or indirect defense, which were totaling \$11.1 billion in fy 52.) Staats' estimates of direct military spending plus aid to allies, would be \$55 to \$65 billion in FY 1953. p. 7.

**BW 7/7/1951:** "Russia's intentions are a mystery to Washington. The full implications of a Korean cease-fire will be months, perhaps a year or longer, coming... Money for defense will be cut... Cuts won't be deep, but will take a few billion off Truman's \$60-billion plus request.. Arms aid will be cut, too. Truman wants \$8.5 billion for the next 12 months. Congress will cut this hard." P. 15.

**BW 7/14/1951:** "Signs of a coming defense letdown are multiplying... Officially, the line is to drive right ahead with arming... But Congress... questions whether the pace can be maintained-or even should be." P. 17.

**BW 7/28/1951:** "Right now, about 11% of the economy is being used to build defense. At the peak, around next midyear, the figure will almost double, to 20%. Then an easing off should come. New industrial capacity, now abuilding will be available for production." P. 15.

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56
Jan 1951	27	53	60	55	50	50...
March 1951	27			50	50	50...
Jun-Jul 1951	27	53	60	55	50	

**BW 8/18/1951:** "Rearmament is going to take at least a year longer than mobilizer Wilson has been saying... Now it will be mid-1953 before even the minimum goal is reached... Why the delay? For one thing, the 18-month schedule was just plain unrealistic." P. 18.

**BW 10/6/1951:** "Another defense expansion is ahead. There's now general agreement among Truman's military advisers that our strength and that of our allies must be upped beyond present goals... The size of the bulge still is uncertain. The military tentatively thinks that minimum safety requires another \$15-billion or so, mostly for planes and atomic weapons. It will be January before the details are settled... The impact on business will be spread out over the next few years." p. 15.

**BW 10/20/1951:** “What will happen after a cease-fire in Korea once again is on all minds. Odds are about even that the shooting will stop... No quick change of pace is in prospect.” P. 15.

**BW 11-12/1951:** Discussions of how hard civilian production will be cut back when military hits peak. Much optimism about Korea. Questions about whether mobilization should slow down.

**BW 1/12/1952:** Defense timetable is stretched out, partly the result of delays but also partly the result of new plans for Air Force expansion. Mobilization adds a year to timetable. Big military budgets will continue at a \$50-billion-plus rate through 1954, instead of tapering off in 1953. Controls and shortages lasting into 1954 instead of disappearing in 1953. p. 16, p. 19.

**BW 1/26/1952:** “Earlier plans called for defense spending to reach a sharp peak, then descend swiftly. The new schedules spread the same total program over a longer period... Actual military spending will run to \$51.2 billion, up \$11.4 billion from this year.” New budget calls for \$39.7 billion for military services and \$7.2 billion for foreign aid in FY 1952, and \$51.2 for military and \$10.8 for foreign aid in fiscal 1953. “The figures in 1953 fix the height of the plateau we’ll stay on for two or three more years... The original post-Korea plans would have had total military spending expanding into calendar 1953-reaching a peak of close to \$7 billion per month. That peak would have been followed by a drop perhaps to as low as \$3-billion to \$3.5 billion per month beginning in 1954.” (Note that means an avg. of \$60 billion for FY 54, consistent with previous forecasts.) “This roller-coaster plan has been discarded... There seemed to be only one big item that might take substantial cuts – the \$10.5 billion foreign aid program.” P. 15, 22, 23.

**BW 2/9/1952:** “Less for war, more for civilians. That’s the meaning for business of Truman’s \$19-billion slash in the military budget. Munitions contracts are being canceled or slowed. It’s all part of a stretchout of mobilization for an extra year or two that has been in the works since December.” P. 22.

**BW 2/16/1952:** More details on the stretchout. P. 21-22

Forecast date	FY51	FY52	FY53	FY54	FY55	FY56
Jun-Dec 1951	27	53	60	55	50	50
Jan 1952		47	62	62 – cuts in foreign aid		

**Defense News Shock: I calculate PDV of delaying \$19-billion for 1 to 2 years.**

**1952q1: PDV: - \$ 0.5 billion (i = 2.6%)**

**BW 4/19/1952:** House cut \$4.7 billion from military. It puts a \$46-billion ceiling on military expenditures for fiscal 1953. Feels less urgency. (Originally, \$51.2 billion for military (excl. foreign aid).) p. 24, 31.

**BW 4/26/1952:** “Spending will be cut... Defense will be over the hump. The spending trends will remain up through December. Then it will level out, and might turn down.” P. 25.

**Defense News Shock: PDV of 4.7 cut from next fiscal year.**

**1952q2: PDV: - \$4.6 billion (i = 2.6%)**

**BW 6/7/1952:** “A big new push for defense is building up... Unfavorable developments abroad are tending to revive the former feeling of urgency... The heat is on Congress to vote the full defense budget... Odds are the Senate will raise and may even remove the \$46-billion spending ceiling that the house put on defense for [FY 1953]... The budget for fiscal 1954 is being prepared now, for submission to Congress next January. It contemplates a spending level about equal to that scheduled for this year - \$85 billion” (this is the total federal budget). P. 23 - 24.

**BW 6/21/1952:** “The Truman budget will continue military spending as charted, with little change likely from the \$63 billion to \$65 billion-a-year level expected to be reached by the second quartet next year. This is the plateau the administration has been talking about for months; it is charted to continue through all of calendar 1954... Spending for the major security programs [...] is listed at \$65.1 billion for 1952-53. But Congressional experts don’t expect actual spending to exceed \$60 billion.” P. 36.

**BW 8/16/1952:** “In a year or two, spending for the services will hit a peak of from \$50-billion to \$55-billion per year. Then, barring war, it will drop to an annual rate of approximately \$40 billion.” P. 35

**BW 8/23/1952:** More stretch-out. The current plan postpones the spending peak again. “Under the new plan, spending won’t approach the high point until late in 1953. And there’ll be a greater spending total-partly the result of plans for a bigger military force than was figured on last December. The goal is now 3.7 million men in uniform in 1956 instead of the previous target of 3.5 million.” The latest adjustment is for the sake of realism on schedules. “All these factors add up to a loss of about \$4 billion of military spending originally planned for [fiscal year 53]”. P. 27-28.

(BW Table on page 27 of 8/23/1952) This excludes foreign aid.

Forecast date	FY53	FY54	FY55	FY56	FY57	FY58 -
“Early this year”	52	53	46			
August 1952	48	55	49	40 (based on 8/16/1953 article)	40	40

**Defense News Shock: Based on table above.**

**1952q3: PDV: \$0.8 billion =  $-4 + 2/1.027 + 3/1.027^2$  (i = 2.7%)**

**BW 10/25/1952:** “Defense spending will remain a big prop. The figuring is that it will rise \$5-to-\$10 billion by next fall, then level out at a \$55-to-\$60-billion annual rate.” p. 39.

**BW 11/8/1952:** Ike “expected to stand by today’s program... Even a settlement in Korea would make no substantial change.” FY 1954 budget for military plus foreign aid, \$50 billion. “By late 1955 or early 1956, they (the military) will have completed their buildup and will have settled on a steady program of modernization. Right now, McNeil figures that the sustaining level of the entire military establishment will be somewhere between \$35-billion and \$40-billion annually.” Currently, \$41-billion for military functions alone in FY 54. p. 31, 34.

Forecast date	FY53	FY54	FY55	FY56	FY57	FY58 -
Nov. 1952		50		35-40	35-40	35-40

**BW 2/21/1953:** “Federal spending is going to be cut – and hard... One top official in the Pentagon tells questioners that anywhere from \$3- to \$5 billion can be shaved [from FY 54 budget] without endangering U.S. security.” P. 37.

**BW 2/28/1953:** Eisenhower hopes to cut spending in FY 54 budget. Chart shows total defense savings of \$5.5 billion. P. 25 – 26.

**BW 3/7/1953:** (Stalin dies.) “There will be no sudden shift in our foreign policy. Drastic cuts in defense spending now seem less likely.” P. 39.

**BW 3/14/1953:** “The Pentagon scheduled \$52 billion for the 12 months ending June 30. It protested successfully when Congress moved to limit spending to \$46 billion. Odds now are that defense spending won’t exceed \$43-billion for the 12 months. (FY 53) Truman put 1954 fiscal defense spending at \$46.3 billion. Congress is thinking in terms of a \$43 billion ceiling. That would hold it at the present rate and would avoid a peaking up in FY 1954 or 1955, as now anticipated. In short, it would mean another stretchout.” P. 37.

**Defense News Shock: Expected decrease in FY 54 budget is \$3 – \$5.5 billion, so I will use average of \$4.3 billion. Unexpected decrease in spending during FY 53 is \$3.3 billion.**

**1953q1: PDV:  $-\$7.5 = -3.3 - 4.3/1.025$**

**BW 4/11/1953:** “An end to shooting in Korea would be, offhand, a \$2-billion windfall for the Administration. That covers what is used in actual fighting... The consequences

of “peace” in Korea now figure in all planning... Officials say the arms buildup will go ahead... But odds are on the side of a letdown.” P. 28-29, 39.

**BW 4/18/1953:** “Eisenhower will have the final say on the big spending item – defense. Thus far Secretary Wilson has snipped about \$3-billion from Truman’s fiscal 1954 estimate of \$46.3-billion. This is still \$1- to \$2-billion short of what budget-balancing advisers say must come off the military budget.” Want defense’s share of cuts to be about \$4.5 billion. P. 38.

**BW 5/9/1953:** “Eisenhower expects to cut about \$5-billion out of new appropriations for the military-plus, in actual spending a little over \$2-billion. Even so, the defense procurement program will change very little” (because of carryover funds.) Eisenhower wants a smaller armed force – “about 3.3 million men against Truman’s 3.6 million. The manpower reduction will account for about a billion dollars less in defense spending over the fiscal year. Close to \$3 billion will come out of future contracting for the Defense Dept. for next year... The balance of the \$5-billion appropriations cuts will be made out of funds destined for maintenance of forces, [etc].” “Eisenhower will ask for \$5.8 billion in foreign aid appropriations-new money-for next year instead of the \$7.6 billion that Truman had requested. This means a \$1.8 billion reduction in new money, about a \$1.3 billion cut in spending.” P. 26, 121-124.

**Defense News Shock: In sum, a decrease in foreign aid spending of 1.3 this year and 1.8 – 1.3 = 0.5 next year, and an additional decrease in military (over 1953q1 expectations) of 7 – 4.3 = 2.7 billion.**

**1953q2: PDV: - \$4.4 = -1.3 - ((7 – 4.3) + (1.8 – 1.3))/1.027 billion (i = 2.7%)**

**BW 6/13/1953:** “The shooting war in Korea costs around \$5-billion a year. If troops pull back a mile and dig in along a new line under the terms of a truce, the cost would be about \$4-billion... A second year of truce conditions would cost about \$3-billion.” P. 26.

**BW 7/11/1953:** “The real story is in cuts in new commitments. Truman had proposed \$72.9-billion in new authorizations. Cuts in this will be \$10- to \$12-billion. Only part of the cash saving will show this year. The leveling-off will be later – in fiscal 1955 and 1956. Barring a new war scare, the spending peak has passed. From here on the trend should be down.” P. 37.

**BW 7/25/1953:** “Cuts: Some now, More Later.” The Senate earmarked \$34.5-billion in new money for defense department. “This is \$6.9 billion under Truman’s \$41-billion; Eisenhower’s revision was \$36.2-billion and the House-approved total was \$34.4 billion.” P. 30.

**BW 8/1/1953:** “The truce will make a big difference in business and politics... Defense production will ease off even more. It was very hard to hold to schedules while the shooting was on. Now it will be still more difficult... Currently, the defense take of goods and services is about \$53-billion yearly. Before the truce, the hope was that this

could be pulled down to about \$35-billion in two years. What was a hope then now seems a certainty.” P. 37.

**Defense News Shock: I assume \$12 billion in cuts in appropriations is spread over 3 years. Note: the decline mentioned in 8/1/1953 was already planned years before, so I don't include that.**

**1953q3: PDV: - \$11.7 = 4 + 4/1.025 + 4/1.025^2(i = 2.5%)**

**BW 10/3/1953:** “Defense spending is being planned at about \$40 billion. That’s less than this year’s \$42.4 billion. It probably will be cut down even more. The range most talked is about \$38-billion to \$40-billion.” P. 39..

**BW 10/10/1953:** “Facing Up to An Atomic World.” Graph of defense expenditures show FY 1954 at \$40, rising to around \$50 in FY 1956 if U.S. prepares A-bomb and H-bomb defense, decreasing to around \$37 if Cold War continues, and to \$30 billion if real settlement with Russia. Will probably vote a 0.5 billion starter for next year. P. 27-30, 39.

**BW 10/17/1953:** “Defense spending will remain higher than planned. The extra for fiscal 1955 may not exceed \$1-billion-the initial step-up in defense against the A-and H bombs. But it’s the first real break in the economy line.” P. 39.

**BW 10/24/1953:** “There’s lots of pulling and hauling on defense... The issue is in the range of \$2-billion to \$3-billion – that much in spending for fiscal 1955. This year, fiscal 1954, spending will run about \$42-billion for the services... Defense Secretary Wilson, however, still feels another cutback is possible. His spending goal is in the range of \$38-billion to \$39-billion for fiscal ’55.” P. 37.

**BW 10/31/1953** The Russian H-bomb was the turning point. It ended the hope of “more arms for less money.” P. 29.

Forecast	FY53	FY54	FY55	FY56
10/1953	43.9	42	38 – 40 billion	37

**BW 12/12/1953:** “Any significant spending cuts are remote. The military is going to spend another \$40-billion in fiscal 1955.” P. 39.

**BW 12/26/1953:** “This week the Defense Dept. forecast military spending in fiscal year 1954-55: about \$38 billion... Up until a little over a week ago, the feeling had been that the Defense Dept. would present a spending program of about \$40-billion for fiscal 1955.” P. 32.

**Overall, I think the talk of cuts and increases about cancel out.**

**BW 1/2/1954:** “The military tightening up has already begun. The pulling back of two divisions from Korea [etc.]” p. 38-39.

**BW 1/16/1954:** Eisenhower will cut nearly 5-billion from defense. P. 38.

**Defense News Shock: This is \$1-billion more than the \$4-billion cut I included in the 1953q3 shock.**

**1954q1: PDV: - \$1**

**BW 4/10/1954:** Talk of foreign aid cut of \$1-billion. P. 38.

**BW 4/17/1954:** Big risks in Indochina. P. 37.

**BW 5/22/1954:** “War is the big uncertainty in the picture... Could Indo-china fighting be limited, as in Korea?” p. 37.

**BW 6/5/1954:** “The drift is toward intervention... The official attitude is that the economy could absorb a sharp jump in military demands, maybe up to \$15-billion extra, without cramping.” P. 39.

**BW 6/12/1954:** “Eisenhower is far from committed to more military spending because of the Indo-China situation... The Treasury, for instance, feels that a stepup in defense spending has been stressed too much... No increases in money outlays have been voted... Another mobilization of the Korea type is remote.” P. 39.

**BW 6/19/1954:** “Military appropriations are not going up.” p. 38.

**BW 7/3/1954:** “Fiscal 1954 spending is off about \$2-billion from what the budget experts said it would be. Defense didn’t run up to expectations... Spending the next 12 months won’t be up to forecasts.” About 1.4 billion below. P. 38.

**BW 7/31/1954:** “The whole defense program is being reviewed in the wake of the truce in Indo-China... Any defense boosts will be small... The big downtrend in defense spending is about over.” P. 37.

**BW 8/14/1954:** “Defense spending [...] will show another sharp drop in fiscal 1955. Last year actual spending fell \$2.5 billion below estimates. The drop may be as large this year... A total of around \$36-billion defense spending is in store, as against the budget’s estimate last January of \$37.6 billion.” P. 38.

**BW 9/18/1954:** “The Administration this week tore up the budget it sent to Congress last January and started all over again. Spending is going down – perhaps as much as \$3 billion below anything previously foreseen for the fiscal year that began last July 1...

Officials in the Defense Dept. privately expect to drive their spending down an additional billion... Cuts are from programs that did not pan out at the production level. Foreign military aid has been cut just under \$1-billion and Atomic Energy Commission will spend 0.25 bil less than foreseen in January... January budget called for \$37.6 billion for defense Dept. This sum was shaved to \$35.5 billion in the budget review this week. Actual spending may trail behind... The big cut for fiscal 1955 is in national security—some \$3-billion below the estimates made last January... The war expectation must be rated 'low'." P. 25-28.

**Defense News Shock: FY 54 being less than expected plus - \$3 billion fiscal 1955.**

**1954q3: PDV: - \$5 billion = - \$2 billion**

**BW 12/25/1954:** “Eisenhower Administration’s 'new look' policy on military power...” 50-Year Look. “The change means cuts in military spending are all over. A level-off period of spending is here sooner than anyone had expected, but at a higher figure than Republic budget-balancers had hoped for. More expensive weapons will be coming... Wilson said he would ask for \$5-billion more in appropriations for fiscal 1956. He added that defense spending from now on would range between \$33-billion and \$37-billion—somewhat higher than the range expected by other top officials. The Truman Administration used to put the level-off range at somewhere between \$35-billion and \$40-billion.” P. 17.

**BW 1/8/1955:** “Congress will go along with the increase in defense appropriations, figured to total around \$35-billion, up from this year’s \$30-billion. The new money will maintain the \$33-billion spending level ticketed for fiscal 1956 and beyond.” P. 39.

**Defense News Shock: \$ 5 billion increase in appropriations.**

**1955q1: PDV: \$4.9 billion (i = 1.6%)**

**BW 4/30/1955:** “Eisenhower made another revolutionary demand upon Congress...to accept—in effect—the proposition that foreign aid has now become an essential permanent tool of U.S. foreign policy [...], not merely one to meet an emergency. On the surface, the President merely was asking for another \$3.5 billion helping of military and economic assistance.” P. 32.

**BW 8/27/1955:** “Military spending will remain high, at the present \$34-billion level.” P. 37.

**BW 12/24/1955:** “Foreign Aid Goes Permanent.” Eisenhower will “ask Congress for \$4.9 billion in aid funds for fiscal 1957 - \$2.2-billion more than last-year’s appropriation.” Dulles and Eisenhower want more than this from Congress. “They want authorization to launch a 10 year program... It could be the opening wedge for a 10-year, \$10-billion to \$15-billion program.” P. 23.

**BW 1/21/1956:** “A Sharp New Turn in Budgeting.” “Federal spending will begin to rise.” For the next fiscal year, \$0.9 billion is for the military. (I don’t see an increase in foreign aid, though.) p. 27.

**Appropriations**

Date of forecast	FY56	FY57	FY58	FY59
Jan 1956	Mil: 39.5 Interntl: 2.1	Mil: 40.4 Interntl: 2.1		

**Defense News Shock: Increase of 0.9 billion.**

**1956q1: PDV: \$0.9 billion**

**BW 5/5/1956:** “Congress will go along with a defense spending rise” - \$1.5 billion. P. 40.

**Appropriations**

Date of forecast	FY56	FY57	FY58	FY59
Jan 1956	Mil: 39.5 Interntl: 2.1	Mil: 40.4 Interntl: 2.1		
May 1956		Mil: 41		

**Defense News Shock: Further increase.**

**1956q2: PDV: \$0.6 billion**

**BW 7/7/1956:** “National defense spending, for instance, is definitely moving up.” p. 31.

(July and August 1956: Suez crisis, but no talk of increasing spending as a result.)

**BW 8/18/1956:** “Military spending will inch up – from \$35.6 billion last year to at least \$36.5 billion in the current fiscal 1957. The climb will continue next year, as more procurement gets tied to advanced missiles and electronic gear. But the manpower cuts will act as a lid to hold the increases to probably not more than \$1-billion annually.” P. 149.(Based on 11/10/1956 BW, I assume it will last three years)

**Spending**

Date of forecast	FY56	FY57	FY58	FY59
Aug 1956	Mil: 35.6	Mil: 36.5	37.5	38.5

**Defense News Shock: More money for advanced missiles.**

**1956q3: PDV: \$3 billion**

**BW 11/3/1956:** Russia goes into Hungary, open warfare at the Suez Canal. P. 33.

**BW 11/10/1956:** “Pentagon officials expect defense spending to rise at least \$1-billion annually over the next three years...As it shapes up now, the Eisenhower program will call for military spending close to \$38-billion in fiscal 1958 – a 5% boost over the current levels.” P. 33. (This is just after Eisenhower is reelected.)

**BW 11/17/1956:** “Top foreign policy chiefs give senators gloomy picture of results of Suez and Hungarian crises – one that means reforging U.S. policy to meet new threats...Washington, at midweek, could see no let-up in the world crisis. Peace literally hung in the balance.” P. 31.

**BW 11/24/1956:** “Next year’s estimated hike in military spending – about \$1.8 billion – is now certain and may be increased. But the additional cost attributable to the Middle East flare-up is expected to be so small that it cannot be measured as a factor in this 5% rise over the current \$36 billion budget... Meantime, there is talk that the Defense Dept. may not go ahead with a plan to cut the size of the armed forces by about 140,000 in fiscal 1958... since the outbreak of the crisis in Egypt, Asst. Defense Secy Burgess... has indicated that the cutback may not be made.” P. 29 - 30.

**BW 11/24/1956:** “Things have calmed down a little this week in the Middle East – but not in Eastern Europe.” P. 157.

**BW 12/15/1956:** “Eisenhower will make new disarmament proposals next year... Any big bulge in U.S. arms spending will be held back. The 1958 defense budget will rise only slightly – not more than 5%... Foreign aid will be held at about the current \$4.5 billion yearly rate...Senate opposition to aid has been rising year by year.” P. 47.

