

GOLD, GREENBACKS, AND BONDS

Lesson by

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Subject

Economic and Financial History of America and the United States

Academic Level

Secondary/Collegiate

Bloom Level

Knowledge

Comprehension

Application

Evaluation

Synthesis

Unit

The Art of Political Finance, Volume I, Part I—Chapter 12

Lesson Number within Unit: 10**Lesson Description**

Gold, Greenbacks, and Bonds will introduce the concept and practice of arbitrage and how it was used during the Civil War to unknown levels within the investor and creditor class.

Time Required

One 60-minute class

Objectives

Students will be able to:

1. Continue to develop an understanding of money
2. Understand the concept of intrinsic value
3. Understand the concept and practice of arbitrage and how it was used during the Civil War
4. Briefly explain how bonds helped finance the Civil War

GOLD, GREENBACKS, AND BONDS

Concepts & Terms

Arbitrage

The simultaneous purchase and sale of an asset in order to profit from a difference in the price. It's a trade that profits by exploiting price differences of the same or similar financial instruments, on different markets or in different forms.

Bond

In finance, a bond is an instrument of indebtedness of the bond issuer to the holders. It is a debt security, under which the issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay them interest (the coupon) and/or to repay the principle at a later date, termed the maturity date; there are several types of bonds, e.g., Government Bonds, Municipal Bonds, Corporate Bonds.

Commodity Money

Money based on a good, often a precious metal such as gold or silver, which has uses other than as a medium of exchange.

Currency

Circulation as a medium of exchange. Money that is in use.

Fiat Currency

Currency which derives its value from government regulation or law. The term derives from the Latin fiat ("let it be done", "it shall be").

Debt Repudiation

The refusal, usually of public authorities, to acknowledge or pay a debt.

Interest

A fee for borrowing money generally in the form of a percentage of principle (amount borrowed).

Intrinsic Value

Intrinsic value refers to the value of a commodity, company, stock, currency or product determined through fundamental analysis without reference to its market value. It is also frequently called fundamental value and can take in both tangible and intangible factors.

Specie

Money in the form of coin. In the colonial period and in the early years of the United States, specie often referred to gold or silver coins.

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Materials/Equipment

Computer with internet connection, Preferably a Large Screen Monitor, Excel, or other spreadsheet software

Visuals



THE NEW NATIONAL LOAN.

United States 6 per cent Bonds,

"CALLED FIVE-TWENTIES."

AT PAR.

The interest on these Bonds is at the rate of Six per cent, per Annum, and is payable 1st of May and November, in Gold. They are called "Five Twenties," because redeemable at the option of the Government after five or within twenty years.


The coupon Bonds are issued in denominations of \$50, \$100, \$500, \$1000, and the Registered Bonds in denominations of \$50, \$100, \$500, \$1000, \$5000 and \$10,000.


FISK & HATCH,


**BANKERS, AND DEALERS IN
All Classes of Government Securities
AND**

U. S. 5-20 LOAN AGENTS.

38 WALL ST., NEW-YORK.

 Deposits and Bankers' accounts received on favorable terms.

 STOCK, BONDS and GOLD, Bought and Sold strictly on Commission for Cash.

 The 5-20's can be obtained of S. H. VER PLANCK, at the Bank of Geneva, Agent for Messrs. Fisk & Hatch.

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Procedures

1. Explain how gold and silver had an intrinsic value and review the definitions of demand notes, greenbacks, legal tender, and currency.
2. Refer to Table 10 – Page 185 and highlight the depreciation of the greenbacks compared to gold and demand notes. *Greenbacks were not on par with gold.*