**BW 12/22/1956:** “This week the Pentagon is putting the finishing touches on the fiscal 1958 budget... the new budget is expected to show expenditures of about \$38-billion – roughly 5% over the current level of spending.”

**BW 12/22/1956:** “Starting with the Poznan uprising in Poland last June the Soviet empire in Europe started to disintegrate. Today Moscow is in the worst jam it has been in since Hitler turned the Stalin-Hitler pact against Russia.” P. 79.

**BW 12/29/1956:** “Spending will be up, primarily for defense. The rise will be over \$2-billion, or about 5%. Many news stories will relate this to Hungary and the Middle East – show it as a defense stepup. The increase is due mainly to rising costs, not any expansion of defense goals.” P. 42. (I don’t think so – according to the data real defense spending rises.)

Military expenditures

Date of forecast	FY56	FY57	FY58	FY59
Aug 1956	35.6	36.5	37.5	38.5
Nov 1956			38	

**Defense News Shock: Increase due to Hungary and Middle East.**

**1956q4: PDV: \$0.5 billion (0.5 = 38 – 37.5 (previously expected rise)) i = 3.5%**

**USNWR 1/11/1957:** “Eisenhower Doctrine.”

**BW 1/19/1957:** “As predicted military spending will rise \$2-billion next fiscal year (1958). In the \$43.4 billion total spending for national security, Defense Dept. military functions account for \$38 billion and the rest is made up of items for atomic energy, foreign military aid, strategic stockpiling, civil defense.” The hike in spending stems from complex new weapons and the general rise in prices. P. 25-27.

**BW 2/2/1957:** “Who’s Ahead in Race for Arms.” “Wilson forecast an increase of at least \$1-billion in military spending for fiscal 1959 – on top of the \$2 billion increases estimated for fiscal 1958.” P. 32.

**BW 2/16/1957:** “Eisenhower’s foreign aid program is heading into unprecedented opposition in the Congress...The question now is not whether the \$4.4-billion aid request will be cut. That seems almost certain...A half dozen powerful congressmen in both parties called this week for cutting the budget by as much as \$2-billion to \$5-billion – and several picked foreign aid as the easiest thing to reduce.” P. 155.

**BW 2/23/1957:** “Congress is talking tough – threatening to slash a big chunk from Eisenhower’s record \$72-billion peacetime budget.” P. 45.

**BW 4/27/1957:** “Foreign aid will be singled out. Eisenhower may have to take a cut of as much as \$2-billion in his new foreign aid request of \$4.4 billion. Defense won’t escape the ax... Defense may be trimmed as much as \$3-billion. The feeling in Congress is that this can be taken out without actually weakening military strength in any important way.” P. 58.

**BW 5/4/1957:** “Economy leaders have set their sights on a \$2-billion-to-\$3-billion cut in Eisenhower’s \$38-billion appropriation. If they pare \$3-billion from appropriations, they will save nearly \$1-billion in fiscal 1958 spending.” P. 56.

(According to the later article in BW Oct. 26, 1957: “The storm began in the spring when it became plain that military spending in fiscal 1957 would wind up \$2.4 billion over the year’s estimate. It grew in fury through the summer as the Administration’s spending edged nearer and nearer the \$275-billion limit on the national debt. Production schedules ... were stretched; bills were lopped further by outright cancellation. By early fall came the Air Force’s discovery that it was spending at a rate almost \$1-billion greater than its \$18-billion budget. P. 43.)

## **Defense News Shock: Spending greater than anticipated.**

**1957q2: PDV = \$2.4.**

**BW 7/13/1957:** “Defense spending is running above budget estimates. The Pentagon is trying to check the rate – estimated now at \$40-billion a year-by cutting or stretching out some programs. But it’s doubtful the \$38-billion target can be met.” P. 42.

**BW 8/3/1957:** “On foreign aid, Congress withheld about \$2.5-billion that Eisenhower asked for. But, actually, this won’t curb foreign aid much for another two years. On defense, there was another big cut... But new appropriation bill won’t cramp very much.” P. 39.

**BW 8/17/1957:** “Military spending is out of hand, pushed up by competition among the three services... No big budget cutback is involved. In January, Eisenhower projected defense spending at about \$38-billion. Since January, the actual rate of spending has hit at annual pace of nearly \$42-billion – some \$4-billion above what had been anticipated. Now, the Pentagon is under orders to get back to the level forecast in January.” P. 39.

**BW 9/21/1957:** After run up in rate of spending, “there were orders in June for the Pentagon to get back on schedule. Cuts were made – contracts canceled, deliveries stretched out.” P. 39.

(According to BW Dec. 14, 1957, Around June/July, Congress was cutting \$3.1 billion out of Eisenhower’s requests for new obligations. However, this was not due to an easing of tensions.)

## **Sputnik is launched October 1957.**

**BW 10/19/1957:** “Sputnik or no, the Administration plans no drastic change in the missile program. Its studied calm is goading critics here and abroad into frantic calls for action... Pentagon sources say there was as much attention to maintaining the \$38-billion military spending ceiling as to Sputnik and its implications... Washington’s official line is that the ballistic missile program, already costing at least \$1.5-billion this year, cannot be effectively speeded up by simply increasing its budget.” P. 41.

**BW 10/26/1957:** “... it won’t be possible gauge the post-Sputnik effort in dollars; the defense budget is still nailed at \$38-billion...Cutbacks in Pentagon’s rate of spending leave contractors and their suppliers guessing.”p. 42-45.

**BW 11/2/1957:** “Rising uneasiness brings new White House mood... Nowhere are the changes in the White House mood reflected more brightly than in the Pentagon. McElroy relaxed the Pentagon’s tight budget restrictions... It was the first official acknowledgement that the \$38-billion goal for the 1958 fiscal year will not be

met... Washington will make major decisions within the next 60 days... Will defense spending take a sharp rise? Odds are that it won't." p. 39-40, 55-56.

**BW 11/9/1957:** "The East-West arms race will get closer and closer. Right now, the West would have an advantage in a showdown." P. 39.

**BW 11/16/1957:** "Pres. Eisenhower, reflecting a sense of national urgency that finally grew overpowering, this week committed the nation to heavy new military expenditures in the arms race with Russia... Military spending will go up by an unspecified but 'very considerable' amount... This is the prospect: Military spending this fiscal year will be about \$38.6 billion. Next fiscal year-the one for which Eisenhower and his advisers are drafting plans now-it may rise to \$40-billion or \$41-billion." P. 39-41.

**BW 11/23/1957:** "It is now clear that defense spending for fiscal 1959 will be at least in the range of \$39-billion to \$40-billion, an increase of \$1-billion to \$2-billion. And that is, but the first of many expensive installments for security that the nation will be called on to meet. Responsible sources within the Administration estimate that three years hence the bill for direct military spending will be in the range of \$42-billion to \$43-billion – up \$4-billion to \$5-billion over present levels... There are skeptics among the Democrats who think the Administration is talking far too low when it mentions a \$1-billion to \$2-billion rise in military spending for fiscal year 1959." P. 46-47.

**BW 12/7/1957:** "Eisenhower [...] called for a \$1-billion boost in defense spending next year – mostly for missiles and pay hikes for service personnel – to bring the defense total to \$39-billion to \$40-billion." P. 31.

**BW 12/21/1957:** "It is becoming more apparent that military spending is going up next year – even more than the \$1-billion to \$2-billion the Administration acknowledged after the Soviets launched Sputniks No. 1 and No.2. The pressure on the administration to 'get cracking' is increasing from Eisenhower's supporters, as well as from Democrats... So, tax cuts are out." P. 31.

**BW 12/28/1957:** The Gaither committee says "the U.S. must spend in the neighborhood of \$44-billion annually in 1960 and 1961, and only slightly less in the succeeding decade, to counter Russia's growth strategic gains." P. 27.

Date of forecast	FY58	FY59	FY60	FY61
Before Sputnik	38	38	38	38
1957q4	38.6	40	41.5	43

### Defense News Shock: due to Sputnik

**1957q4:**  $PDV = \$ 10.3 = 0.6 + 1.9 + 3.3 + 4.5$  (i = 3.7%)

**BW 1/4/1958:** “Foreign aid will be continued. Questions are on what basis and how much. Eisenhower will push this hard and will get about \$4-billion.” P. 36.

**BW 1/11/1958:** “Congress will vote Eisenhower’s defense budget – O.K. a start on a new arms spending rise that may well carry into the mid-1960s... Defense outlays already are on the rise. The hold-down ordered by the White House early last fall relaxed shortly after the first Red Sputnik. The December spending rate was near \$40-billion, up about \$3-billion from November.” P. 41.

**BW 2/1/1958:** Eisenhower has a “big selling job” on foreign aid – he wants “some \$4-billion, which is just about what he had this year.” P. 42.

**BW 2/8/1958:** “Defense spending estimates will rise. Congress will vote more than the \$1.1-billion asked by Eisenhower... Here’s how the Pentagon thinks about fiscal 1960: A rise of \$10.7 billion above this year in appropriation requests is talked about. This doesn’t mean a rise of the same size in spending... Spending runs behind contracts. But it would well mean a defense spending of nearly \$50-billion a few years hence, compared to the proposal for nearly \$40 billion in the next fiscal year. And a big part of the rise contemplated would be for conventional weapons.” P. 42.

**BW 3/1/1958:** “Already, Congress has approved \$1.3-billion that can be used for contract letting the remainder of this fiscal year.” P. 40.

### **Defense News Shock: Increase in defense spending.**

**1958q1: PDV = \$ 0.7**

**BW 6/28/1958:** “You will see a sharp spending rise over the next 12 months. Part of this results from the space race with Russia. But mostly, it stems from the Administration’s decision to rely on bigger spending and easier credit to end the recession.” P. 39.

**BW 7/19/1958:** “New war threat” (from Middle East). P., 39.

**BW 11/29/1958:** “Russia again threatens the Eisenhower budget... For the import of this, look back only one year... (Sputnik), plus worry over the recession, turned a January budget of \$73.9-billion into over \$79-billion before midsummer... But hope of a defense cut now is out.” P. 41.

**BW 12/6/1958:** “Military spending will be increased. Cost of the more advanced weapons is on the rise and Soviet advances in rocketry and air capability are forcing the Pentagon budget to more than \$42 billion.” P. 33.

**BW 3/14/1959:** “Eisenhower still backs his January figure, \$46-billion for national security. The total includes more than just the Pentagon. About \$5-billion goes to allies. Democrats say Pentagon spending isn’t enough – the \$41-billion that might well be called U.S. strength. They want this upped and upped substantially... Their point is this:

The race with Russia will go on and on. So the U.S. should lift its whole defense level.” P. 43.

**BW 3/21/1959:** Berlin crisis develops. “No defense mobilization is anticipated... Congress will vote a rise in defense money - \$1- to \$2-billion more than Eisenhower proposed in January”, which was \$40.9-billion for U.S. defense forces, and \$45.8-billion for aid to allies, etc. p. 41.

### **Defense News Shock: Berlin Crisis**

**1959q1: PDV = \$ 1.5**

**BW 9/19/1959:** “The over-all defense spending figure will be about \$41-billion, the same as this fiscal year.” P. 47.

**BW 10/10/1959:** “The big concern is that the gap (space program) does not seem to be closing... Russia is ahead... There will be demands for heavy new spending to 'catch up.' You can already pick up talk about need for another \$2-billion or so – on top of today’s estimated \$3.5 billion. This is not taken seriously.” P. 39.

**BW 1/16/1960:** “Pres. Eisenhower can have his way, hold spending to \$41-billion in the defense area.” P. 33.

**BW 2/13/1960:** “How much Congress will add to Eisenhower’s \$41-billion defense budget is anybody’s guess at this point.” P. 41.

**BW 5/14/1960:** U2 incident. Prospects for an easing of East-West relations at the summit dimmer this week. P. 25.

**BW 5/21/1960:** Collapse of the summit in Paris. Impact on West – somewhat higher defense spending in the U.S and Western Europe. P. 25-26.

**BW 5/28/1960:** “Washington reshuffles defense dollars, and Congress will probably add a couple of billions to the Administration’s budget.... Arms procurement programs and spending levels will eventually be affected, some rising and some falling. The general direction will be upward, perhaps by only a small amount at first....The administration still hopes to hold military outlays in fiscal 1961 at the \$41-billion level, where they have been the past two years... Like after Sputnik I in 1957 – only after furious demands from Congress for increases, did the Administration move then....The initial effect on defense expenditures will be moderate...some step-up in defense spending – amounting at most to some \$2-billion in fiscal 1961-now seems in the cards...Sen. Stuart Symington proposes a \$3.5-billion addition to defense expenditures....Lyndon Johnson talks privately about putting an extra \$2-billion or so into defense spending.” P. 25-33.

**BW 6/11/1960:** Senate adds \$1.5 billion to defense budget request. P. 142.

**Defense News Shock: Collapse of summit in Paris.**

**1960q2: PDV = \$2.9 billion (i = 4%) (Assume it lasts 2 years)**

**BW 2/11/1961:** Kennedy elected previous November. “Speeding Up Defense Spending.” P. 31.

**BW 3/4/1961:** “The decision to put greater stress on non-nuclear arms – affirmed this week by Kennedy – will cost billions more than Administration planners have been talking about in public. So far, a rise of \$1.5 billion or so in defense spending has been discussed for fiscal 1962. But the new strategic concepts now taking form inside the Administration imply \$4-billion or more annually in a few years.” p. 35.

**BW 3/11/1961:** “The Kennedy Administration is putting more emphasis on weapons to counter limited-type or 'brushfire' wars... It does mean increased spending – maybe \$2 billion more – for conventional arms and equipment.” P. 27.

Forecast date	FY61	FY62	FY63	FY64
1961q1		+1.5	+2.5	+4

**Defense News Shock: Kennedy is much more a hawk than Eisenhower.**

**1961q1: PDV = \$7.7 = 1.5 + 2.5/1.034 + 4/1.034^2**

In May 25, 1961, Kennedy gives speech before joint session of Congress announcing goal of going to the moon. NYT May 31, 1961: Estimates price tag of \$20 - \$40 billion dollars. In July 1961, a 10 yr \$35 billion space exploration program sails through Congress. Note: this was not counted as defense spending.

BW: Military spending

Forecast date	FY61	FY62	FY63	FY64
1961q1		+1.5	+2.5	+4
1961q2		+1.2 (based on 7/29/61 discussion)		

**Defense News Shock: Moon mission.**

**1961q2: PDV = \$31.1 = 29.9 (PDV of 10 yr moon of \$35 billion) + 1.2. (i = 3.7%)**

**BW 7/8/1961:** “The Administration’s 10-year, \$35-billion space exploration program...is moving swiftly and almost casually through Congress. Virtually no

questions are being raised about the sums involved, or the usefulness of sending men to the moon.” P. 41.

### Berlin Crisis in July 1961

**BW 7/15/1961:** “Whatever Kennedy decides about Berlin will cost money. One lawmaker with wide experience in military matters believes the cost of a buildup of sufficient size to impress Khrushchev will run between \$2-billion and \$3-billion, even it lasts only eight months.” P. 41.

**NYT: 7/21/61** US will double the draft pool.

**NYT: 7/27/61.** Kennedy calls for \$3.5 billion more for short-run, but NYT says that Soviet moves could lead to more drastic mobilization measures. Short-range added cost is \$3.6 billion.

**BW 7/29/1961:** “Kennedy’s TV address marked the third time in five months that he increased the military spending program he inherited from former Pres. Eisenhower. Like his other requests, the new one is not – by itself – particularly large; about \$2.7 billion for the current fiscal year, plus \$800-million that will carry into fiscal 1963. It is necessary to go back to Eisenhower’s last full year in office to the real impact of what Kennedy is doing. Eisenhower spent \$41.2 billion for defense that year, fiscal 1960. Kennedy added a little to the Eisenhower program last March. He threw in some more in a special message in May. The \$2.7 billion he added this week makes a target of \$46.6 billion for defense spending this fiscal year. Thus, by easy steps, Kennedy has increased defense outlays 5.4 billion over fiscal 1960. His new target is about \$3.4 billion higher than he and Eisenhower between them spent for arms in fiscal 1961.” P. 33 -34.

Forecast date	FY61	FY62	FY63	FY64
1961q1		+1.5	+2.5	+4
1961q2		+1.2		
1961q3		+2.7		+0.8

### Defense News Shock: Berlin Crisis

**1961q3: PDV = \$3.5 = 2.7 + 0.8/1.037 (i = 3.7%)**

**BW 11/18/1961:** “An unexpected hesitation in the rise of defense expenditures in the July-Sept. quarter comes to light... The third-quarter quirk gives Kennedy almost a \$2-billion windfall in his drive to slow down the rise of total spending.” P. 39.

**BW 12/9/1961:** “The lessening of the tension in Berlin allows him to hold military spending about \$1-billion lower than seemed likely a few weeks ago.” P. 41.

## **Defense News Shock: Lessening of tension in Berlin.**

**1961q4: PDV = - \$1**

**BW 2/24/1962:** “On the spending side, the Soviet threat to the air lanes leading to Berlin and the increasing tempo of fighting in S. Vietnam raise the strong likelihood of additional defense outlays... If we throw up a fighter cover over the Berlin air lanes and hold reservists beyond July 1, spending could swiftly jump \$1-billion or so.” P. 41.

**BW 3/10/1962:** “Outlays so far have lagged behind the pace required to meet budget totals for fiscal year ending June 30. To catch up – and Pentagon officials say they will – spending the April-June quarter will have to hit somewhere between \$13 billion and \$14 billion... In the first quarter of the fiscal year, spending was only \$10.6 billion. In the current quarter it may be around \$12 billion.” P. 39.

## **Defense News Shock: Berlin and Vietnam**

**1962q1: PDV = \$2**

**BW 9/29/1962:** “Long-run implications of the Cuban situation begin to affect Administration planning. And they will affect budgets.” P. 39.

**BW 10/27/1962:** “The showdown around Cuba creates an air of high tension in Washington... The first impact on federal spending will be minor, even if blockade maintained for a year. But military spending, already slated to rise \$2-billion next fiscal year to \$50-billion, will get another nudge. Space spending may be increased too.” P. 41.

**BW 11/24/1962:** “Current spending in the Defense Dept. is on the budget target of \$48.3-billion. Officials insist no reduction is contemplated this year.” P. 40.

**BW 12/22/1962:** “For the first time under Kennedy, economy is becoming a watchword in the Pentagon.” P. 31.

**BW 1/26/1963:** “Defense programs alone call for \$55.4 billion, more than half the total budget. This is just where Congress is least likely to cut.” P. 39.

**BW 2/16/1963:** “The \$4.6 billion rise foreseen for the next fiscal year is accounted for entirely by defense, space and interest.” P. 39.

**BW 3/2/1963:** “Administrator of the space program says that not a dollar can be cut from the \$5.7 billion Kennedy spending plan without endangering the goal of putting a man on the moon by 1970.” P. 39.

**BW 3/9/1963:** “As a starter, Republicans have in mind cuts of around \$3-billion in defense spending authority, perhaps another \$2-billion in the space program and \$1-billion or more in foreign aid.” P. 41.

**BW 3/16/1963:** “GOP budget-cutters face uphill battle.” P. 26.

**BW 3/23/1963:** “Clay commission, appointed to build support for foreign aid program, calls instead for slashing aid, a general \$500-million cut.” P. 27.

**BW 3/30/1963:** “Pres. Kennedy’s foreign aid message will go to Congress next week. It is likely that he’ll shave as much as \$300-million from his original \$4.9 billion request.” P. 75.

**BW 6/29/1963:** “NASA will wind up with perhaps \$500 million less than the \$5.7 billion it asked in Jan.” p. 44.

**This budget cutting seems to stem more from concern about the size of the budget than with a lessening of tension, thus I don’t count it.**

**BW 7/20/1963:** “The rapid rise of defense appropriations – a hallmark of the Kennedy Administration since it took office Jan. 1961 – apparently is over... The Defense Dept. asked for \$52.5 billion of new funds for this fiscal year. Congress is cutting this down to around \$51 billion and the Pentagon budget experts say the goal for next year is hold request to this \$51-billion level. Actual spending, in contrast to appropriations, is expected to rise a bit next fiscal year – perhaps \$1-billion compared to the \$2.7 billion rise budgeted for this year. Conservative members of Congress [...] are convinced a spending plateau is a reality and not just a mirage” – in addition to military trends, space and foreign aid are likely to be cut. P. 39.

**August 6, 1963: Test ban treaty and easing of tensions with Soviets.**

**BW 8/24/1963:** “The possibility of a defense budget cut, of a major shift in the mix of defense spending rates serious consideration – if friendlier relations with the Soviets continue... More relaxed cold war atmosphere.” P. 39.

**BW 8/31/1963:** “The volatile defense industry may be in for its biggest shakeup since the massive production cutbacks after the Korean War. It won’t be so severe as that time when military spending was slashed a total \$8-billion over a two-year period... The size of the military market has apparently reached its peak.” Battle over next year’s federal budget begins. Military spending is expected to rise some \$1-billion. NASA spending could rise another \$1-billion. In terms of cash outlays a relative plateau will be achieved next year, fiscal 1965. “Support is growing for proponents of the 'over-kill thesis', that we can substantially trim military spending without injuring national security... The Defense Dept. asked for \$52.2-billion in new funds for the current year - \$2.5 billion more than last year’s appropriation. But from the way things have been going, Pentagon officials figure they’ll be luck to come out with \$51-billion in new money.” P. 24.

Where the money goes chart: FY 1964

Space	\$4.2 billion
Atomic energy:	\$2.9 billion
Defense	\$51 billion
Foreign military assistance	\$1.5 billion

Forecast date	FY63	FY64	
Early 1963	53.4	56.0	
Aug. 1963		51	

**BW 9/21/1963:** “In eight appropriations bills passed so far by the House, Kennedy’s requests have been slashed \$3.2 billion.” Cannon estimates the appropriations cuts could come to \$5.4 billion. Rule of thumb used by Cannon translates into a spending cut of around \$3.5 billion. P. 41.

**Defense News Shock: Based on decreasing tensions, defense is now expected to plateau rather than to continue to increase. I assume that the counterfactual was an increase each year of \$2.7 billion for two years, based on the previous increases (from BW 7/20/1963).**

**1963q3: PDV = -\$7.1 = (1- 2.7) + (0 - 2.7 - 2.7)**

**BW 10/12/1963:** “House whacks \$1.5 billion from spending requests for space and research.” P. 31.

**USNEWS 12/2/1963:** Johnson is not expected to change the defense budget materially for this fiscal year. P. 37

**BW 12/21/1963:** “There will be more cutbacks in military installations and civilian manpower in months ahead.” P. 31.

**BW 2/1/1964:** “McNamara rests his budget on a belief that cold war tensions and perils are lessening... McNamara believes our missile stockpile is large enough to justify lower spending... The McNamara budget seems likely to be a landmark, setting guideposts for what could become a \$1-billion-a-year slash in arms spending in each of the next five years.” p. 36.

**Defense News Shock: This signals actual cuts rather than the elimination of increases, as in 1963q3.**

**1964q1: PDV = -\$4.6 = -1 – 1/1.04 – 1/1.04^2 – 1/1.04^3 – 1/1.04^4**

**BW 4/25/1964:** “This week, both Congress and Pres. Johnson made unmistakably clear a double trend that had already become evident in the U.S. defense picture – a gradual downturn in military spending coupled with a shift in emphasis and changing equipment

requirements... Now, barring some major international crisis or costly new technological breakthrough, the decline in military spending is likely to continue through the 1960s. The total drop will be relatively small – about 10% in all over the next five years, at a rate of about \$1-billion annually.” P. 34.

**BW 9/12/1964:** “Can we do away with the draft?” p. 29.

**BW 11/21/1964:** McNamara’s cost-cutting of defense paid is spreading. P. 45.

**BW 11/28/1964:** “Defense base closings raise a hullabaloo.” P. 32.

**BW 1/2/1965:** “McNamara is still chipping his total spending down by some \$500-million below the current year’s estimate of \$49.8 billion... This year’s spending is \$1.1 billion below last year’s.” p. 17.

**BW 1/16/1965:** “Now you can expect limited air strikes against the infiltration routes that run from North Vietnam through Laos to the south.” P. 91.

**BW 1/23/1965:** “The concentrated, expensive buildup in both strategic and conventional forces begun during the Kennedy Administration is coming to an end... Defense spending has leveled off and is declining. The outlook is that barring a major international crisis it will henceforth constitute a shrinking portion of the gross national product.” Johnson expects a \$1.7 billion drop in the defense spending from this year’s fiscal 1964 \$51-billion level. P. 28.

**BW 2/13/1965:** “The U.S. passed a fateful point of no return in the war in Vietnam this week when Pres. Johnson ordered air strikes against military targets in North Vietnam.” P. 30.

**BW 3/6/1965:** “No one can any longer think of it as a low-risk, low casualty holding operation... Spending will rise from the present range of \$1.5 million to \$2-million a day, but how much is just guesswork at this stage. Perhaps to \$3-million a day, unless the North Vietnamese army invades and the then the lid would be off.” P. 41.

**BW 3/20/1965:** “...the major part of a long decline in new contracts is over... Contracts next fiscal year may slide by another billion, but are then expected to level off... The year could end up perhaps \$1-billion under the budget.” P. 51.

Defense spending

Forecast date	FY1965		
Jan. 1965	49.3		
Mar 1965	+ \$1		

**Defense News Shock: \$3 million a day = \$1.1 billion a year. I assume it is expected to last two years.**

**1965q1: PDV = \$ 2.2 = 1.1 + 1.1/1.04**

**BW 4/3/1965:** “Will Viet war step up?” p. 29.

**BW 4/10/1965:** Johnson offers to contribute \$1-billion in aid, plus U.S. farm surpluses to Southeast Asia. P. 30.

**BW 4/24/1965:** “The pace of war in Vietnam is quickening steadily... It’s expected that U.S. troop strength in Vietnam will be increased from 32,000 to 50,000.” P. 135.

**BW 5/1/1965:** “The prospect of more and harder fighting is increasing.” P. 37.

**BW 5/8/1965:** “In three related moves this week, Pres. Johnson altered vastly the U.S. commitment against Communism around the world – widening its scope, sharpening its political impact at home, and raising its cost... He is certain to get Congress behind a bill increasing military spending by \$700-million... Early in March, the Vietnam fighting was costing about \$1.5 million or \$2-million a day. It has risen to around \$5-million a day. Johnson promises more if this is not enough – and more seems quite likely.” P. 41.

**BW 5/15/1965:** Congress approves “\$700-million increase in military funds, a large part of which is slated for immediate spending on production goods.” P. 27.

**BW 6/12/1965:** “The U.S. will beef up its forces in South Vietnam from 51,000 troops at present to perhaps 70,000 in the near future. That figure could well be upped to 100,000 if needed.” P. 135.

**BW 6/19/1965:** “Rising U.S. commitments in Vietnam over the next few weeks will raise questions about their impact on the domestic economy.” P. 41.

Forecast date	FY1965		
Jan. 1965	49.3		
Mar 1965	+ \$1.1 (3 mill per day)	+1.1	
May 1965	+ 0.7 (5 – 3 mill per day)	+ 0.7	

**Defense News Shock: Increase from 3 to 5 million a day, assume lasts 2 years.**

**1965q2: PDV = \$1.4**

**BW 7/3/1965:** “Chairman Stennis suggests a \$1-billion rise in the \$49-billion Defense Dept. budget for the fiscal year that began Wednesday.” P. 29.

**BW 7/17/1965:** “This week, Pres. Johnson warned that more infiltration of men and arms from North Vietnam could require a 'substantially larger' U.S. commitment.” P. 111.

**BW 7/24/1965:** “An increase in defense spending seems certain – something on the order of \$1-billion to \$2-billion to be added on to the \$45.2-billion defense appropriation bill that is before Congress. With the exception of a \$700-million supplemental in May, the war in Vietnam has been supplied out of inventory. Now Congress seems eager to appropriate still more money... Congress now expects a request to boost the defense budget by \$1-billion to \$2-billion immediately.” P. 22, 39.

**BW 7/31/1965:** “‘This is really war’ So Pres. Johnson told the nation at midweek, announcing a doubling of draft quotas and heavier commitment of regular forces... Congress will be asked for an increase of \$1-billion or \$2-billion in pending defense appropriations. Additional funds will be requested in a supplemental appropriation in Jan... But key members of the Senate have been told it will require an increase of \$2-billion to \$3-billion.” P. 15.

**NYT 8/6/1965:** Senator Russell “estimated that the additional cost of the Vietnam War 'could easily reach \$10 - \$12 billion.” Senator Stennis said \$10 to \$14 billion p. 2.

**BW 8/7/1965:** “At this point, the Pentagon plans to spend an extra \$2-billion to \$3-billion on the Vietnam war in fiscal 1966. McNamara asked for \$1.7 billion this week. Until this buildup was ordered, spending in Vietnam was at a \$1.5 billion annual rate... Russell [...] believes that the annual rate of spending could rise by \$10 or \$12 billion if the U.S. effort continues to escalate as he thinks likely to.” P. 23, 41.

**BW 8/21/1965:** “Continued warnings from Congress that the cost could jump \$10-billion or more next year are having a disturbing effect on civilian planners.” P. 43.

**BW 8/28/1965:** Republicans in the house think that spending will rise between \$6-billion and \$7-billion. “But Johnson has asked for an increase of only \$1.7 billion for this fiscal year so far.” P. 37.

**BW 9/4/1965:** “Defense spending will rise significantly during the months ahead. Govt officials now say that for calendar 1966 the increase probably will average about \$1-billion higher each quarter to bring next year’s total spending about \$4-billion higher than this year’s level.” P. 27.

**Defense News Shock: I think the public realized Administration officials were low-balling the estimates. I take average of official \$2 - 3 billion and Republican estimates of \$ 6 – 7 billion for this fiscal year and Stennis and Russell lower bound estimates of \$10 billion by the following fiscal year**

**1965q3: PDV = \$ 14 = 4.5 + 10/1.04**

**BW 10/9/1965:** “The cost to the U.S., in men, weapons, and money is mounting steeply... Earlier this year, the U.S. was spending \$1.5 billion annually in the Vietnamese effort and now this has probably doubled. It will rise still more as the Pentagon begins allotting the additional \$1.7 billion just voted. For fiscal 1967, Congressmen talk of additional defense outlays somewhere above \$5 billion.” P. 30.

**BW 10/16/1965:** “Vietnam has pushed this year’s spending up about \$2-billion over the last official estimate of \$49.8 billion. A good guess for next year is an increase in the range of \$4-billion.” P. 45.

**BW 11/6/1965:** “Defense spending on goods and services will be about \$5-billion higher in 1966 than this year.” P. 41.

**BW 12/4/1965:** “Long-term defense procurement commitments are growing... Defense cash outlays, originally forecast at \$49 billion for this fiscal year, will wind up at \$52-billion to \$53-billion.” P. 25.

**BW 12/4/1965:** Defense spending in fiscal 1966 will be \$3-billion to \$4-billion more because of Vietnam. “A good guess for the increase in the fiscal 1966 budget will be \$3-billion or \$4-billion increase in defense.” P. 25, 28.

**NYT 12/15/1965:** Forecaster at U. of Chicago predicts that defense spending will go up about \$8 billion in 1966. p. 67.

**BW 1/1/1966:** “...the way already seems cleared for a sharp rise in military spending to somewhere in a \$57-billion to \$60-billion range.” P. 27.

**BW 1/8/1966:** “The President this week disclosed that he will ask for a supplemental request for defense funds of \$12-billion” [for fiscal 1966]. \$3 billion will be spent in the current fiscal year, the other \$9-billion in fiscal 1967. p. 27 – 28.

**BW 1/15/1966:** “Defense spending for fiscal 1967 would rise to \$58.3 billion, up \$4.1 billion over the estimate for this year.”p. 26.

**BW 1/29/1966:** “For Vietnam alone, a \$15.2 billion rise in spending - \$4.7 billion spent this year and another \$10.5 billion extra during fiscal 1967.” P. 28.

**BW 3/5/1966:** “Senate critics of the Vietnam war were both outgunned and outmaneuvered in this week’s voting on the \$4.8 billion military authorization bill.” P. 47.

**NYT 3/8/1966:** Private sector economists project a rise in defense spending of \$11.1 billion to \$61-billion in calendar 1966, “a much greater increase than implied in the Administration’s budget in Jan.” [page missing]

**BW 3/19/1966:** “Congressional conferees agreed on a \$415-million increase in foreign aid, most of it for South Vietnam. The House approved a \$13.1 billion appropriation for the war by a margin of 289-3.” P. 53.

**Defense outlays**

Forecast date	FY66	FY67	
Jan. 65	\$49 billion		
Aug. 65	\$53.5	\$59	
Dec. 65	\$52-\$53		
Jan. 66	53.7	\$58.5	
Mar. 66		61 in CY66	

**These estimates are similar to those incorporated in my 1965q3 shock.**

**BW 4/23/1966:** “Defense spending the first quarter hit a seasonally adjusted annual rate of \$55 billion, a jump of \$3-billion over the fourth quarter. Pentagon officials believe this assures another increase in the current quarter, though it may not be as large as \$3-billion. They also believe that spending will not level off at current rates after midyear – an assumption made in the President’s January budget message... The need for a supplemental was virtually built into the Pres. Budget for the fiscal year beginning July 1. The budget figures were based on an assumption that the war would not continue beyond mid-1967 and that it would not intensify in the meantime.” P. 47-48.

**BW 5/7/1966:** “The government’s budget calculations for this year and next are strictly out the window. .. almost certain there will be requests to congress for more money and a boost in the still official projection of \$56.5 billion military spending in fiscal 1967. Defense buying hit an annual rate of \$55 billion in the first quarter and is expected to climb to perhaps a \$57-billion rate in the present quarter.” P. 27-28.

**BW 6/18/1966:** “NASA will be trying privately to see Johnson and Congress on the need for a hefty increase in space funds soon. An increase of \$500 million to \$1-billion must be budgeted in fiscal 1968.” P. 55.

**Defense News Shock: 1 billion for additional spending during 1966**

**1966q2: PDV = \$ 1**

**BW 7/2/1966:** “The mounting cost of war.’ Pentagon officials estimated that defense expenditures for the fiscal year 1966 had exceeded January’s project of \$54.2 billion by \$1-billion and maybe more... The House Approp Committee last week approved a basic \$58.9 billion defense appropriation for the current year that is nearly \$1-billion more than the Administration sought.”p. 17-18.

**BW 7/16/1966:** “Don’t expect a quick, dramatic end to the war.” McNamara says it is “too early to say when the supplement will be presented and how much it will be.” “But expectations are that it will be handed to Congress in January and will amount to \$5 billion or more.” P. 34.

**BW 8/27/1966:** Size of supplemental is closely guarded budget secret. Russell, “the Senate’s most respected authority on such matters, said that a supplemental of \$10-billion would be needed... Saltonstall, the leading GOP authority on military spending, said it would run \$15 billion. But if the Pres. Wants it that way, it could run as low as \$5 billion.” BW says that the most likely is Russell’s \$10 billion. P. 37 – 38.

**NYT 9/1/1966:** Heller predicts defense spending will continue to increase by about \$2 billion a quarter.

**BW 9/24/1966:** Contract awards show signs of leveling-off, but military spending, which lags behind contract letting is still rising. P. 50, 53.

**NYT 9/30/1966:** Most economists believe defense spending in calendar 1967 would average around \$65-billion. P. 86.

**Defense News Shock: I include 1 billion for Congress’ addition to budget plus 10 for expected supplemental**

**1966q3: PDV = \$ 11**

**BW 10/29/1966:** “The Fairy-tale figures on defense.’ The commerce Dept. reported that defense spending the third quarter hit an annual rate of \$61.3 billion. This was far ahead of the \$56.5 billion projection made last Jan. for all of fiscal 1967.” P. 182-184.

**BW 11/5/1966:** “Pentagon officials ... have hinted recently that the military supplemental bill will be for as little as \$7-billion or \$8-billion. But Congressional critics of the Administration say the amount really needed will range between \$15 and \$17 billion.” P. 57.

**BW 11/26/1966:** Budget squeeze on NASA. Probably won’t get much over \$5-billion for FY 1968. “NASA is spending around \$5.4 billion the current fiscal year; last year it hit a peak of \$5.9 billion.” P. 64.

**BW 12/3/1966:** “Some official estimates suggest that Vietnam war costs will push total military spending up to around \$70-billion in fiscal 1967. But a more conservative guess suggests \$64 billion or \$65 billion. That’s about \$10-billion more than was spent in fiscal 1966, and \$7-billion or so more than Johnson’s official Jan. estimate of \$57.2 billion.” P. 37-38.

**BW 12/10/1966:** Johnson puts defense spending fiscal 1967 at \$67 - \$68 billion, up from last Jan. forecast of \$58.5 billion. Fiscal 1966 spending was \$54 billion. “McNamara

suggested that fiscal 1968 defense outlays might climb still higher, reaching some \$73 billion... Last Jan, everyone knew that the Administration's military budget was insufficient for all of fiscal 1967, and that supplemental funds would be required. The President now is trying to assure budget-watchers that this is not his policy this year." P. 36 – 37.

**BW 12/17/1966:** “[Defense expenditures] are slated to reach an annual rate of \$71-billion by the second quarter of next year. They may go as high as \$72 billion. This would be about \$6-billion to \$7-billion above the current rate.” P. 33.

**Defense News Shock: The FY 67 numbers were already incorporated in my 1966q3 shock. Add in fiscal year 1968 increase to \$73 relative to pre-Vietnam amount of \$50.**

**1966q4:  $PDV = \$21.8 = (73 - 50)/1.055$**

**BW 1/21/1967:** “A first peek at peak budget. President pegs defense outlays at \$73 billion in coming year (FY1968), but the rise in outlays should level off by June... FY will cost \$5-billion more than the \$67.7 billion estimated for the current year and \$18 billion more than in fiscal 1966. The new level is about 50% higher than the \$50 billion area where defense spending seemed to be stabilizing back in fiscal 1964 and 1965. Already in the current fiscal year, defense expenditures have been rising at an annual rate of around \$5.3 billion each quarter. This increase will continue through June. Then spending will be close to the \$73-billion annual rate the Administration now pinpoints for fiscal 1968 – which means that there should be no further gains. McNamara explains that military buildup for Vietnam is close to completion and thus spending can level off. But he is forecasting that the Vietnam war could continue for several more years.” p. 33.

**BW 1/28/1967:** Table p. 32

	Fiscal 1967	Fiscal 1968
Defense total (incl. atomic)	\$70.2	\$75.5
Vietnam costs	\$19.4	\$21.9

“The Administration asked Congress for \$12.9 billion in supplemental appropriations for the current year. That means fiscal 1967 spending is being revised sharply upward by \$9.7 billion to \$68 billion.”

**Defense News Shock: The increase in FY 67 numbers were already incorporated in my 1966q3 shock. Fiscal 1968 was already included in my 1966q4 shock. Add in 21.9 for two more years (fiscal 1969 and 1970) for McNamara's forecast of war continuing for several more years.**

**1967q1:  $PDV = \$38.8 = 21.9/1.05^2 + 21.9/1.05^3$**

**BW 4/15/1967:** It looks like contracts will rise by \$6.5 billion over fiscal 1966. This means that “expenditures six months from now also will be more than anticipated.” P. 39.

**BW 4/29/1967:** Are figures low? Stennis, “a persistent critic of defense budgeting,” estimated that the increase in men in Vietnam would add between \$4-billion and \$6-billion to the fiscal 1968 figure. Since Stennis’ record for projections is so good, he is “generally listened to.” P. 37.

**BW 5/20/1967:** Spending climbs. “Widespread speculation that defense spending [...] would run \$5-billion or more above the \$75.5 billion sought last Jan.” Govt economists estimated \$5-billion. P. 44.

**BW 6/3/1967:** “A new troop increase there by the end of the year is now taken for granted. This, in turn is translated in a defense spending figure that is about \$6 billion higher than the official budget projection of \$75.5 billion for the fiscal year starting next month... Officials are privately acknowledging and working the higher level, around \$81-billion.” P. 49.

### **Defense News Shock: Increase of \$6 billion for fiscal year 1968.**

**1967q2: PDV = \$6**

**BW 6/10/1967:** “Fundamental changes in U.S. foreign policies seem certain in the aftermath of the Israeli-Arab clash... The effects will be felt for months and probably into the indefinite future. For one thing, there will be a sustained push to increase U.S. military strength, with the explosive situation in the Middle East cited as a major reason....Johnson’s Vietnam war policy will come under fresh assault.” P. 53.

**BW 7/1/1967:** “Speculation that a mobilization of Reservists is just around the corner to support a dramatic new increase in Vietnam manpower commitments should be heavily discounted... Probably another rise in troop level. But the odds are that the approved increase will be considerably less than 150,000 and that it will be phased in.” p. 34.

**BW 7/8/1967:** “Hints that the Administration may ask a 10% or even 12% surtax on corporations and something less – perhaps 8% - on individuals, are being circulated.” P. 43.

**BW 8/26/1967:** “The general effect of the debate [...] might serve as a warning to Johnson against further escalation of the war.” P. 41.

**BW 9/16/1967:** “The Administration’s top experts on national defense now consider it inevitable that Pres. Johnson will order a start on a limited U.S. defense system against intercontinental missiles.” Nike-X anti-ballistic missile moves from research stage to production stage. “The system will cost \$4-billion over the next 3 years and will be designed as a shield against Red China. But this first system could be a start toward a defense against Russia, a sophisticated system of missiles and electronics that would cost roughly \$40-billion over the next decade. Johnson and his advisers still view the move toward anti-missile production with deep misgivings. The Pres. regards it as one of the

most fateful decisions of his Administration... Johnson fears a costly new round in the arms race with Russia... At home, the U.S. may be committed to increasing the proportion of its resources for defense for years to come... Despite the grim possibilities, Johnson's advisers feel now that events have forced his hand. Red China has hung up an extraordinary record of successes in nuclear development. Russia has begun a missile defense..." U.S. deployment of an anti-Chinese missile defense is now widely taken for granted in the White House. P. 57.

**BW 9/30/1967:** "Criticism of the Vietnam war pushed to a new peak this week. Worried businessmen, leaders of the liberal establishment, [etc] were joining in." p. 51.

**Defense News Shock: I assume that the first \$4 billion of the Nike system is assumed, with uncertainty about future spending.**

**1967q3: PDV = \$3.8 = (4/3)(1 + 1/1.055 + 1/1.055^2)**

**( If one counts entire program over 10 years, it would be \$29.9 billion.)**

**BW 10/21/1967:** New phase in debate over the war. Sec. of State Rusk "swung hard against domestic critics of the war." P. p. 59.

**BW 10/28/1967:** "Rep Wilbur Mills talks about an expected \$19-billion spending rise this year. He sees a further rise of some \$15-billion in fiscal 1969 just with existing programs, and no slackening of the pace into the 1970s." p. 57.

**BW 11/4/1967:** "Two widely divergent views on the progress of the war." P. 47.

**BW 11/25/1967:** "A combination of \$4-billion in spending cuts and a tax increase" is being discussed. P. 51.

**BW 12/9/1967:** For aerospace contractors, the spending squeeze in the civilian space program. "From a high of \$5.4 billion last year, to about \$4.9 billion this year, spending by NASA prob. will drop to about \$4.5 billion next year... NASA's spending runs higher than its budget requests because of past appropriations." P. 59.

**BW 12/16/1967:** Budget Director Schultze "is getting from the Defense Depart. the most encouraging projections for defense spending the last three years – since the start of the major Vietnam buildup. Defense spending is expected to hold steady, at about this year's level of \$75-billion, or at the outside \$2-billion more... Space spending is being cut again. This year's freeze on hiring and on new construction starts will allow important cuts to be made next year – perhaps as much as \$4-billion." P. 53.

**BW 12/30/1967:** “Draft calls will be higher next year. The 34,000-man call scheduled for Jan. is nearly double that of a year ago and well above the 1967 monthly average of 18,000. The number will drop to 23,300 in Feb, but increase again later.” P. 27.

**Defense News Shock: Reverse of 1967q2 expectation shock, - 6, and cut in NASA of 4.**

**1967q4: PDV = - \$10**

**BW 1/20/1968:** “Progress by the Soviet Union in improving its strategic weapons has decided the Pentagon on taking the first steps toward a generation of U.S. weapons beyond the Minuteman and Poseidon missiles... Defense dept. will ask \$200-million to build and test a prototype... And it will ask \$10-million for studies of a new class of submarines.” P. 47.

(from later BW timeline) **Jan. 30, 1968:** Despite U.S. force of 500,000, Communists succeed in **Tet offensive**. Johnson decides to boost strength to 550,000.

**BW 2/17/1968:** “Sending troops to Vietnam at a faster clip than planned raises the chances of more reservists called.” P. 53.

**BW 3/2/1968:** “The new stepup in Vietnam carries heavier implications for change at home than any previous escalation in the three-year war... Every sign points to his deeper commitment to military success in Vietnam... On spending, a troop increase for Vietnam of 50,000 to 1000,000 will mean a request for extra military funds of probably \$5-billion... In the wake of Tet offensive, Johnson warns Vietnam will require more 'blood, sweat, and tears.” P. 35.

(from later BW timeline): **March 31, 1968:** Johnson orders end to air strikes against most of N. Vietnam and **withdraws from Presidential campaign**.

**Defense News Shock: Increase of \$5 billion in response to Tet offensive.**

**1968q1: PDV = \$5 billion**

**BW 3/30/1968:** McGraw Hill forecast assumes an end to hostilities in Vietnam by 1972. If it holds, defense spending will fall to \$61.5 billion in 5 years, down 15% from the current 72.5 billion level. If that 61.5 billion can be held over the years from 1972 to 1982, as the study assumes, defense outlays as a percentage of GNP will fall from the current 9.2% to 6.4% in 1972 to 5.2% in 1988 and to 4.2% in 1982. McGraw Hill forecasts high growth in potential GNP – 4.3% average through 1982.

**BW 4/6/1968:** “A whiff of peace.’ Negotiations to end the Vietnam war seemed possible.” The effect of this and the progress on the international monetary system buoyed the stock market. “In any event, defense spending will remain high for some time... It will be just about as expensive to bring the boys back as it was to get them over there.’ The President’s Council of Economic Advisers estimates that at maximum, the decline in defense spending would amount to \$15-billion, stretched over 18 months... Because of the lag of contracts and actual deliveries, it noted, the economic impact on defense production industries could come months before any significant decline in military outlays.” p. 21.

**BW 4/13/1968:** “Financial markets are already betting on de-escalation, and eventually peace in Vietnam, even though it may be a long road toward a settlement.” P. 21.

**BW 4/20/1968:** The impact of peace in Vietnam would hit business by the start of 1969 at the earliest. Firm government plans still call for defense spending to rise at an annual rate of \$3 billion this quarter and a shade over \$1 billion each in the next two quarters. Wharton assumes any peace would begin on Jan. 1, bringing an \$8 billion drop in defense spending that would be more than offset by \$14 billion in fiscal stimulation. Overall, it would be an \$18 billion drop in defense spending. P. 52-53.

(from later BW timeline) **May 13, 1968:** Preliminary peace talks open in Paris, quickly deadlock on issue of a bombing halt.

**BW 6/22/1968:** “Production for the military seems to have stabilized. Defense Dept. obligations are now in a downward trend. Prime contract awards have been declining from their peak in the third quarter of 1967.” P. 26.

**Defense News Shock: Use McGraw-Hill forecast of decline through 1972. BW says earliest cuts start in 1969.**

**1968q2: PDV = - \$23.3 billion = - (2.75/1.058 + 5.5/1.058<sup>2</sup> + 8.25/1.058<sup>3</sup> + 11/1.058<sup>4</sup>)**

**BW 9/7/1968:** “A big new decision faces the U.S. in the arms race with Russia: whether to embark on a costly program to improve Minuteman missile site defenses... If the decision is to go ahead, it will be expensive. The construction portion alone would approach \$2-billion.” P. 47.

**BW 9/21/1968:** “Pentagon slows flow of contracts.’ Modest decline in ordering, and in number of men under arms should add to deflationary effect of a federal budget moving toward surplus. Some of the economic steam generated by the war in Vietnam is beginning to ease off... The buying surge set off by Vietnam sent contracts soaring from a pre-buildup \$27.4 billion up to \$43.4 billion in fiscal 1967. Newly compiled Pentagon statistics show that a downturn began in the past fiscal year... Contract volume for fiscal 1968, which ended June 30, dipped to \$42.8 billion. That’s less than 2%, but Pentagon officials expect the decline to accelerate to perhaps 10% in the current fiscal year, even if

there is no breakthrough in the Paris negotiations and the war continues at about its present level... As for manpower, there are no prospects that the troop level in Vietnam will be reduced in the foreseeable future. But the Pentagon is moving to trim the total size of the armed forces, which has jumped by nearly 900,000 men, to 3.5 million, since the Vietnam buildup began in mid-1963.” P. 32.

(from later BW timeline) **Oct. 31, 1968:** Johnson calls off bombing in effort to move Paris talks to substantive issues.

**BW 11/9/1968:** “Vietnam peace is edging closer.” P. 33.

**BW 12/14/1968:** “Pentagon gets a tough pragmatist.” New Defense chief Laird “puts greater emphasis on military superiority over Russia.” “An inkling of the problems he will inherit shows up in the Pentagon’s package of cuts designed to reduce this year’s spending by \$3-billion. This is its share of the \$6-billion reduction Congress ordered for the Administration. While the exact level of this year’s defense spending is a closely guarded secret, estimates put it near \$80-billion. But a supplemental request to offset Vietnam costs is now an openly accepted fact.” P. 134-135.

**BW 1/11/1969:** “A \$3.5 billion reduction in the cost of the war could reasonably be budgeted based on the fact that ground fighting is at a low level... A reduction of this magnitude would keep the defense budget at about the \$81-billion level of this year, including the supplemental appropriations to be requested. A reduction of \$10-billion for Vietnam – as has been speculated in the press – could be predicted only on a reduction in troops, however, and that is ruled out at the White House. A reduction in Vietnam spending of around \$6-billion would easily let Johnson offer his promised budget surplus and still cut the surcharge in half.” P. 41.

**BW 1/18/1969:** Nixon’s inherited budget. In fiscal year 1970, “defense expenditures would level off at \$81.5 billion, rising only \$500 million from the current year, but still accounting for roughly 42% of all government outlays.” Budget envisages a war of lessened intensity in Vietnam, but allots more dollars to strategic nuclear weapons. “For budgetary purposes, Johnson assumes that the Vietnam war will continue at its present level of intensity and will continue to require nearly 550,000 troops. He could not prudently forecast an end to the war, even though the budget looks 18 months ahead. He forecasts the war’s cost at \$25.4 billion in the next fiscal year. This is a drop of \$3.5 billion from the revised estimator for this year and the first decline in war spending since the buildup began in 1965. The decline stems from the halt in the U.S. bombing of N. Vietnam, the fall-off in fighting in S. Vietnam since the Paris talks opened, and the virtual end of the construction program in the war zone. But the “saving” on the war is more than offset by a \$4-billion rise in other military programs. As the Vietnam fighting slows, spending is picking up on strategic nuclear weapons... The space budget – both military and civilian – drops by a slight \$45 million to \$5.1 billion.” P. 18.

**BW 2/8/1969:** “President Nixon’s idea of moving from confrontation to negotiation in world affairs is beginning to take concrete shape... Nixon’s decision to press for early

ratification of the nuclear nonproliferation treaty ends speculation that he might try to use it as a bargaining counter.” P. 41.

**BW 5/17/1969:** “Pres. Nixon adopted the war in Vietnam as his own in his first formal address to the nation on the issue this week. He firmly laid to rest any lingering doubts – or hopes – that he might seek an easy way out by compromising S. Vietnam’s right to self-determination. He said that to simply withdraw from Vietnam would expose millions of S. Vietnamese to massacre.” p. 49.

**BW 6/14/1969:** “War work payrolls start heading down... Civilian employment at defense plants and military bases may well have passed its crest. Pentagon figures show that defense-generated employment rose by 903,200 from the start of the Vietnam buildup in June 1965 to June 1967, a 44% increase. But from June 1967 to June 1968, total employment turned down slightly. Officials feels the trend has continued since.” P. 134.

**BW 8/23/1969:** “The rise in defense spending that will show up this quarter may look like an ominous reversal of the recent trend. It isn’t. The edging downward in military outlays that began in the Jan-March quarter will continue. But spending isn’t falling quickly enough to offset the \$2-billion a year military pay raise that went into effect July 1. After regular quarter-to-quarter climbs since the Vietnam buildup began in earnest in July 1965, purchases of goods and services for defense peaked at an annual rate of \$79.3 billion at the end of calendar 1968. They had fallen to \$78.5 billion by the June quarter, will show a drop again in Dec. after this quarter’s spurt.” P. 37.

**BW 9/6/1969:** “Plans for the U.S. space program for the next decade go to the White House next week.” They will quietly ok continuing to spend at present level of \$4 billion a year. P. 42.

**BW 9/27/1969:** “There will be no major reduction in the Defense Dept’s budget for new weapons in fiscal 1970... For fiscal 1971, the outlook is that spending for weapons systems will head even higher, though the Nixon Administration may reduce over-all defense costs by cutting military personnel and by pulling back from the Vietnam War. Both House and Senate are virtually committed to more than a dozen weapons-system development programs sought by the Pentagon for the next 5 – 7 years. A conservative estimate of the cost of these programs: well over \$100-billion.” P. 28.

**I think that this was already mostly planned.**

**BW 10/4/1969:** “Critics of the war harden their line.” Nixon has begun bringing troops home. P. 28. “The grim news that defense spending next year will be cut only slightly – it at all – will stir dissent in Congress and even within the Nixon Administration.” Planners “see a minimum request for \$75 billion including pay raises. And it will be no surprise to these experts if the new military program is as big as their year’s expected \$77 billion... The biggest change in Sec. Laird’s new budget will be less spending planned for Vietnam, [...] cut back from \$25 billion to somewhere between \$15 and \$20 billion.

Strategic forces will be up appreciably from \$8 billion, barring some quick agreement with Russia on arms controls. R & D up a big from \$7 billion... General purposes, outside Vietnam: up from \$20 billion. A defense budget of \$75 billion to \$77 billion actually will reflect considerable pruning and economies. A veteran Pentagon cost analyst explains absence of decline as the rise in prices and military pay. Pentagon rule of thumb. Maintaining a man in Vietnam costs up to \$20,000 a year; keeping him elsewhere overseas costs \$10,000, and in the U.S., the figure drops to \$7,000." P. 37.

**BW 10/18/1969:** Protest Day. "To the surprise of their long-haired sons, thousands of businessmen across the nation participated in Wed. Vietnam moratorium protest... Hawks in Congress shift fast against the war." P. 40.

**BW 12/6/1969:** Predictions for the 1970s: Both superpowers will retrench and focus on internal issues. The arms race will go on, but at a slower pace. There is a fair possibility of an agreement early in decade to halt or put ceilings on deployment of strategic weapons. "From the fiscal year 1970 level of \$77 billion, military outlays may drop by \$8 billion by fiscal 1973, to \$69 billion... In the middle of the decade, spending will begin swinging upward again as modernization programs begin and as inflation takes it toll. But it is doubtful that the upturn will take expenditures much higher than \$79 or \$80 billion." P. 91-96.

**BW 1/3/1970:** Congress and Nixon cut \$6 billion from defense. P. 11.

**BW 2/7/1970:** "The single most important message in the new federal budget is that the Nixon Administration is firmly committed to cut back defense spending... Defense spending for the coming fiscal year will be held to \$71.8 billion – only \$3.8 billion higher than it was before the Vietnam war started, after adjusting for wage and price increases... Defense spending could be in for an even sharper reduction than raw figures suggest (see page 76)." P. 37.

**Defense News Shock: It is hard to gauge how this compares to previous McGraw Hill predictions, because of inflation. I assume it is an extra \$5 billion cut.**

**1970q1: PDV = - \$5 billion**

**BW 5/2/1970:** Soviet gains work against cuts in defense. Red China launches its first satellite and Russia orbits 8 satellites from a single rocket. "Defense budget cutters see no change of repeating last year's success when \$5 billion was cut, by both the Administration and Congress, from the original defense request." P. 25.

**BW 5/9/1970:** Nixon announces the invasion of Cambodia. If invasion goes as planned, the administration maintains the cost will not add appreciably to military spending, which is now scheduled to tail off. Defense spending's current course graph: falling from around \$86 billion in fiscal year 1970 to \$71 billion in fiscal year 1971. p. 18-19.

**BW 6/20/1970:** “Nixon says that defense spending for fiscal 1972 [...] must not exceed the \$71.8 billion budgeted for the fiscal year [just about to start]. But inflation and built-in pay increases alone threaten to add \$6 billion to costs.” P. 40.

**BW 7/18/1970:** Defense programs will face sharp attack in Senate. Shooting for a total \$10 billion in cuts. “A cut of that size is not in the cards.” P. 35.

**BW 9/5/1970:** Vietnam spending reductions will continue. “Estimates that Vietnam costs will be down to a \$14.5 billion annual level by the end of this fiscal year [and] to \$10 billion in fiscal 1972.” P. 29.

**BW 9/12/1970:** “Pentagon cuts: ‘the worst is yet to come.’” “How the Vietnam cutback hits.” “Peace dividend.” Nominal figures are not down so much because of inflation. Nixon Doctrine: US should play a supporting role in future brushfire confrontations without jumping to man the front lines itself. Implications: significantly smaller standing army, manned by volunteers rather than draftees. Strong air and naval forces to bolster allied manpower to offset army strength cutbacks. P. 94.

**Defense News Shock: Based on later BW history, congressmen for peace group cut a total of \$8 billion over two years. Thus, I use 8 – previous 5 = 3.**

**1970q3: PDV = - \$3 billion**

**BW 12/5/1970:** Flood of defense layoffs coming. P. 37.

**BW 3/27/1971:** “Members of Congress for Peace Through Law, a bipartisan group of senators and representatives instrumental in trimming \$8-billion from the defense budget over the last two years, is after more. It now wants to cut the fiscal 1972 figure at least \$4.9 billion, to the level of this year’s budgeted \$71.1 billion.” P. 37.

**BW 5/8/1971:** “Pentagon critics in Congress have firmed up their strategy of warfare against the Defense Dept.’s \$76 billion budget request. They plan weekly hit-and-run... They will try to cut \$7 - \$10 billion from Defense request.” P. 39.

**BW 7/24/1971:** “Nixon began lining up congressional support for his visit to Peking well before his televised announcement last week.” P. 25.

**Feb. 1972: Nixon to china**

**May 1972: SALT I signed in Moscow**

**BW 8/18/1973:** “Defense cuts may go deep... Now, in the wake of revelations that the military lied to Congress about bombing in Cambodia, the defense budget may well get walloped by percentage slashes... Proxmire intends to propose that military spending be

kept at last year's level, which would mean a \$5 billion whack out of the \$79 billion defense budgets. Normally, Proxmire's attacks against the defense budget get little serious attention. But this time he may win sharp across-the-board cuts." P. 32.

### **Defense News Shock: Bombing of Cambodia gives doves more power.**

**1973q3: PDV = - \$5 billion**

**BW 11/3/1973:** "Unexpected U.S. defense spending to resupply the Israelis will boost business for arms makers in the months ahead." Administration request to Congress for an extra \$2.2 billion of defense appropriations. "House and Senate appropriations committees are now working on the total \$80 billion Pentagon budget requests, and some cuts are anticipated, though certainly not of the \$6-billion magnitude anticipated last spring. It is doubtful now if the reduction will exceed \$3 billion. And one high govt official feels the Mideast war has virtually wiped out changes of Congress making a cut of even that size. In his view, the net impact of the war on defense expenditures, given the supplemental, will be about \$5 billion." P. 21.

"Combat lessons of the Mideast war will accelerate a shift in U.S. defense buying away from big-ticket strategic weapons systems toward less costly arms for deployment on the battlefield." P. 32.

### **Defense News Shock: Mideast War**

**1973q4: PDV = \$5 billion**

**BW 2/9/1974:** "The consequences of the shift in U.S. strategic nuclear policy that Defense Secretary Schlesinger has been talking about for weeks is clearly visible in the Administration's record \$92.6 billion defense budget... A sizeable portion of the new money that the Pentagon is requesting for R& D and testing will go to improve the accuracy and striking power of its existing nuclear arsenal." P. 67.

**BW 9/28/1974:** "The defense budget that will be sent to Congress next Jan. will top \$100 billion and then some. The main reason for the huge increase over this year's \$94 billion request: for the first time, the Pentagon intends to budget realistically for inflation." (Lists inflation factors through 1980.) p. 44.

**BW 12/7/1974:** "Although the Vladivostok arms agreement may hold down defense spending in the long run – as Pres. Ford insists – its short-run impact could be just the opposite... The Pentagon's new budget will probably request \$105 billion in appropriations." P. 40.

**BW 6/9/1975:** "A rebound in Pentagon basic research." "Congress is extending its unusually gentle treatment of the defense budget to long-range research as well as to ongoing programs." P. 32.

**BW 12/1/1975:** “former Defense Secretary James R. Schlesinger ironically may end up winning his last policy fight. Because of the furor over his firing, the White House may loosen up on the defense budget. The budget was the chief course of tension between Schlesinger and President Ford at their last meeting before Schlesinger was sacked. Schlesinger wanted a \$118 billion budget request for fiscal 1977. Ford wanted to impose a \$110 billion ceiling as part of his effort to produce a \$395 billion budget...Now signs are growing that Ford will ease up on the Pentagon. Officials expect that when they are given their final budget ceiling next week, it will be higher than the \$110 billion that Schlesinger said he could not abide.” P. 79.

**BW 2/16/1976:** “Defense spending suddenly is getting fashionable in Congress again. The Pentagon will do surprisingly well getting its budget through the Hill this year. Both at the Pentagon and in key Congressional offices, the betting now is that only about \$3 billion will be trimmed from the department’s \$112.7 billion budget request. Congress lopped \$7 billion from the Pentagon’s budget for this fiscal year. But the mood is changing. Opinion polls have indicated growing suspicion over Soviet intentions. A soon-to-be-released Library of Congress study will confirm Pentagon claims that the Soviets are far outspending the U.S.” p. 105.

**Defense News Shock: Increase of \$4 billion, which is equal to the difference in increase and the lopping due to change in mood in Congress.**

**1976q1: PDV = \$4**

**BW 5/17/1976:** “The CIA is about to increase dramatically its estimate of the economic burden the Soviets are bearing to maintain their military establishment. The CIA analysis will reinforce the growing pro-defense mood in Congress. The report concludes that defense takes up about twice the 6% to 8% of the Soviet gross national product that had been estimated earlier. Administration officials do not interpret the new numbers as calling for a further speedup in U.S. defense. But they believe the estimate undermines defense critics contention that the Soviets have set consumer well-being as their top priority.” P. 161.

**BW 8/2/1976:** “Foreign arms sales are fast becoming the lifeblood of leading U.S. defense contractors. Over the past three fiscal years, overseas customers have shelled out a staggering \$28.5 billion for U.S.-made aircraft, engines, tanks, armored vehicles, ships, missiles, electronics, ammunition, and other war materiel. The peak came in fiscal 1974. From July 1973 through June 1974, foreign governments contracted to buy \$10.8 billion worth of U.S. weapons...(Lieutenant General Howard M. Fish, security assistance director for the defense department says) ‘we should see orders sustaining a range of \$6 billion to \$7 billion a year through 1982, unless they are increased by another war in the Middle East.’ If Fish’s outlook is accurate, foreign orders for U.S. weapons will average about 20% of the \$175 billion worth of military equipment that the U.S. defense industry will produce from now through 1982.” P. 30G.

**BW 10/18/1976:** “Administration plans to rebuild the nation’s \$7.4 billion stockpile of strategic materials is likely to impress only conservatives worried about defense preparedness.” P. 149.

**BW 10/25/1976:** “The flap over what happened to up to \$8 billion in expected government spending that never got spent has seriously embarrassed the OMB... OMB does know where the spending shortfall occurred: \$1.7 billion in defense, \$1.4 billion in agriculture, [etc.]” p. 155.

**BW 11/8/1976:** “The Pentagon is betting that Jimmy Carter will build the B-1 bomber after all if he is elected President.” P. 111.

**BW 12/6/1976:** “‘Defense Cuts: A Big Test for Carter.’ Jimmy Carter’s campaign promise to cut defense spending by as much as \$7 billion may have been good politics in Sept. but will prove embarrassing to him in Jan. The reason is that any tinkering with military spending will collide dangerously with [...] the need to push some stimulus into the economy... Carter has managed to avoid painting himself into a corner on the defense issue. During the campaign, he never made clear whether his target cuts would represent a net reduction from the \$111.1 billion appropriation of the current fiscal year that runs until next Sept. or a reduction from the \$121 billion that the Defense Dept. expects to present in Jan. for the fiscal year that begins Oct. 1, 1977.” P. 115.

**BW 12/20/1976:** “Foreign arms sale dilemma. One of the major political time bombs President Carter will have to defuse next year is the touchy subject of foreign-arms sales...the volume of business is enormous. Foreign orders for U.S. weapons, which came in at about \$8.5 billion in fiscal 1976 are expected to hit \$9 billion in the current fiscal year and stay at that high level right through 1980. The orders have been averaging close to one-third of the total domestic defense procurement budget and many major U.S. corporations have important stakes in the business...in the Middle East, where foreign sales have been concentrated, the money (to buy arms) will never run out.” P. 79.

**BW 2/14/1977:** “Congress rushes in with defense proposals. No matter what the Administration’s hopes to cut or rearrange the hardware and development areas of the defense budget, the powerful congressional committees concerned with defense spending are determined to keep that spending on a firm, upward track. ” p. 143.

**Spring 1977: Carter promises to build up NATO defenses.**

**BW 4/18/1977:** “Détente is not the Issue it was. The abrupt end to Sec of State Vance’s mission to Moscow confirms what has become increasingly apparent: that Jimmy Carter is far less interested in détente with the Russians than either Nixon or Ford was. In fact, détente is dead – or at least dying.” P. 169.

**BW 6/27/1977:** “Proponents of heavy defense spending are likely to have things pretty much their own way in Congress for the next couple of years. The reason: their opponents, the liberal critics of big Pentagon spending, are virtually finished as a

cohesive force on the Hill. One tip-off is that there has been almost no effective opposition to Pres. Carter's impending decision to build the B-1 bomber..the liberals have moved a considerable distance to the right in their approach to the Soviet Union. For one thing, they have become convinced that reports of a Russian buildup of strategic weapons and of conventional forces in Eastern Europe are something more than Pentagon budget-time propaganda...Opponents of new weaponry are wary about intervening in the negotiations (over SALT) by tinkering with weapons programs. If SALT fails, no one wants to take even a small part of the rap." P. 119.

**BW 7/18/1977:** "Carter's decision to kill the B-1 bomber is prompting quiet jubilation in many quarters of the Defense Dept... Cancellation of the B-1 means that at least half the \$25 billion earmarked for the Air Force's new bomber over the next eight years may now go to fatten other weapons procurement... Not all the would-be B-1 money will flow into other weapons programs. Carter clearly intends to use a considerable part of the B-1 savings to help him reach his goal of a balanced federal budget by 1980." P. 21. (This decision surprised everyone)

**BW 8/29/1977:** "The odds improve for arms sale to Iran."

**BW 9/5/1977:** "Pres. Carter's successful effort to trim funds from the mammoth defense budget that will take effect in Oct. will begin to pay off politically next year. The reason: if, as expected, the economy begins to cool late in 1978, the President will be able to argue that a stimulative boost in 1979 defense spending will start from a low enough base... Allowing for inflation of 6.1%, the numbers total \$117.8 billion, a cut of \$5.4 billion from the defense figure Pres. Ford proposed last Jan. The only trouble is that defense spending is so ponderous that actual cash outlays take on tremendous momentum from programs authorized years ago. The OMB estimates that outlays for fiscal 1978 will rise about 14%. The appropriations process is unlikely to slow that growth for another year." P. 101.

**Defense News Shock: Cut of \$5.4 in appropriations. But as BW says, this will only affect spending a year hence. (i = 7%).**

**1977q3: PDV = - \$5.0 = 5.4/1.07**

**BW 5/1/1978:** Senator Jackson, chairman of the Senate arms control subcommittee "has said publicly that SALT is in trouble", privately that "SALT is dead for this year, and very likely for next." P. 115.

**BW 5/15/1978:** "Growing evidence that the B-1, or a bomber like it, may be headed for future production." P. 139.

**BW 7/24/1978:** "Sharpening debate in Washington over economic sanctions against the Soviet Union... At stake is some \$2 billion worth of exports to the Russians." P. 181.

**BW 8/28/1978:** “President Carter’s early promise to restrain the sale of U.S. arms abroad sounds as hollow as an Army drum. Pentagon sources say that foreign military sales will climb to a record high this fiscal year – to as much as \$15 billion, compared with \$13.2 billion in fiscal 1977. So far this year, foreign customers have signed up for \$8.5 billion worth of U.S. weapons and supporting services. Saudi Arabia leads the pack with \$3.7 billion worth of purchases.” [page missing].

**BW 9/4/1978:** “Pres. Carter is likely to win on his veto of the \$37 billion military procurement authorization bill.” P. 103.

**BW 9/25/1978:** Pres. Carter’s successful veto of the military authorization bill is a pyrrhic victory. He did get rid of \$2 billion for a nuclear aircraft carrier he does not want. Vengeance is taking form. P. 183.

**BW 1/29/1979:** Carter’s 1977 pledge to NATO to increase inflation-adjusted defense spending by 3% in 1980. As a result, defense outlays will increase by \$11 billion to \$123 billion next year.p. 74.

**Defense News Shock: According to Richard Carson (who worked in Washington at the time), Carter gets his increase for the 1980 fiscal year, but no one is sure whether he can make it stick in future fiscal years.**

**1979q1: PDV = \$11 billion**

**June 1979: Carter and Brezhnev sign SALT II**

**BW 3/26/1979:** “President Carter’s decision to dispatch an aircraft carrier task force to meet the latest threat to Western security in the Middle East – a sputtering war between the two Yemens- will spark a new debate on naval strategy...the Administration or Congress-or both-will probably move to add a frigate or two the six already projected in the Navy’s 1980 shipbuilding budget of \$6.2 billion.” P. 48.

**BW 7/16/1979:** “The slide of the U.S. economy into recession will put Pres. Carter’s cherished goal of a balanced budget by fiscal 1981 thoroughly out of reach... An almost certain victim – and the one with the most severe political consequences – will be Carter’s pledge to NATO to increase inflation-adjusted defense spending by 3% a year. Fulfilling that promise would require a 1981 increase of at least \$12 billion more than 1980’s projected Defense Dept. outlays of \$123.5 billion. The defense budget was a major item of contention during the preparation of Carter’s 1980 budget, which will take effect on Oct. 1. Over the loud objections of liberals, Carter held fast to the 3% increase. As a result, virtually all of the real spending increases in the overall 1980 budget were in defense... As of now, the Administration has made no decisions on 1981 defense spending.” P. 117.

**BW 10/29/1979:** “Defense Dept. has been given \$13 billion of overall spending increase for fiscal 1981, partly to appease SALT II Treaty critics... Carter is committed to raising

defense budget authority to about \$160 billion, an increase of 5% after inflation adjustment. That figure will determine actual outlays in future years.” p. 207.

**Nov. 26, 1979: Iran Hostage crisis**

**At a special meeting 12/12/1979, NATO decides to deploy Pershing missiles in response to Soviet SS-20s.**

**BW 12/24/1979:** SALT faces gloomy prospects next January. P. 101.

**BW 12/31/1979:** Strong public support for bigger defense budgets. Kennedy committed to increase in defense spending. Carter pledges to increase defense by an average of 3.4% annually, meaning defense spending would increase by \$100 billion to \$220 billion by fiscal year 1985. p. 161.

**NYT 1/20/1980:** “Love it or loathe it, the military-industrial complex is back in business... The defense budget [...] will begin rising significantly when President Carter unveils his fiscal 1981 budget later this month... Even before Soviet troops landed in Afghanistan, President Carter promised to increase the fiscal 1981 defense budget about \$19 billion over 1980 to \$157.5 billion, with real increases averaging 4.5 percent through fiscal 1985. Adjusted for an inflation rate of 9.3 percent, defense spending might well hit \$200 billion in fiscal 1984. But industry officials believe that events of the last few weeks will push defense spending even higher.” P. F1.

**BW 1/21/1980:** “A New Cold War Economy” End of détente, beginnings of a new cold war. Even if Pentagon gets the money to make good on its shopping list - \$96 billion more in defense spending over 5 – 7 years, defense will take less than 5.5% of GNP. Carter’s previous vow: Increase budget authority at a rate of 4.5% a year over the next 5 years. Because of lead times involved in major strategic weapons, the peak in spending will not come until mid-1980s. p. 78.

**Defense News Shock: Carter promised a \$19 billion increase in FY 81 to \$157.5, with real increases of 4.5% thru FY 85. 3 year Treasury bond rates and inflation were both running at 10 -11%, so the real interest rate was 0. Assume that counterfactual is constant real defense spending at previous 138.5.**

$$1980q1 \quad PDV = \$ 169.1 \text{ billion} = 19 + 157.5 \cdot \sum_{t=1}^4 (1.045)^t - 4 \cdot 138.5$$

Reagan wins by a landslide in November 1980, given a “stunningly wide mandate.” In December 1980, Reagan says he will step up defense by perhaps \$15 billion in FY 1981 and by more after that. Feb. 18, 1981 Reagan spells out defense increases.

**NYT: 2/19/81:** “In perhaps the largest shift of financial resources proposed in the nation’s peacetime history, President Reagan disclosed tonight that he planned to increase

the military budget from 24.1 percent of federal spending to 32.4 percent over the next three years.” Shows Administration’s ‘fact sheet.’ p. B9.

Proposed additions to defense in billions (expenditures, not authority), relative to Carter’s budget

1981	1982	1983	1984	1985	1986
1.3	7.2	20.7	27.0	50.2	63.1

**Defense News Shock: However, it is clear from the articles that these numbers don’t take into account “savings” and thus don’t represent net increases in defense. I thus use the October 1981 forecasts, average of OMB and CBO. See table below.**

**1981q1: PDV = \$ 74.5 billion =**

$$1.3 + \frac{(188.9 - 184.4)}{1.13} + \frac{(220.9 - 210.4)}{1.13^2} + \frac{(251.1 - 237.8)}{1.13^3} + \frac{(297.0 - 267.8)}{1.13^4} + \frac{(336.2 - 299.5)}{1.13^5}$$

**(Using the numbers from the “fact sheet” without taking into account saving, the PDV is \$108 billion.)**

**NYT 1/24/1982:** Gives October 1981 estimates of defense spending (I think fiscal years):

Fiscal yr	Def outlays 82 budget (Carter 1/15/81)	Inflation projections from FY 1982 budget	OMB 10/1981 Defense	CBO 10/1981 defense	Actual defense outlays	Actual inflation
1981		10.5%	160.4	160.9	159.8	8.3
1982	184.4	9.3	186.1	191.7	187.4	5.2
1983	210.4	8.5	220.1	221.6	210.5	3.4
1984	237.8	7.8	249.2	252.9	227.4	3.6
1985	267.8	7.0	302.5	291.4	252.7	2.8
1986	299.5	6.3	341.3	331.0	273.4	2.3

Fiscal year	Avg. of OMB and CBO projection	Actual defense if inflation had been as projected	Projected real defense increases (using inflation projections)	Actual real defense increases (using actual inflation)
1981	160.7			
1982	188.9	194.7	7.5%	11.5%
1983	220.9	229.4	7.7	8.6
1984	251.1	257.9	5.5	4.3
1985	297.0	298.4	10.6	8.1

<b>1986</b>	336.2	335.5	6.5	5.8
-------------	-------	-------	-----	-----

Note that actual defense, adjusted for the difference between projected and actual inflation, is equal to or occasionally greater than the range of estimates from OMB and CBO. By 1986, actual is the same as projected once we adjust for inflation forecast errors.

**BW 9/6/1982:** Congressional inaction on defense appropriations means uncertainty “over the level of defense spending for at least 4 and perhaps 6 months.” P. 111.

**BW 10/18/1982:** “Weinberger has won some key victories this year in staving off deep cuts in the military budget, but he may well lose the battle next year... He infuriated Stevens by refusing even to discuss cuts in his fiscal 1983 budget request of \$209.5 billion defense outlays... He grudgingly acceded to a \$201.5 billion figure.” P. 205. (I got the impression that this only represented delays.)

**BW 1/24/1983:** “Budget chaos is shaking the Administration.” P. 23.

**March 8, 1983: Reagan’s “Evil Empire” speech**

**March 23, 1983: Reagan’s “Star Wars” speech**

**BW 3/14/1983:** “The budget ax may only graze defense.” P. 159.

**BW 4/25/1983:** “Why Reagan is losing on the Hill.” Senate republicans have joined democrats in voting in committee “to cut in half his planned 10% defense spending hike.” P. 135.

**BW 5/23/1983:** “Congress is copping out on defense cuts.” P. 45.

**BW 12/26/1983:** Congress will “make a big show of whacking away at Reagan’s fiscal 1985 defense plan without making cuts of long-lasting effect.” P. 171.

**BW 4/30/1984:** “Despite a lot of bluster, foes of the Administration’s fiscal 1985 goal of 7.5% growth in real defense spending still lack the political will to kill big-ticket weapons outright.” P. 151.

**BW 5/7/1984:** “There is virtually no chance that the Administration will get the 7.5% increase in real defense spending for fiscal 1985 it agreed to as part of a deficit-trimming compromise... The House-passed budget resolution calls for 3.5% growth” – it will probably be scaled back in conference to 5%. P. 163. (Note: Reagan actually got an 8.1% real increase in fiscal year 1985 in spending, but this article might be talking about obligational authority, which lags spending.)

**CBO Working Paper, May 23, 1984:** Estimates for cost of SDI research:

FY 1984: 1.0            FY 1986: 3.8            FY 1988: 6.3  
FY 1985: 1.8            FY 1987: 5.0            FY 1989: 7.4

However, much of the earlier moneys came from reallocation with defense department.

**Summer 1984: USSR boycotts Summer Olympics in U.S.**

**BW 8/13/1984:** Lots of talk about deficit. P. 157.

**NYT 10/27/1984:** The Council on Economic Priorities, a private research organization, estimates that it would eventually cost at least \$400 billion to build Reagan's missile shield. Pentagon officials said that it was premature to estimate cost for a long-range plan on which research has just begun. P. D2.

**BW 2/11/1985:** "President Reagan will shortly ask Congress in the defense budget to increase funding for his controversial Star Wars program by a huge 170%, to \$3.8 billion, over the current level of \$1.4 billion. Everyone agrees that the outcome of the funding battle will be crucial to the program's future." P. 133.

**March 11, 1985: Gorbachev comes to power.**

**BW 3/25/1985:** "Reagan's budget is already on the ropes... In preliminary votes, the Republican-controlled committee froze defense spending... Hollings proposal gives the Pentagon no after-inflation increase in spending authority for fiscal 1986 and only a 3% real hike in the following two years. This scheme would leave military outlays in fiscal 1988 \$43 billion short of Reagan's target." P. 26.

**BW 4/1/1985:** "The Senate's decision to continue production of the MX missile – by a wider-than-expected 55 to 45 – proves that when Ronald Reagan really wants something, he can still get it... The victory was critical. Continuation of the Reagan defense buildup had just taken a serious beating in the Senate, where the Budget Committee voted to freeze inflation-adjusted military appropriations for fiscal 1986 at this year's level." P. 41.

**August 1985: Gorbachev announces moratorium on nuclear testing. U.S. won't go along and moratorium ends Feb. 5, 1987.**

**November 1985: Reagan and Gorbachev meet in Geneva. Agree to 2 more summits.**

**BW 11/25/1985:** "Defense: More Ammo for Congress' budget-cutters... Reports that the Defense Dept. is using artificially high inflation estimates to amass a big cushion of contingency funds. Inflation has fallen short of forecasts in each of the past 4 years, and the military has been able to use the "savings" to offset the effects of congressional budget cuts. The General Accounting Office estimates that the Pentagon got nearly \$37 billion in extra appropriations from 1982 to 1985 because of exaggerated inflation assumptions." P. 47.

## Defense spending Budget projections

Fiscal year	1/1984	1/1985	1/1986	1/1987	1/1988	1/1989	Actual
1986	310.6	285.7	265.8	273.4			273.375
1987	348.6	321	282.2	282.2	282.0		281.999
1988		358.4	299.1	297.6	285.4	290.4	290.361
1989			322.3	312.2	294.0	298.3	303.559
1990				330.0	306.2	303.0	299.331
1991					320.2	314.4	273.292
1992						326.4	298.35

**BW 4/21/1986:** “Why Star Wars may be facing the beginnings of the end... Running out of time... Reagan has less than 3 years left in the White House...” Fans of SDI “believe that total spending of between \$20 billion and \$25 billion through 1989 is necessary to give the program the momentum it will need to survive once Reagan retires. That would be a substantial boost from the \$4.2 billion already authorized.” P. 35.

### Feb – Mar 1986: Gorbachev announces Perestroika.

**BW May 26, 1986:** “Reagan is taking his lumps on the budget fight... President Reagan will be forced to accept a budget with no real increase in defense spending for the second straight year.” P. 53.

**BW 6/16/1986:** “Worried by tighter defense budgets, McDonnell Douglas Corp. is scrambling to protect its \$34 billion C-17 transport.” P. 47.

**BW 9/29/1986:** “The Pentagon is finally biting the bullet. Slowly, but inexorably, reality is beginning to sink in at the Pentagon. Sr. Defense Dept. officials finally realize that Congress has brought President Reagan’s military buildup to a halt. But the top brass and their civilian overseers have not yet figured out what to do about budgets that could fall more than \$100 billion short of expectations over the next several years... Originally, Defense Secretary Caspar Weinberger had planned to request a total of \$686 billion for 1988-89 (2 year cycle). Defense planners already have lopped off about \$25 billion and are likely to cut an additional \$12 billion before the budget goes to the White House.” P. 49.

**BW 10/20/1986:** “Now the right is taking potshots at Star Wars... An increasingly skeptical Congress has slashed the President’s fiscal 1987 funding request of \$5.3 billion by about one-third.” P. 39.

**October 11, 1986: Reagan and Gorbachev meet in Reykjavik and almost reach breakthrough on nuclear arms control.**

**BW 11/3/1986:** “Faced with the certainty of a tight defense budget next year, Pentagon fiscal planners have their paring knives out. The Defense Dept. is trying to carve \$20 billion out of its tentative fiscal 1988 request. That would still call for an increase of \$30 billion over this year. But it would leave the 1988 budget at the level originally proposed for this year.” P. 39.

**Defense News Shock: 100 billion cumulative cut over three years, with the 25 + 12 occurring in coming year.**

**1986q4: PDV = - \$ 89.4 billion =  $-(25 + 12)/1.065 - 32/1.065^2 - 32/1.065^3$**

**Dec. 1986: Iran-Contra crisis surfaces.**

**BW 5/25/1987:** “The ‘wall around the President’ is beginning to crumble” because of Iran-Contra. P. 71.

**June 12, 1987: Reagan in Berlin challenges Gorbachev to tear down the Berlin Wall.**

**BW 12/21/1987:** New defense sec. “Carlucci has laid down the law, and it’s tough.” New thinking to prepare the Pentagon for “coming era of tight budgets”. “Orders to slash \$32.5 billion from next year’s planned spending landed like a lump of coal in Pentagon Christmas stocks.” P. 49.

**BW 2/29/1988:** “Such cuts are only the beginning. This summer Pentagon begins work on the 1990-91 budget. That two-year proposal will project annual budget growth two percentage points above the inflation rate through 1994. Just 18 months ago, the services counted on 5% a year real growth. The difference between these rates totals about \$400 billion over the next six years. If Congress keeps military spending growth in line with inflation, the shortfall would top a half-trillion dollars.” P. 39.

**Defense News Shock: 18 months ago would have been August 1986. Thus, I think the 100 billion cut over 3 years that I counted in the 1986q4 date is included in this. Thus, I will spread  $400 - 100 = 300$  billion over 6 years. Interest rate = 6.5%**

**1988q1: PDV = - \$242.0 billion =  $-\left(\frac{50}{1.065} + \frac{50}{1.065^2} + \frac{50}{1.065^3} + \frac{50}{1.065^4} + \frac{50}{1.065^5} + \frac{50}{1.065^6}\right)$**

**May 15, 1988: Soviet troops begin withdrawing from Afghanistan.**

**1988: Glasnost**

**BW 5/9/1988:** Carlucci and “Pentagon officials are drawing up a 1990-91 fiscal plan that could have a marked effect on military policy for years to come... Four years of congressional hacking away at the defense budget have taken their toll. As recently as 1986, the Pentagon forecast that military spending would top \$400 billion in 1991. The

best Carlucci can now hope to get is an inflation-adjusted spending growth of 2% a year, yielding \$334 billion in 1991... The funding shortfall calls for drastic action.” P. 59. Many cuts.

**BW 6/20/1988:** “The Pentagon’s down-to-earth plans for Star Wars.” P. 57.

**BW 7/25/1988:** “Congress finally finds a way to mothball military bases... On July 12 the House of Representatives overwhelmingly voted for legislation that may make the closing of a number of big military bases possible.” P. 55.

**BW 11/7/1988:** “The Defense Budget: Why Bush is Hiding in a Foxhole... Bush’s ‘flexible freeze,’ the cornerstone of his deficit-reduction proposals, would allow Pentagon spending to rise only with the rate of inflation. But the Pentagon’s five-year plan assumes that its budget will rise by at least 2% a year after inflation. That means Bush would have to cut \$75 billion from planned spending for fiscal years 1989 to 1993.” Bush’s answer is “to stretch out purchases of weapons over a longer time than first planned.” P. 49.

**BW 11/21/1988:** “Bush aims to cut strategic nuclear arsenals and conventional forces in Europe.” Bush is “faced with the need to cut \$75 billion from planned Pentagon spending over the next five years.” p. 39.

**Defense News Shock: 75 billion over next 5 years is 15 billion a year**

$$1988q4: PDV = - \$ 58.8 \text{ billion} = - \left( \frac{15}{1.087} + \frac{15}{1.087^2} + \frac{15}{1.087^3} + \frac{15}{1.087^4} + \frac{15}{1.087^5} \right)$$

**March- April 1989: First free elections in the USSR since 1917.**

**BW 8/7/1989:** “Defense Secretary Cheney tried to kill several big programs in his \$296 billion budget request for 1990.” P. 61.

**BW 9/4/1989:** “As the U.S. and the Soviet Union step up efforts to trim forces in Europe, the prospect of a smaller defense budget is tantalizing Washington. But politicians shouldn’t spend that “peace dividend” yet. In the calculus of conventional arms, smaller may be safer. Smaller may be better. But smaller may not be cheaper – at least not in the near term. It’s easy to see why everyone hankers after a piece of the \$180 billion a year that the U.S. spends on the defense of Europe. Liberals would like the money for social programs... Cuts in Europe will save money, but most of the savings are likely to remain in the defense budget... In the long run, as easing of tension in Europe should allow significant cuts in military spending, particularly if the arms thaw develops into a lasting rapprochement. The Washington representative of one big defense contractor has told his home office that inflation-adjusted budgets could decline 25% by the mid-1990s. Until then, however, liberals and conservatives alike would be well advised not to write any checks against an elusive peace dividend.” P. 43.

**October 1989: The Berlin Wall falls.**

**BW 11/18/1989:** “Congress Drops a Bomb on Defense” “Congress already is thinking of cutting the projected \$291 billion fiscal 1993 defense budget by up to \$20 billion. And industry experts predict spending of at most \$200 billion in 1991 dollars by the end of the decade.” P. 41. (This implies a 33% decline in real terms by the end of the decade.)

**BW 11/27/1989 (Cover Story):** “Americans are extremely heartened by the recent developments in Eastern Europe, but they’re wary too... But most of the public is still leery of a Soviet crackdown if reforms go too far, and they don’t believe the cold war is over... Americans don’t think it’s time to start beating swords into plowshares either. A 66% majority says the U.S. shouldn’t sharply cut military spending. The public is evenly split on whether the U.S. should withdraw its troops from Europe if the Soviets reciprocate... 80% oppose a new Marshall plan for the East bloc.” P. 70.

**BW 12/4/1989:** “The Pentagon money-raising machine, held together for the past 5 years with chewing gum and baling wire, is finally breaking down. Congress has been funding domestic programs by chipping away at the military’s \$300 billion in annual spending. Now, with Gorbachev proposing arms cuts and communism retreating in Central Europe, the Bush Admin. is joining the budget-cutting chorus. The certain result: a painful new world for the military Establishment and the defense industry... Def. sec. Cheney has launched a search for cuts of \$10 billion to \$15 billion for fiscal 1991. And he’s looking at reducing planned spending by up to \$180 billion over the following three years... It’s unlikely that 1992-94 spending will actually be cut as much as current speculation suggests. Reductions of \$100 billion to \$120 billion seem more probable. But even the Pentagon’s strongest backers now expect that military spending over the next few years will fail to keep pace with inflation. McCain believes the defense spending will decline 2% to 3% a year after factoring out inflation.” P. 32. (Note: inflation hovered between 4 and 5% from 1987 to mid 1990. It climbed to 6% during recession, and then fell to 3 % by mid 1991. In January 1990, the Greenbook forecasted average inflation of 4% over the next two years.)

**BW 12/11/1989 (Cover Story):** “The Peace Economy: How Defense cuts will fuel America’s long-term Prosperity’... The whole world is watching... a new chapter in East-West relations... The superpowers are already winding down defense spending in the wake of intermediate-range arms control negotiations and easing tensions. But the developments in Eastern Europe are sure to accelerate cutbacks: Against a backdrop of rapid liberalization, the Warsaw Pact threat seems to be diminishing by the day... No one knows how deep or how far-ranging cutbacks in military spending are likely to be. Defense Secretary Cheney has instructed the services to look at cuts of up to \$180 billion for fiscal years 1992-94. That figure, it turns out, represents cuts from projected increases in the defense budget. Still, after accounting for inflation, what Cheney has proposed amounts to cuts in real terms of up to 5% a year. If the reduction in fiscal 1991 is about the same size, as many analysts expect, then the spending rollback from 1991 to 1994 would total about \$60 billion in 1989 dollars, for a 20% reduction in real terms. Barring a sudden reversal in the source of East-West relations, that seems a reasonable

course of spending to expect. But some defense experts are already arguing that the cuts could go far deeper. Brookings senior fellow Kaufmann provides a blue print that would shrink the Pentagon budget by up to 50% in real terms by 1999... John Rittenhouse of GE Aerospace Groups, says that for more than a year, he's been expecting real cuts of 5% to 10%. 'There is no news here to defense contractors who were attentive,' he says of Cheney's proposed cuts... Whatever the size of the cuts, they appear certain to bring an eventual 'peace dividend' to the U.S. in the form of lower inflation and interest rates, a declining budget deficit, and faster growth." P. 5055.

**BW 12/25/1989:** "The Administration itself opened the door to an assault on the defense budget by suggesting that the Pentagon may have to slash \$180 billion out of planned spending by 1994. What Bush meant as a worst case, Democrats regard as a 'peace dividend' down payment. Look for Bush to recommend [...] a \$10 billion to \$15 billion cut in planned military spending." P. 63.

**Defense News Shock: The current budget was around \$300 billion. At that time inflation was running about 4 % and the interest rate was around 8%. Industry experts were saying a cut of 25% by the middle of the decade and 33% by the end of the decade. This is consistent with many of the numbers. Thus, I assume 5% annual real cuts for first five years and 3% annual real cuts for second five years. As done previously, I don't look beyond 10 years because there is so much uncertainty.**

**1989q4 PDV = - 507.6 billion =**

$$-\sum_{t=1}^5 \left[ \left( \frac{1.04}{1.08} \right)^t [300 - (0.95)^t \cdot 300] \right] + \sum_{t=6}^{10} \left[ \left( \frac{1.04}{1.08} \right)^t [300 - (0.95)^5 (0.97)^{t-5} \cdot 300] \right]$$

### U.S. Budget, Outlay forecasts

Fiscal year	1/1988	1/1989	1/1990	1/1991	1/1992	1/1993	Actual
1988	285.4	290.4					290.4
1989	294.0	298.3	303.6				303.6
1990	306.2	303.0	296.3	299.3			299.3
1991	320.2	314.4	303.3	298.9	273.3		273.3
1992		326.4	309.2	295.2	307.3	298.4	298.4
1993			311.9	292.0	291.0	290.6	292.4
1994				286.7	283.0	276.9	282.2
1995					282.9	270.9	273.6
1996						264.7	265.7
1997						246.9	270.5
1998						252.5	268.5
1999							274.9

**Jan. on 1990 in Business Week is more talk about details of defense cuts, but no real changes in expected present discounted value.**

**BW 7/2/1990:** Big article on projected job losses because of defense cuts. P. 64.

**BW 8/6/1990:** Business Week's plan to slash military spending by 25% over the next five years. p. 60. (This is consistent with assumptions used in 1989q4 shock.)

**August 4, 1990: Saddam Hussein invades Kuwait.**

**BW 8/20/1990:** "The Persian Gulf crisis has all but eliminated hopes for a big deficit reduction package this year. Saddam Hussein's invasion of Kuwait sent energy prices soaring and threatens to tip an already faltering U.S. economy into recession... The biggest source of spending cuts in any budget pact was to have been the Pentagon. Even Republicans seemed resigned to reductions of \$180 billion in planned spending over five years. While long-term military savings remains likely, the odds of big, near-term cuts have diminished. The only way to save much money in '91 is to slash personnel and operations—and that's not about to happen... 'If you're mobilizing in the Middle East... I can't imagine giving out pink slips to 100,000 troops.'" P. 32.

**BW 9/3/1990:** "How the Crisis is Scuttling the Peace Dividend.' Washington's showdown with Saddam Hussein may take months to play out, perhaps longer. But whether or not hostilities erupt, Operation Desert Shield, the largest U.S. mobilization since Vietnam, has shattered many of the glib myths about the U.S. in a post-cold-war era... The halting response to the crisis by West Germany and Japan shows that for all their economic clout, their inability to project force leaves them bit players in this power play... By taking on an Iraq bristling with arms, Bush has fanned the flames of Arab nationalism, all but guaranteeing a prolonged U.S. military presence in the Mideast. And at home, the action has radically altered the terms of the budget debate, just about eliminating the near-term prospect for slashing defense outlays... A House Armed Services Committee plan to slash the Administration's fiscal 1991 military-spending request to \$283 billion from \$307 billion now looks dead. 'The crisis has put the brakes on the move to cut defense'... In the euphoria that followed the crumbling of the Warsaw Pact, many in Congress believed that the U.S. military could contribute up to half of a hoped-for \$500 billion in deficit reduction over the next 5 years. Now, budgeters figure they won't be able to skim more than \$120 billion from defense over the same period." P. 30.

**BW 11/12/1990:** "The defense component of the budget marks a much less significance change in political dogma. By holding defense spending at 1990 levels for the next three years, the agreement ratifies the end of the cold war and recognizes fundamental changes in the Soviet Union and Eastern Europe. Yet the new budget merely puts defense policy on hold... Real decisions won't be made until after 1992, if then." P. 44.

**Defense News Shock: Cuts expected to be reduced from 250 to 120 over next 5 years, so it is an increase of 130 over 5 years.**

$$1990q4: PDV = \$ 112.1 \text{ billion} = \left( 26 + \frac{26}{1.08} + \frac{26}{1.08^2} + \frac{26}{1.08^3} + \frac{26}{1.08^4} \right)$$

**BW 1/14/1991:** “Defenseless against cutbacks.’ Even Desert Shield won’t rescue the arms industry... No matter what happens in the Middle East, the recession at home, coupled with reduced tensions in Europe, translates into deeper cuts in the Defense Depts’s procurement budget, which Congress has slashed by \$19 billion for fiscal 1991, to \$66.7 billion. ‘We’ve been through major declines before,’ says [VP at GD], ‘The difference now is that we don’t see what would bring spending up again.’ It won’t be Desert Shield. In fact, the estimate \$30 billion annual cost of the Middle East buildup will mean less to spend on new weapons... From 1989 to the end of 1991, more than 50,000 jobs will have disappeared at military-aircraft plants. This may be just the start of a shrinkage that could last through the early 1990s.” p. 69.

**BW 1/21/1991:** Bush pushes allies for financial help for Desert Shield. If shooting starts, the cost could hit \$1 billion a day. Estimated cost through fiscal 1991 if no war is \$30 billion. P. 34.

**BW 1/28/1991:** “The little things that are in short supply.’ The Pentagon has plenty of tanks, but fatigue, boots, and field rations are back-ordered.” P. 36.

**BW 2/18/1991:** “Lessons from the Front: The war against Iraq will change the way America arms itself.” P. 30. Mostly strategic differences, not necessarily more or less money.

**August 1991: Coup in Soviet Union. Yeltsin came out as hero, Baltic republics seceded.**

**BW 10/14/1991:** “The Brawl over Peace.’ President Bush’s decision to slash the U.S. nuclear arsenal is rewriting the nation’s military and diplomatic strategies. And if Moscow matches Washington’s bold move, the final curtain will come down on the cold war... ‘Bush has made it politically acceptable to say that the defense budget should be cut substantially’... ‘For weapons makers, peace is hell.’ Bush speech highlights the new reality.” P. 42.

**December 8, 1991: Soviet Union dissolved.**

**Defense News Shock: There aren’t a lot of numbers given, so I assume that it undoes the positive shock of the Gulf War.**

$$1991q4: PDV = - \$ 112.1 \text{ billion}$$

Fiscal year	1/1992	1/1993	1/1994	1/1995	Actual
1992	307.3	298.4			298.4
1993	291.0	290.6	292.4		292.4
1994	283.0	276.9	280.6	282.2	282.2
1995	282.9	270.9	271.1	272.1	273.6
1996		264.7		262.2	265.7
1997		246.9		257.5	270.5
1998		252.5		255.1	268.5
1999				260.2	274.9
2000				268.3	294.5

**I couldn't find any significant developments between 1992 and 1996.**

**BW 12/1/1997:** “The showdown with Saddam.” P. 47. No talk of change in military spending.

**BW 6/22/1998:** “Hawks on the hill are circling the surplus.” Several articles discussed how some of the budget surplus might be spent on the military. P. 53. However, this is not an exogenous shock, so it does not qualify.

**BW 1/11/1999:** “‘Battle Stations! The coming combat over defense spending.’ After years of dining on Hamburger Helper, the Pentagon is about to rediscover red meat. Concerns about the military are rising, spurred by reports of aging weapons and underpaid, poorly trained troops. With U.S. forces set for a long and expensive mission to Iraq, Republican hawks and White house budgeters agree that it’s time to boost defense outlays. The likely result: the first big Pentagon spending hike in a decade... Joints Chiefs of Staff have taken the unusual step of publicly lobbying Congress for an increase. But Clinton’s opening bid will be on the low side. In the February budget, he’s expected to propose about a \$10 billion increase over the \$262 billion projected for fiscal 2000 military spending... Trent Lott wants to see Clinton’s defense bet and double it to \$20 billion. Democrats want to protect themselves against charges they undermine America’s security for upcoming elections... Lobbyists predict that the Prez will cut an 11<sup>th</sup> hour deal for a \$15 billion defense boost.” P. 55.

**Defense News Shock: Reports of depreciation of military capital stock lead to projected rises in spending.**

**1999q1: PDV = \$ 15 billion**

**BW 6/4/2001:** “The betting is that, in the short term, the biggest change can be summed up in two sweet words for defense industry executives and investors – more money... Bush may ask for an increase of up to \$40 billion in the proposed \$325 billion defense budget for 2002.” P. 51.

**BW 8/6/2001:** “Rumsfeld got only half of the extra \$10 billion he had sought for 2001. His request for \$55 billion more in 2002 was slashed to \$33 billion, and it’s far from certain he’ll get that. Conservatives think his \$329 billion budget request for 2002 is insufficient.” P. 37.

### **September 11, 2001 Terrorists strike the World Trade Center and Pentagon.**

**NYT 9/22/01.** “The budget numbers tell the story. Three days after the attack, Congress overwhelmingly approved \$40 billion in emergency funds, with \$10 billion to \$15 billion for the armed services. In the next few weeks, Congress is also expected to approve, with little dissent, a \$33 billion increase in the Pentagon budget, raising it to \$329 billion for the fiscal year beginning Oct. 1.”

“And before final votes on the 2002 spending plan are even cast, the Pentagon is expected to ask for an additional \$15 billion to \$25 billion. There is bipartisan support for that, too.” (p. C1, C4) (Note: the military part adds up to about \$70 billion.)

### **Defense News Shock: Terrorist attacks.**

**2001q3: PDV = \$97.1 billion = 40 + 33 + 25/1.034**

**BW 10/1/2001** “Suddenly, Washington’s Wallet is Open.’ Spending restraints go out the window... Under these circumstances, it’s inevitable that the government will take a larger role in the economy. Pentagon may get \$70 billion this year and next over last year’s budget, with another 17.5 billion going to aid airlines and \$20 billion for recovery efforts in NYC and Virginia... During campaign, Bush had said he wanted to boost military spending by \$198 billion over 10 years, by \$18.4 billion in fiscal 2002 alone, an increase Democrats will now find hard to oppose... Prior to suicide missions, Congress was aiming to hold defense spending to a modest 5% increase next year... Average gains for defense contractors ranged from 15% to 20% on the first day of trading and remained high in the following days.” Boeing fell, though, because of commercial airline industry problems. “Most aggressive analysts conjecture that the 2001 defense budget of \$302 billion will balloon 30% or more by 2003... When market reopened for trading on Sept. 17, the defense sector defied the overall plunge.” [online] (Note: BW 10/1/2001 was written in Sept.)

**NYT 11/12/2001:** “The U.S. expects to spend \$1 billion a month on war in Afghanistan. The Pentagon has told Congress that it will need \$3.8 billion to pay for the first three months of the war in Afghanistan.” P. 5.

**NYT 11/22/2001:** “Ridge to request billions for homeland security after anthrax attacks.”

**NYT 11/24/2001:** Democrats say now is the time to raise security spending. One wants \$7 billion right now, another wants \$15 billion.

**NYT 11/29/2001:** Bush makes Democrats back down with veto threat.

**BW 12/24/2001:** “Despite an impressive victory in Afghanistan, Bush is still pushing for a major overhaul... The supposedly tattered U.S. military took a scant two months to help crush Afghanistan’s Taliban regime.”

**NYT 1/7/2002:** “The Pentagon is pushing for a substantial increase, in the range of \$20 billion or more for its 2003 budget, confident that the war on terrorism has strengthened supports.” P. 1.

**NYT 1/24/2002:** “Bush’s request for more military spending was larger than even some Pentagon officials expected.” P. 1.

**NYT 1/30/2002:** In State of the Union Address, Bush proposes to double spending for domestic security to \$38 billion.

**NYT 2/2/2002:** Bush calls for increase in Pentagon annual budget by \$120 billion over next 5 years to \$451 billion in 2007. In FY 2003, Pentagon spending would rise to \$379 billion; with nuclear stockpiling increase, total is \$396 billion. Bush seeking \$48 billion more for military next year. “Those Democrats and their aides contend that with Mr. Bush's approval rating at above 80 percent, and with public support for the war running high, opposing military spending would be a political blunder.

“The president will get largely what he asks for in this area,” said Senator Kent Conrad, a Democrat from North Dakota who is chairman of the Senate Budget Committee. “We're at war, and when the president asks for additional resources for national defense, he generally gets it.”

Representative Ike Skelton, a Missouri Democrat who is the ranking minority member on the House Armed Services Committee, said the Pentagon budget ‘will pass at the size the president has asked for,’ though he said Congress might try to shift money around within the president's proposal.” P. 1.

**NYT 2/5/2002:** Bush will increase funds for domestic security by \$18 billion

**NYT 2/13/2002:** “Democrats joined Republicans on the House Budget Committee today in expressing strong support for increasing military spending. But both sides raised questions about the long-term costs of some weapons systems in President Bush's Pentagon budget. Congress seems highly unlikely to make significant cuts to the spending plan, which calls for an increase of \$48 billion, to \$379 billion for 2003, the largest increase in Pentagon spending in 20 years. The request includes a \$10 billion contingency fund that would be used to fight wars.” P. 28.

**NYT 3/10/2002:** “Before Sept. 11, the military industry was in the dumps. The Pentagon's procurement budget was tight, military stocks were plummeting, and Defense Secretary Donald H. Rumsfeld was considering deep cuts. What a difference war makes. Congress authorized \$17.5 billion for emergency war costs, providing an immediate

boost to companies like Boeing, which makes precision-guided munitions, and General Atomics Aeronautical Systems, which produces the Predator, the unpiloted surveillance plane. More important for the industry, President Bush has proposed increasing the military budget by \$48 billion next year and \$120 billion over five years, and Congress seems prepared to go along.” P. 4.

**NYT 3/21/2002:** “House passes \$2.1 trillion budget plan that would grant Pres Bush all funds he has sought for campaign against terrorism but results in deficit next year despite cutting or freezing many other programs...” p. 26.

Military spending

Fiscal year	4/2001	2/2002	2/2003	Actual
2001	299.1	308.5		304.9
2002	319.2	348.0	349	348.6
2003	322.1	379.0	376	404.9
2004	333.1	393.8	390	455.9
2005	347.2	413.5	410	495.3
2006	354.0	428.5	423	521.8
2007		442.5	436	571.9
2008			460	

**NYT 3/22/2002:** “The Bush administration asked Congress today for \$27 billion in emergency funds to strengthen domestic security, rebuild New York and wage the war on terrorism, including plans to expand that conflict beyond Afghanistan. More than half the money, \$14 billion, would go to the Pentagon, mostly to pay for military operations in Afghanistan, where the United States has stationed more than 4,000 troops and continues to fly scores of combat air patrols daily. The request indicates the White House does not expect war costs to taper off from their current rate of more than \$2 billion a month.

The size of the request generated grumbling among Democrats on Capitol Hill who said it would increase the deficit and take money from domestic programs. But it is likely to draw broad support from both parties in Congress.

The \$14 billion request for the Pentagon, intended to last through the end of the fiscal year on Sept. 30, comes on top of \$17.5 billion allocated to the military late last year for emergency war costs. Between Sept. 11 and Jan. 30, the Pentagon estimates it spent \$11.8 billion for waging war in Afghanistan and flying air patrols over American cities.” P. 20.

**Defense News Shock: I use numbers of FY2003 budget (Feb. 2002) for defense minus numbers for FY2002 budget (April 2001) for defense. Add in domestic security of \$18 billion. Subtract \$70 billion already counted in 2001q3 shock.**

**2002q1 PDV = \$296.3 billion**

$$\begin{aligned}
& -70 + 18 + (308.5 - 299.1) + (348 - 319.2) \\
= & \\
& + \frac{379 - 322}{1.03} + \frac{393.8 - 333}{1.03^2} + \frac{413.5 - 347}{1.03^3} + \frac{428.5 - 354}{1.03^4} + \frac{442.5 - 360.9}{1.03^5}
\end{aligned}$$

**NYT 6/28/ 2002:** “After resolving a dispute over investment in the missile defense system, the Democrat-led Senate voted 97 to 2 to adopt a \$393 billion Pentagon spending outline for the year beginning Oct. 1. At almost the same time, the House passed, 413 to 18, its \$355 billion military appropriations bill, the first of 13 spending measures to advance in Congress this year.”

**NYT 7/13/2002:** “Office of Management and Budget has told Congressional leaders that \$30.4-billion emergency spending bill needs to be cut by about \$1.6 billion to avoid veto.

Three senior Republican lawmakers bitterly criticized the White House today for refusing to spend as much money on the military and domestic defense as Congress wants, saying the Bush administration was endangering national security by adhering to a rigid bottom line.

The angry comments, including those of Representative C. W. Bill Young of Florida, chairman of the House Appropriations Committee, were unusual for conservative Republican leaders, and reflected their frustration at what they characterized as continuing mixed signals from the administration on military and antiterrorism spending.

For weeks, administration officials have been urging Congress to pass an emergency spending bill to keep the military running and pay for new domestic security programs. Just today, the comptroller of the Defense Department said the uniformed services were only a few days away from running out of money for paychecks and maintenance, and pleaded for final Congressional agreement.” P. 9.

**NYT July 21, 2002:** Turkey thinks US invasion of Iraq is inevitable.

**NYT July 25, 2002:** We might need to occupy Iraq for a decade or more.

**NYT 7/30/2002:** “Government officials, diplomats and economists say American military attack against Iraq could profoundly affect American economy since US would have to pay most of cost and bear brunt of any oil-price shock or other market disruptions; say government could well find itself spending heavily on military even as economy recovers falteringly from 2001 recession; senior administration officials say Pres Bush and top advisers have not yet weighed cost of war since they have yet to decide what kind of military operation may be necessary; experts say whatever choice is made, costs are likely to be significant and may ultimately influence size, scale and tactics of any military operation.

The House Budget Committee's Democratic staff said that in 2002 dollars, the cost of the (first gulf) war was \$79.9 billion, providing a very rough benchmark for what a conflict of similar dimensions might cost today.” P. 1.

**NYT Aug 2, 2002:** “The Senate easily passed a \$355.4 billion military spending measure today, showing strong support for the higher budget that President Bush sought for his buildup.

With little debate over military priorities, senators voted, 95 to 3, to adopt the measure that Senator Ted Stevens of Alaska, senior Republican on the Appropriations Committee, said 'fully meets the needs of our men and women who serve in the armed forces, today and for the future.'

Except for a \$10 billion wartime contingency fund, also sought by the White House, that is being negotiated by the White House and members of Congress from both parties, the record military appropriations bill is generally consistent with the administration's request and is \$34.4 billion higher than the level for this year. The White House, although expressing reservations about some aspects, supported the measure.” P. 18.  
(Note this is appropriations, not spending. I think Bush got exactly what he wanted on spending.)

**NYT Aug. 3, 2002:** Just like 1939: Everyone knows war is imminent but the guns are silent.

**NYT Aug. 27, 2002:** It might cost \$55 billion to attack and rebuild Iraq. (Fighting \$35 billion, rebuild \$20 billion)

**NYT 9/8/2002:** “Hours after President Bush agreed to make Congress a partner in deciding whether to invade Iraq, members from both parties began gearing up the cumbersome legislative process to reach a decision. At least six committees plan several weeks of hearings to determine whether an invasion is justified and would work, and the airwaves will most likely be full of supporters and opponents through October. Legislative leaders said they might delay a vote until after the Nov. 7 midterm elections.”

**NYT 9/6/2002:** “The federal government has spent nearly \$37 billion in response to the Sept. 11 attacks and is on track to spend more than 10 times that much to counter terrorism over the next decade, a study by the Congressional Budget Office has found. The study, the most comprehensive government effort to identify the direct costs of the stepped-up effort to deal with terrorism, did not seek to put a price tag on any war with Iraq. Its findings were in line with earlier and less thorough cost estimates. A new Congressional study of federal spending related to the Sept. 11 attacks finds that the government has spent \$37 billion so far, and may spend \$443 billion over the next 10 years. p. 15.

Breakdown of increased spending over 10 years

Fiscal years 2003 to 2012  
Nonmilitary: \$146 billion

Additional spending in legislation already passed: \$37 billion  
Military: \$260.3 billion  
TOTAL: \$443.4 billion

Figures do not add to total because of rounding.

(Source: Congressional Budget Office)”

**NYT 9/16/2002:** Lawrence Lindsey says Iraq could cost \$100 - \$200 billion. Administration distances itself from that estimate.

**CBO 9/30/2002:** Acknowledging high uncertainty, predicts (i) \$9-\$12 billion to deploy; (ii) \$6-\$9 billion per month to prosecute the war; (iii) \$5-\$7 billion to return US forces to home bases; (iv) \$1-\$4 billion per month for occupation.

**Defense News Shock: Non-Iraq spending. CBO says \$443 from FY 2003 – 2012. I had already counted \$340 extra (undiscounted) for 2003 – 2007. Thus, an extra  $(443-340)/10 = 10.3$  per year for 10 years is:**

$$\mathbf{2002q3} \quad \mathbf{PDV = \$93 \text{ billion} = } 10.3 \cdot \sum_{i=0}^9 \left( \frac{1}{1+i} \right)^i = 10.3 \cdot \frac{1.023}{.023} \left[ 1 - \left( \frac{1}{1.023} \right)^{10} \right]$$

Congressional debates in October 2002. October 11, 2002 Congress authorizes the use of force against Iraq.

**NYT 11/27/2002:** “The Defense Department is seeking an extra \$10 billion a year for the next five years, beyond the growth in its regular budget, to carry out its campaign against terrorism, senior Pentagon and other administration officials said today. Both Democrats and Republicans on Capitol Hill proved unwilling this year to create a \$10 billion fund for the Pentagon to spend with little Congressional oversight.

But with President Bush now in a more commanding position politically after the Republican victories in the midterm elections, administration officials seem increasingly confident not only of getting the money from Congress, but also of getting it on their terms: in a separate fund. The \$10 billion would be insufficient to pay for a major war against a country like Iraq.” P. 16.

**NYT 12/1/2002:** War looming in Iraq.

**NYT 12/31/2002:** Budget director Daniels says that cost of war in Iraq would be \$50 - \$60 billion. “Congressional democrats estimate \$93 billion, not including the cost of peacekeeping and rebuilding.”

**NYT 2/2/2003:** President’s new budget. “Defense spending, excluding the possible costs of a war, would climb about \$17 billion, or 4.4 percent, to \$399 billion. Domestic security programs, from the Federal Bureau of Investigation to the Customs Service, would increase to \$40 billion from \$34 billion.” P. 18.

**Feb. 3, 2003: Colin Powell’s presentation to the U.N.**

**NYT 2/4/2003:** “President’s budget includes no projection of cost of any war with Iraq, which administration officials say could be as low as \$50 billion and as high as \$200 billion...” p. 1.

Military spending

<b>Fiscal year</b>	<b>4/2001</b>	<b>2/2002</b>	<b>2/2003</b>	<b>Actual</b>
2001	299.1	308.5		304.9
2002	319.2	348.0	349	348.6
2003	322.1	379.0	376	404.9
2004	333.1	393.8	390	455.9
2005	347.2	413.5	410	495.3
2006	354.0	428.5	423	521.8
2007		442.5	436	571.9
2008			460	

**NYT 2/6/2003:** “Days after the administration asked Congress for the biggest military budget since the Reagan-era buildup, Defense Secretary Donald H. Rumsfeld told a Congressional panel today that the administration would soon request additional billions to fight terrorism and for any conflict with Iraq.

Mr. Rumsfeld told the House Armed Services Committee that sending forces for a possible war had already cost \$2.1 billion and that the Pentagon was spending \$1.5 billion a month to fight terrorism. Those costs are not included in the current budget nor in the \$380 billion request for 2004, and they would require a separate spending bill.” P. 23.

**NYT 2/28/2003:** “Deputy Defense Sec Paul D Wolfowitz disparages top Army general's assessment of number of troops needed to secure postwar Iraq, and dismisses newspaper articles claiming that Pentagon budget specialists have put cost of war and reconstruction at \$60 billion to \$95 billion in this fiscal year; says Gen Eric K Shinseki's estimate that several hundred thousand troops would be needed in postwar Iraq is 'wildly off the mark,' holding Pentagon has put figure closer to 100,000 troops; says as for cost of war, it is impossible to predict accurately a war's duration, its destruction and extent of rebuilding afterward; Wolfowitz's refusal to be pinned down on costs of war and peace in Iraq infuriates some Democratic members of House Budget Committee, who note that Defense Sec Donald H Rumsfeld and Mitchell E Daniels Jr, budget director, briefed Pres Bush on just such estimates on Feb 25...” p. 1.

**NYT 3/8/2003:** “Troop Movement Alone Could Cost \$25 Billion, Congressional Office Finds” “Congressional Budget Office estimates that initial cost of deploying troops and equipment to Persian Gulf to fight Iraq and returning them home would cost nearly \$25 billion; estimates that cost of first month of combat would be \$10 billion and each additional month would fall slightly, to about \$8 billion; says total cost of potential war would depend on how long hostilities last and how much is spent on reconstruction and other assistance (M)

The staff calculated that the initial cost of deploying troops and equipment in the region of the war would be about \$14 billion, that the cost of the first month of combat would be \$10 billion and that the cost would then fall slightly to about \$8 billion a month.

After the war, the budget office figured it would cost about \$9 billion to return the troops and equipment to home bases. American occupation of Iraq, the staff said, could vary from \$1 billion to \$4 billion a month.” P. 11.

### **March 19, 2003: U.S. invades Iraq**

**Defense News Shock: Once Colin Powell gives his speech and troops were built up, I think that most people thought that war was imminent. Although the actual invasion did not occur until the very end of the first quarter, I think the realization occurred earlier in the quarter. I use the average of the range given \$50 - \$200, which is \$125 (this number was also used by Davis and Topel). I assume it is expected to be spent over two years.**

**2003q1 PDV = \$123.8 billion =  $(125/2)(1 + 1/1.02)$**

**NYT 5/23/2003:** “House and Senate endorse Bush administration's continued military buildup, approving similar \$400.5 billion spending measures; bills go beyond administration requests in many areas, authorizing more than \$70 billion for weapons, raising military pay about 4.1 percent and providing more housing and other services; “ p. 21.

**NYT August 25, 2003:** Biden predicts that troops will be in Iraq for 4-5 more years at a cost of \$100 billion.

**NYT 9/9/2003:** “Pres Bush's \$87 billion request for postwar costs is heavily weighted to maintaining military operations, with \$65.5 billion directed to armed forces, \$15 billion toward rebuilding Iraq, \$5 billion toward building its security forces, and \$800 million to new spending for civilian programs in Afghanistan; combined with earlier \$79 billion approved by Congress to conduct war and pay initial postwar expenses, it would bring cost to United States of deposing Saddam Hussein and stabilizing Iraq and Afghanistan this year and next to \$166 billion; Bush administration officials say their main financial goal is to squeeze donations from other countries to help pay for physical reconstruction of Iraq; total cost of reconstruction has been put at \$50 billion to \$75 billion; photo; chart (M)” p. 12.

**NYT 9/10/2003:** “Analysis of Pres Bush's bid for \$87 billion for next year for effort to stabilize Iraq and begin reconstruction; notes he has set off fiscal and political aftershocks with admission that earlier expectation of relatively low costs was based on erroneous assumptions that Pentagon would be able to cut military presence quickly and that Iraq was reasonably well developed economically; chronology of administration's statements on cost of war” p. 10.

**Defense News Shock: The \$166 billion is \$41 billion above the \$125 I included in the 2003q1 shock.**

**2003q3 PDV = \$41 billion**

**NYT 11/1/2003:** “Congressional Unit Analyzes Military Costs in Iraq. A new analysis by the Congressional Budget Office suggests that the military costs for the occupation of Iraq could range from \$85 billion over four years to \$200 billion over 10 years, even if the Pentagon sharply reduces the forces there... With about 130,000 troops now in Iraq, the Pentagon says the occupation has been costing about \$4 billion a month. The Senate is close to approving about \$51 billion for military operations in Iraq next year, a figure included in all of the plans worked out by the budget office.” P. 6.

**CBO:** <http://www.cbo.gov/ftpdocs/46xx/doc4683/10-28-Spratt.pdf>  
10/28/2003

Dear Congressman:

In response to your request of October 9, 2003, the Congressional Budget Office (CBO) has estimated the costs of four illustrative scenarios for the occupation of Iraq. The scenarios are based on the specifications in your request, as well as CBO’s current understanding of planned force-rotation schedules. For the scenarios you outlined, CBO estimates the cost of occupying Iraq could range from \$85 billion to \$200 billion over the 2004-2013 period, depending on the size and length of the occupation. All estimates assume the \$52 billion requested by the Administration for the occupation of Iraq in fiscal year 2004 will be provided without significant changes, as per the instructions in your request. The estimates exclude costs associated with reconstruction or classified intelligence activities, since we do not possess enough data to appropriately quantify these costs. As requested by your staff, the estimates also do not include costs associated with Operation Enduring Freedom, Operation Noble Eagle, and other activities associated with the war on terrorism. Details regarding CBO’s estimates are discussed below.

**Defense News Shock: I take average of \$85 billion over 4 years and \$200 billion over 10 years. I subtract \$51 billion already estimated for following year.**

$$\$80.1 = (85/4) \cdot \frac{1}{.024} \left[ 1 - \left( \frac{1}{1.024} \right)^4 \right]$$

$$\$175.9 = (200/10) \cdot \frac{1}{.024} \left[ 1 - \left( \frac{1}{1.024} \right)^{10} \right]$$

**Average is \$128.**

**2003q4 PDV = \$78.2 billion = \$128 - \$51/1.024**

### Iraq War Spending

FY	Actual Appropriations	Cumulative	
2003	53	53	
2004	75.9	128.9	
2005	85.5	214.4	
2006	101.7	316.1	
2007	133.6	449.7	
2008	153.5	603.2	

### Military spending from budget

Fiscal year	4/2001	2/2002	2/2003	2/2004	2/2005	Actual
2001	299.1	308.5				304.9
2002	319.2	348.0	349			348.6
2003	322.1	379.0	376	404.9		404.9
2004	333.1	393.8	390	453.7	455.9	455.9
2005	347.2	413.5	410	440.3	465.9	495.3
2006	354.0	428.5	423	418.8	447.4	521.8
2007		442.5	436	422.3		571.9
2008			460	434.5		
2009				444.3		

**NYT 2/13/2004:** “Top Pentagon officials are warned by senior House Republicans and Democrats that military's proposed \$401.7 billion budget for next year faces tough fight on Capitol Hill; Democrats complain that likely costs of future operations in Iraq and Afghanistan are not being addressed in proposed budget; Bush administration says it will make supplementary request of up to \$50 billion for that, but not until January, after elections (M)” p. 14.

**NYT 5/6/2004:** “Bush administration, which once said it had enough money for military's role in Iraq through 2004, asks Republican leaders of Congress to add \$25 billion for military beginning Oct 1; lawmakers say they are not surprised and expect to comply with request, which would be added to more than \$400 billion already sought for military uses worldwide (M)” p. 22.

**The Chicago Tribune, June 1, 2004,** “As Iraq War Costs Skyrocket, Some Question. White House economic adviser Lawrence Lindsey caused a furor two years ago when he suggested a **war** in **Iraq** could **cost** as much as \$200 billion, a figure so high it helped prompt his ouster. But with the **cost** of the operation now hitting \$119 billion and slated to reach at least \$170 billion by the end of 2005, a growing number of experts believe Lindsey's estimate may actually have been low. As the **war**'s costs creep toward that \$200 billion figure, Congress and the public are showing a growing unease. The Bush

team originally predicted the **war** would **cost** closer to \$60 billion, and the **cost** could emerge as an issue in ... “

CBO study: 6/25/2004.

3 scenarios for additional cost of Iraq, 2005-2014.

1: \$266 billion      2: \$392 billion      3: \$179 billion

**NYT 6/28/2004:** “The transfer of governmental authority to the Iraqis this week will inevitably lower the profile of the costs of war and reconstruction. But the commitment of the United States remains substantial. American taxpayers have already spent over \$100 billion in support of military operations in Iraq, and Congress is likely to approve \$25 billion more this summer. In addition, more than \$21 billion is pledged for postwar reconstruction.

This chart shows the expenses already incurred and the potential sources of funds to rebuild and stabilize Iraq. In the end, President Bush's former senior economic adviser, Lawrence B. Lindsey, was right when he said in September 2002 that the Iraq war could cost \$100 billion to \$200 billion.”

**Defense News Shock: Add the \$25 billion because current costs are higher than expected.**

**2004q2                  PDV = \$25 billion**

**NYT 7/22/2004:** “War Costs Exceed Budget, Watchdog Panel Says  
Edmund L. Andrews. New York Times. (Late Edition (East Coast)). New York, N.Y.: Jul 22, 2004. pg. A.10

**Abstract (Summary)**

“Military operations in Iraq and Afghanistan are running \$12.3 billion over budget this year, and Pentagon officials are trying to make up for the shortfall by transferring money from other accounts and delaying refurbishment of worn-out equipment in Iraq, the General Accountability Office said Wednesday.

Administration officials have acknowledged that costs in Iraq are running higher than the \$65 billion that Congress approved for military operations in Iraq and Afghanistan. At the administration's urging, Congress is expected to pass an appropriations bill this week that contains \$25 billion in funds for Iraq that can be used immediately.”

**After the Voting: What May Lie Ahead for Business in America**

=====

New York Times, The (NY)-November 4, 2004

Author: LESLIE WAYNE

“Investor Euphoria Could Be Short-Lived. Shares of military companies rose on news of the Bush victory yesterday, but the euphoria could be short-lived. While President Bush's re-election and the return of a Republican majority in Congress assure a robust approach to Pentagon spending, the growing budget deficit and the costs of the war in Iraq could begin to take their toll.

Those sentiments were echoed yesterday by James Albaugh, head of the defense business at the Boeing Company, the nation's second-largest military contractor after Lockheed Martin. At a Goldman Sachs investor conference in New York, Mr. Albaugh predicted a flattening in military spending as the government attempts to rein in the deficit and balance the need for more troops against Pentagon weapon modernization plans, Bloomberg News reported. The 2005 Pentagon budget includes \$25 billion for fighting in Iraq and Afghanistan.”

=====  
**Pentagon Said To Offer Cuts In the Billions**  
=====

New York Times, The (NY)-December 30, 2004

Author: ERIC SCHMITT

“Pentagon proposes \$60 billion in budget cuts over next six years in response to White House order to all federal agencies to cut spending requests for 2006 fiscal year budget; proposed Pentagon cuts would for first time since 9/11 attacks slow growth in Pentagon spending, which has risen 41 percent in that period, to about \$420 billion this year; military and Congressional officials say Pentagon is looking to trim up to \$10 billion in 2006 budget alone; budget-cutting is likely to foreshadow additional reductions of weapons designed in cold war and revamping of America's arsenal as Pentagon prepares for its quadrennial review of military weapons and equipment to address current and long-term security threats; photo (M)”

“Congress expects \$100 billion war request”

By Peronet Despeignes, USA TODAY

WASHINGTON —“ Congress expects the White House to request as much as \$100 billion this year for war and related costs in Iraq and Afghanistan, congressional officials say.

It would be the third and largest Iraq-related budget request from the White House yet, and it could push the war's costs over \$200 billion — far above initial White House estimates of \$50 billion-\$60 billion. So far, the Iraq war has cost about \$130 billion, according to the White House's Office of Management and Budget.”

=====  
**The Pentagon's New Math**  
=====

New York Times, The (NY)-January 11, 2005

Author: Lawrence J. Korb

however, there is less to it than meets the eye.

“First, the overall size of the Pentagon budget would not come down very much. A large amount of the money that is supposedly being cut is in fact only being transferred from the Air Force and Navy budgets to the Army's, which is scheduled to increase by \$5 billion a year. The overall military budget will continue to rise; from 2006 through 2011, the Pentagon will still spend more than \$2.5 trillion, not counting the costs of the war in Iraq, which now exceed \$200 billion.”

=====

Asia Times Online: Feb. 25, 2005: “According to a report on the cost of the war in Iraq released last week by the Democratic staff of the House Budget Committee, the war and ongoing insurgency could cost the United States between US\$461 billion and \$646 billion by 2015, depending on the scope and duration of operations.... The Congressional Budget Office estimates that the cost of military operations in Iraq and Afghanistan and the global "war on terrorism", after the newest supplement is exhausted, could total about \$350 billion over the next 10 years (excluding interest payments on the debt), assuming an eventual phase-down of US activities in Iraq and Afghanistan.”

**Defense News Shock: Add the \$100 billion from the request. It is also broadly consistent with increased PV of estimates. This brings estimated past and expected future costs to almost \$400 billion.**

**2005q1 PDV = \$100 billion**

**Jan. 2006: Davis et al revise estimates of total cost to \$410 - \$630 billion in 2003 \$.**

### **Projected Iraq War Costs Soar**

Total Spending Is Likely to More Than Double, Analysis Finds

By Jonathan Weisman  
Washington Post Staff Writer  
Thursday, April 27, 2006; A16

“The cost of the war in Iraq will reach \$320 billion after the expected passage next month of an emergency spending bill currently before the Senate, and that total is likely to more than double before the war ends, the Congressional Research Service estimated this week.

The analysis, distributed to some members of Congress on Tuesday night, provides the most official cost estimate yet of a war whose price tag will rise by nearly 17 percent this year. Just last week, independent defense analysts looking only at Defense Department costs put the total at least \$7 billion below the CRS figure.

Once the war spending bill is passed, military and diplomatic costs will have reached \$101.8 billion this fiscal year, up from \$87.3 billion in 2005, \$77.3 billion in 2004 and

\$51 billion in 2003, the year of the invasion, congressional analysts said. Even if a gradual troop withdrawal begins this year, war costs in Iraq and Afghanistan are likely to rise by an additional \$371 billion during the phaseout, the report said, citing a Congressional Budget Office study. When factoring in costs of the war in Afghanistan, the \$811 billion total for both wars would have far exceeded the inflation-adjusted \$549 billion cost of the Vietnam War.”

"The costs are exceeding even the worst-case scenarios," said Rep. John M. Spratt Jr. (S.C.), the ranking Democrat on the House Budget Committee.”

**Defense News Shock: Previous cumulative estimates for Iraq were almost \$400 billion. Total estimate for Iraq and Afghanistan is now \$811. According to Center for Defense Information, spending on Afghanistan through fiscal year 2006 was about \$90 billion (<http://www.infoplease.com/ipa/A0933935.html>) Thus, additional estimate is (811 – 400 – 90) = 321. Assume it is over 5 years.**

**2006q2**            **PDV = \$227.7 billion =  $(321/5) \cdot \frac{1}{.05} \left[ 1 - \left( \frac{1}{1.05} \right)^4 \right]$**

By [Steve Hargreaves](#), CNNMoney.com staff writer

October 24 2007: 4:41 PM EDT

NEW YORK (CNNMoney.com) – “The wars in Iraq, Afghanistan and anti terrorist efforts abroad could cost the country \$2.4 trillion over the next ten years, according to a report Wednesday.

The money, over 70 percent of which would go to support operations in Iraq, includes the estimated \$600 billion spent since 2001, Congressional Budget Office Director Peter Orszag said in testimony before the House Budget Committee. That estimate includes projected interest, since the government is borrowing most of the funds required.

The \$2.4 trillion would pay to keep 75,000 troops deployed overseas from 2013 to 2017. About 210,000 troops are currently deployed. It does not include the Pentagon's normal spending, which in 2007 is estimated to be about \$450 billion.

The estimated \$2.4 trillion works out to about \$21,500 per American household “

Without interest, the war efforts are projected to cost about \$1.7 trillion. Several lawmakers noted the wide gap.

CBO Oct. 24, 2007:

Cost of Iraq and Afghanistan 2001-2007: \$604 billion

Projected cost 2008-2017: range: \$570 - \$1055

**Defense News Shock: Take 1,700 – 811 = 889 for additional estimate of cost.**

**2007q4**      **PDV = \$739.3 billion** =  $(889/10) \cdot \frac{1}{.035} \left[ 1 - \left( \frac{1}{1.035} \right)^{10} \right]$

**NYT 2/4/2008:** Defense spending is projected to be highest since WWII. (Page A10).

(There is no news in this given the information from 2007q4.)

**Washington Post 10/13/2008:** Defense contractors expect defense spending to level out. Fear that financial crisis will lead to a cut in defense. Page D01.

(Note: I do not want to code this because it would be a response to the financial crisis, and hence endogenous, rather than a response to foreign political events.)

**Christian Science Monitor 12/22/2008:** “Will Obama’s War Strategy Produce a Peace Dividend?” A back-of-the-envelope calculation at the Center for American Progress suggests a total savings of \$370 billion through 2013 if operations in Iraq are scaled back. But if extra troops sent to Afghanistan, as Obama has promised, that would cost \$54 billion. So the net savings would be \$316 billion. (Money and Values, page 16).

**Defense News Shock: Obama, who is more dovish, is elected.**

**Date: 2008q4**      **PDV = - \$243.6 billion** =  $(316/5) \cdot \frac{1}{.015} \left[ 1 - \left( \frac{1}{1.015} \right)^4 \right]$

**NYT 2/22/2009 A1:** Cutting troops in Iraq would save \$90 billion, but increase in Afghanistan might offset savings.

**NYT 3/1/2009 WK1:** Obama’s announced troop withdrawal from Iraq probably won’t bring budget relief.

**MILITARY BUDGET REFLECTS A SHIFT IN U.S. STRATEGY: LOBBYING FIGHT IS ...**

Drew, Christopher; Bumiller, Elisabeth  
*New York Times* (1923-Current file); Apr 7, 2009;  
ProQuest Historical Newspapers: The New York Times (1851-2009)  
pg. A1

WASHINGTON — Defense Secretary Robert M. Gates announced a major reshaping of the Pentagon budget on Monday, with deep cuts in many traditional weapons systems but new billions of dollars for others, along with more troops and new technology to fight the insurgencies in Iraq and Afghanistan.

[Obama Seeks Quick Approval of More Money for Overseas Military Operations: \[Foreign Desk\]](#)

Hulse, Carl. *New York Times, Late Edition (East Coast)* [New York, N.Y] 10 Apr 2009: A.9.

### **Gates Takes His Case for Military Budget on the Road**

Bumiller, Elisabeth

*New York Times (1923-Current file)*; Apr 17, 2009;

ProQuest Historical Newspapers: The New York Times (1851-2009)  
pg. A18

to be longer than a single year — his expected tenure when Mr. Obama offered him the job — he has opened an offensive to overhaul Pentagon spending and the way the military does business. His proposals include cutting back on the Air Force's most advanced fighter jet, the F-22, but adding programs in other areas, so that the Pentagon budget is projected to grow by 4 percent in 2010. to \$534 billion.

### **HIGH COSTS WEIGH ON TROOP DEBATE FOR AFGHAN WAR: A HOT POLITICAL ...**

Drew, Christopher

*New York Times (1923-Current file)*; Nov 15, 2009;

ProQuest Historical Newspapers: The New York Times (1851-2009)

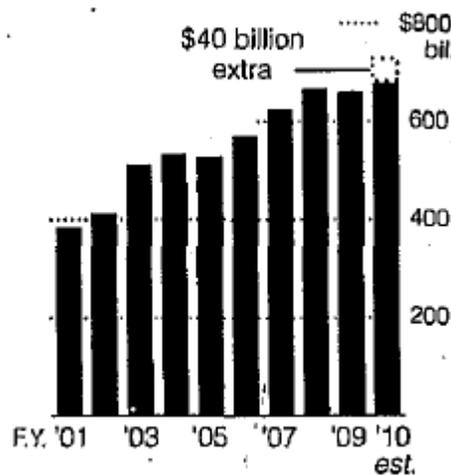
pg. 1

While President Obama's decision about sending more troops to Afghanistan is primarily a military one, it also has substantial budget implications that are adding pressure to limit the commitment, senior administration officials say.

The latest internal government estimates place the cost of adding 40,000 American troops and sharply expanding the Afghan security forces, as favored by Gen. Stanley A. McChrystal, the top American and allied commander in Afghanistan, at \$40 billion to \$54 billion a year, the officials said.

## The Cost of War

Sending more troops to Afghanistan would push the overall military budget well above the peak under the Bush administration. The cost — at \$40 billion, for an estimate that includes 40,000 American troops and expanding Afghan forces — would also erase the savings expected next year from reduced troop levels in Iraq.



The administration has projected that spending on Iraq would drop by \$25.8 billion in fiscal 2010, to \$60.8 billion, as most of the troops withdraw.

It also expected spending on the Afghanistan war to increase by \$18.5 billion in fiscal 2010, to \$65.4 billion, for a net savings on the two wars of \$7.3 billion, if no more troops were added.

**NYT 6/4/2010 A-13:** Current **budget** plans project growth of only 1 percent in the Pentagon **budget**, after inflation, over the next five years

**NYT 7/23/2010 A-1:** After nearly a decade of rapid increases in military **spending**, the Pentagon is facing intensifying political and economic pressures to restrain its **budget**, setting up the first serious debate since the terrorist attacks of 2001 about the size and cost of the armed services. Senior administration officials said they hoped Mr. Gates's effort would help quiet critics who asked why military **spending** had been exempted from the president's order for a 5 percent cut in the **budgets** of most domestic agencies.

At the moment, the administration projects that the Pentagon's base **budget** and the extra war **spending** will peak at \$708 billion in the coming fiscal year, though analysts say it is likely that the Pentagon will need at least \$30 billion more in supplemental war financing then.

**NYT 8/10/2010 A-1:** Pentagon Plans Steps to Reduce Budget and Jobs: Mr. Gates has ordered the armed services and the Pentagon's agencies to find \$100 billion in **spending** cuts and efficiencies over the next five years: \$7 billion for 2012, growing to \$37 billion annually by 2016.

(While the budget deficit is a big issue, the lack of significant new military threats is allowing them to cut. This is similar to Eisenhower's cuts after the Korean War.)

**Date: 2010q3**      **PDV = - \$97.8 billion =**  $(100/5) \cdot \frac{1}{.0075} \left[ 1 - \left( \frac{1}{1.0075} \right)^5 \right]$

**NYT 1/7/2011 A-1:** WASHINGTON -- **Defense** Secretary Robert M. Gates said Thursday that the nation's "extreme fiscal duress" now required him to call for cuts in the size of the Army and Marine Corps, reversing the significant growth in military **spending** that followed the terrorist attacks of Sept. 11, 2001.

**NYT 8/4/2011 A14:** WASHINGTON -- The Pentagon pushed back aggressively on Wednesday against what senior officials warned was the prospect of \$1 trillion in military **budget** cuts and thousands of layoffs, furloughs and reductions in military programs over the next decade.

Less than 24 hours after President Obama signed a debt-ceiling bill calling for trillions of dollars in reduced government **spending**, **Defense** Secretary Leon E. Panetta and top Pentagon officials said that large cuts to the Pentagon **budget** -- which has more than doubled since the attacks of Sept. 11, 2001 -- would imperil the nation's security.

In a letter to **Defense** Department personnel posted Wednesday morning on the Pentagon's Web site, Mr. Panetta warned that if a Congressional panel could not reach agreement on cuts to the nation's deficit, "it could trigger a round of dangerous across-the-board **defense** cuts that would do real damage to our security, our troops and their families, and our ability to protect the nation."

Wednesday's sound of alarm from the **Defense** Department was its opening salvo in what are certain to be many months of battles over military **spending** and how much the Pentagon should have to give up in a new era of austerity. No one in the building disputes that the huge military buildup since the Sept. 11 attacks is coming to an end, but the Pentagon is already drawing a line about how far it is willing to go.

On Wednesday, that line was \$400 billion in military cuts over the next decade -- and no more.

Although White House officials estimate that an immediate \$1 trillion in cuts called for in the debt-ceiling bill will take \$350 billion from the Pentagon over the next decade, the Pentagon official said that as he measured it, the cuts amounted to \$400 billion.

**NYT 8/14/2011 SR 10:** Military **spending** has soared by 35 percent in the past decade -- and that is not even counting the more than \$1 trillion spent on the Iraq and Afghan wars, which are budgeted separately. This year's \$537 billion basic Pentagon **budget** is \$140 billion higher, in inflation-adjusted terms, than in 2001.

Pumping up those **budgets** was easy; slimming them back down will be a lot harder. Multiyear weapons contracts for tens of billions of dollars have been signed, tens of thousands of additional troops have been recruited for long-term operations in Iraq and Afghanistan, and health care costs have escalated. Insufficient oversight of military contractors and the Pentagon's weakness for excessive bells and whistles have raised costs on almost every major weapons system.

Just finding the roughly \$400 billion that President Obama and Congress have agreed to shave off projected **spending** over 10 years will require a lengthy review of **budgets** and strategies, even though that would only bring basic annual **spending** down to about the same level as in 2009.

**Date: 2011q3**      **PDV = - \$389 billion =**  $(400/10) \cdot \frac{1}{.005} \left[ 1 - \left( \frac{1}{1.005} \right)^{10} \right]$

NYT 11/7/2011 A-1: "Panetta Weighs Pentagon Cuts Once Off Limits:

WASHINGTON -- Under orders to cut the Pentagon **budget** by more than \$450 billion over the next decade, **Defense** Secretary Leon E. Panetta is considering reductions in **spending** categories once thought sacrosanct, especially in medical and retirement.

**Extra \$50 billion over what was discussed in August.**

**Date: 2011q4**      **PDV = - \$48.6 billion =**  $(50/10) \cdot \frac{1}{.005} \left[ 1 - \left( \frac{1}{1.005} \right)^{10} \right]$

[THOM SHANKER and ELISABETH BUMILLER. \*\*New York Times\*\*, Late Edition \(East Coast\)](#) [New York, N.Y] 05 Jan 2012: A.17.

WASHINGTON -- **Defense** Secretary Leon E. Panetta has concluded that the Army has to shrink even below current targets, dropping to 490,000 soldiers over the next decade, but that the United States should not cut any of its 11 aircraft carriers, according to

The new military strategy is driven by at least \$450 billion in Pentagon **budget** cuts over the next decade. Another \$500 billion in cuts could be ordered if Congress follows through on plans for deeper reductions.

[\*\*New York Times\*\*, Late Edition \(East Coast\)](#) [New York, N.Y] 30 Jan 2012: A.22.

The \$259 billion in **budget** cuts over the next five years announced by the Pentagon may sound like a lot. But they are mainly a scaling back of previously projected **spending** -- the delights of the Washington **budget** games.

This year, Pentagon **spending** will total \$531 billion. In 2017, it will rise to \$567 billion. Factoring in inflation, that amounts to only a minuscule 1.6 percent real cut. (Both numbers exclude war **spending** -- \$115 billion this year.)

After a decade of unrestrained Pentagon **spending** increases, President Obama deserves credit for putting on the brakes. The cuts are a credible down payment on his pledge to reduce projected **defense spending** by \$487 billion in the next decade. They are not going to be enough. In the likely absence of a bipartisan **budget** pact, a further automatic across-the-board 10-year cut of nearly \$500 billion is to take effect starting next January.

[Bai, Matt. \*\*New York Times Magazine\*\*](#) (Apr 1, 2012): 22-29,36,44,46-47,3.

The truth here matters for more than its historical value. At the end of this year, no matter how the presidential election turns out, the two parties will face yet another Armageddon moment in the fight over debt and **spending**; this time, if they don't settle on a plan to rein in the nation's nearly \$16 trillion debt, then a series of onerous **budget** cuts - worth about \$1.2 trillion over 10 years, divided between **defense** and other programs - will automatically go into effect. If we understand what really went on last July, then we'll

have a better sense of how difficult it will be for the two parties to stave off the coming political calamity and why, too, the situation may not be quite as hopeless as it seems.

[Weisman, Jonathan](#). [New York Times](#), **Late Edition (East Coast)** [New York, N.Y] 04 June 2012: A.17.

On Jan. 2, national security is set to receive a heavy blow if Congress fails to intervene. That is when a 10-year, \$600 billion, across-the-board **spending** cut is to hit the Pentagon, equal to roughly 8 percent of its current **budget**.

[Steinhauer, Jennifer](#). [New York Times](#), **Late Edition (East Coast)** [New York, N.Y] 22 June 2012: A.16.

The White House -- along with some top Democrats -- has concluded that Republicans care so deeply about the roughly \$492 billion in planned Pentagon cuts that the military **budget** will become a bargaining chip that Democrats can use at the end of the year to pursue new revenues and leverage in the debate over extending the Bush tax cuts.

### ***Analysts Expect a Deal On Military Spending: [Business/Financial Desk]***

[Drew, Christopher](#) . [New York Times](#), **Late Edition (East Coast)** [New York, N.Y] 08 Nov 2012: B.6.

Whether President Obama or Mitt Romney won Tuesday, the top Pentagon contractors had already begun preparing for a new reality of shrinking resources for the military.

Boeing, for one, has slashed \$2.2 billion in costs, including 6,300 jobs, from its huge military business since 2010. It announced Wednesday that it planned to cut an additional \$1.6 billion by the end of 2015 by consolidating office space and divisions.

Boeing's actions underscored the biggest question of the day in the industry: How soon and how deep will bigger cuts come?

For more than a year, the contractors have been pressing President Obama and the House Republicans to reach a deal to forestall \$500 billion in additional military **spending** cuts set to start in early January.

With Mr. Obama's re-election, that issue will flare up over the next few weeks in the lame-duck Congress. Political leaders will search for ways to avert or delay the cuts while talks get under way again on a broader deficit-reduction package.

Mr. Captain said that the biggest military contractors -- including Lockheed Martin, Boeing, General Dynamics and Northrop Grumman -- all recognized that more cuts were inevitable and had been paring back, even though Mr. Romney had said he would sharply increase military **spending**.

### ***Whether 'Fiscal Cliff' or Debtocalypse, by Any Name, It Spells Austerity: [National Desk]***

[Lowrey, Annie](#). [New York Times](#), Late Edition (East Coast) [New York, N.Y.] 17 Nov 2012: A.16.

But the drier "fiscal cliff" has become the common nomenclature, popularized by no less an authority than Ben S. Bernanke, the chairman of the Federal Reserve. At the end of February, in testimony to Congress, Mr. Bernanke warned that under current law, "there's going to be a massive fiscal cliff of large **spending** cuts and tax increases" in 2013.

### ***Honey, I Shrank the Pentagon: [Op-Ed]***

[Keller, Bill](#). [New York Times](#), Late Edition (East Coast) [New York, N.Y.] 19 Nov 2012: A.21.

But the economic crisis has chipped away at **Defense's defenses**. Early this year, in conformity with a **budget** directive from Congress, Panetta proposed a **budget** that would cut \$487 billion -- about 8 percent -- from planned **defense spending** over 10 years. The fiscal cliff, known to **defense** wonks as "sequestration," would cut an additional \$492 billion.

### ***Pentagon Starts Planning For Potential Budget Cuts: [National Desk]***

[Shanker, Thom](#). [New York Times](#), Late Edition (East Coast) [New York, N.Y.] 08 Dec 2012: A.13.

#### **Abstract (summary)**

After months of refusing to plan for how the Pentagon **budget** could or should be trimmed further, senior **Defense** Department officials have begun examining in earnest how the military would respond to automatic **spending** reductions if a **budget** deal eludes President Obama and Congress past the end of the year.

### ***Under Pressure, House Approves Senate Tax Deal: [National Desk]***

[Steinhauer, Jennifer](#). [New York Times](#), Late Edition (East Coast) [New York, N.Y.] 02 Jan 2013: A.1.

WASHINGTON -- Ending a climactic fiscal showdown in the final hours of the 112th Congress, the House late Tuesday passed and sent to President Obama legislation to avert big income tax increases on most Americans and prevent large cuts in **spending** for the Pentagon and other government programs.

***Pentagon Acts to Limit Spending In Case Cutbacks Begin in March:  
[National Desk]***

[Shanker, Thom.](#) [New York Times](#), Late Edition (East Coast) [New York, N.Y] 11 Jan 2013: A.15.

[Turn on hit highlighting for speaking browsers](#)

[Hide highlighting](#)

**Abstract (summary)**

[Translate Abstract](#)

Fearing that Congress and the president may not reach a deal on spending and the deficit, the Pentagon's leadership is freezing civilian hiring, limiting maintenance work and delaying approval of some contracts.

***Hard Budget Realities As Agencies Prepare To Detail Reductions:  
[National Desk]***

[Weisman, Jonathan;](#) [Lowrey, Annie.](#) [New York Times](#), Late Edition (East Coast) [New York, N.Y] 24 Feb 2013: A.18.

If the stalemate in Washington continues, furloughs and layoffs will probably begin in April, starting largely in the 800,000-member civilian work force of the Defense Department and then rippling across the country, from meat inspectors in Iowa to teachers in rural New Mexico.

***Defense and the Sequester: [Editorial]***

[New York Times](#), Late Edition (East Coast) [New York, N.Y] 25 Feb 2013: A.16.

[Turn on hit highlighting for speaking browsers](#)

[Hide highlighting](#)

The arbitrary budget cuts known as the sequester will exact a toll on not only domestic programs but military spending as well. Hence the howls in Washington from the Pentagon chieftains and their ardent Congressional supporters. But the truth is that the military budget not only can be cut, but should be cut, though not with this kind of political machete and not in the way the service chiefs say they plan to wield it.

If and when the sequester comes into play on March 1, it will force cuts totaling \$85 billion in discretionary government spending over the next seven months. This includes \$43 billion from defense programs, or 8 percent. Over the next 10 years, defense cuts are supposed to total \$500 billion.

***Parties Focus On the Positive As Cuts Near: [National Desk]***

[Weisman, Jonathan. New York Times, Late Edition \(East Coast\)](#) [New York, N.Y] 28 Feb 2013: A.1.

WASHINGTON -- With time running short and little real effort under way to avert automatic **budget** cuts that take effect Friday, substantial and growing wings of both parties are learning to live with -- if not love -- the so-called sequester.

***Washington Fails To Reach A Deal To Head Off Cuts: [National Desk]***

[Shear, Michael D; Weisman, Jonathan. New York Times, Late Edition \(East Coast\)](#) [New York, N.Y] 02 Mar 2013: A.1.

WASHINGTON -- President Obama and Congressional leaders failed on Friday to stop deep, automatic cuts in federal **spending** that will immediately shrink the size and ambition of government, even as they vowed an end to the rolling fiscal battles that have repeatedly threatened government shutdowns and economic crisis over two years.

According to the articles, the sequester cut defense spending an additional \$500 billion over 10 years.

**Date: 2013q1**                      **PDV = - \$486.5 billion = -  $\left(\frac{500}{10}\right)\left(\frac{1}{.005}\right)\left[1 - \left(\frac{1}{1.005}\right)^{10}\right]$**

September – lots of articles on impending government shutdown if not budget agreement is reached.

***Cuts Have Hagel Weighing Realigned Military Budget: [National Desk]***

[Shanker, Thom. New York Times, Late Edition \(East Coast\)](#) [New York, N.Y] 07 Nov 2013: A.24.

WASHINGTON -- The Pentagon has traditionally managed rivalries among services by giving each more or less equal shares of the base military **budget**.

Today, under pressure from the threat of nearly \$1 trillion in forced **spending** reductions, **Defense** Secretary Chuck Hagel says the days of automatic, equitable allotment to the Army, Air Force and Navy may be over.

Mr. Hagel inherited **budget** cuts of \$487 billion over a decade, and is now faced with the threat of sequestration cuts of an additional \$500 billion over 10 years.

For 2014 and 2015, I found no evidence of significant changes in defense spending.