Relative Depreciation of the Greenback to Specie					
Date End of Month	Greenbacks Required to buy \$100 of		Currency Value to \$100 Gold		Significant Events
1862 - 1863	Gold	Demand Notes	Greenbacks	Demand Notes	
April	101 9/16	100	98.40	98.40	1st Legal Tender Act (February)
May	103 5/8	100	96.60	97.20	
June	109 1/8	104 1/2	91.70	95.80	
July	117 1/4	106 1/2	85.30	90.80	2nd Legal Tender Act
August	115 11/16	108 1/4	86.40	93.60	
September	120 3/8	116 1/2	83.10	96.80	
October	130 5/8	127	76.60	97.20	
November	129 1/8	124 1/2	77.50	96.40	
December	132 1/4	129	75.60	97.50	
January	159 7/8	153	62.50	95.70	3rd Legal Tender Act
February	172	171	58.10	99.40	
March	158 1/4	153	63.20	96.70	4th Legal Tender Act

3. Emphasize fluctuations based on events.

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4. Refer to Table 11 on page 187 to show rise and fall of values in the greenback in relation to gold, shown in percentages. Again, point out values with significant events.

Value of the Greenback to Specie				
Date	Average Gold Value of \$1 in Greenbacks	Change	Percent of Change in Gold Value of the Currency	Significant Events
February, 1862	\$0.966	-0.034	Fell 3.4% in 2 Months	1st Legal Tender Act (February)
April, 1862	\$0.985	0.019	Rose 1.97% in 2 Months	
February, 1863	\$0.623	-0.362	Fell 36.75% in 10 Months	3rd Legal Tender Act (January)
August, 1863	\$0.795	0.172	Rose 27.61% in 6 Months	
July, 1864	\$0.387	-0.408	Fell 51.32% in 11 Months	2nd Nat'l Banking Act (June)
May, 1865	\$0.737	0.350	Rose 90.44% in 10 Months	Lee Surrenders (April)
December, 1865	\$0.684	-0.053	Fell 7.19% in 7 Months	

5. Refer to Table 13 – page 201 and ask students if they see any issues with paying the interest on the bonds in gold. Emphasize the fact that the bonds could have been purchased with greenbacks as well as gold. *The differences in value between gold and greenbacks caused a great amount of discord after the Civil War when citizens and officials complained that the gain was unfair. Since there was only the stipulation that the interest be paid in gold but no mention of the principle, the argument was that the principle be paid back in the same currency that was authorized to purchase the bonds in the first place, i.e., greenbacks.*

Civil War Bonds Issued by the Union - THE PUBLIC DEBT; Official Statement of the Amount, Nov 30, 1865...NY Times						
Date	Amount	Type	Interest Rate	Term (Years)	Interest Payable in Coin	Total Payable
February 8, 1861	\$18,415,000		6.00%	20	\$1,104,900	\$19,519,900
July 17 & August 5, 1861	\$50,000,000		6.00%	20	\$3,000,000	\$53,000,000
July 17 & August 5, 1861	\$139,252,450	7-30s	7.30%	3/20	\$8,355,147	\$147,607,597
February 25, 1862	\$514,780,500	5-20s	6.00%	5/20	\$30,886,830	\$545,667,330
June 30, 1864	\$100,000,000	5-20s	6.00%	5/20	\$6,000,000	\$106,000,000
March 3, 1863	\$75,000,000		6.00%	18	\$4,500,000	\$79,500,000
March 3, 1864	\$172,770,100	10-40s Conversions	5.00%	40	\$8,638,505	\$181,408,605
March 3, 1865	\$50,590,300	5-20s Conversions	6.00%	20	\$3,035,418	\$53,625,718
					\$65,520,800	\$1,186,329,150

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Exercises

Referring to the 3 tables and concentrating specifically on the 5-20 bonds, show how arbitrage was used to purchase bonds with greenbacks using an initial investment of gold.

For example, using Table 11, in February of 1863 the greenbacks were \$.62 compared to a gold dollar on the market but on par with bonds. In other words, if you had \$10 in gold you could buy or convert them into approximately \$16 in greenbacks. In turn you could buy \$16 worth of 5-20 bonds and be paid back in gold.

Assumptions	Transaction Date	February 1, 1863
	Ratio: Gold to Gold	1:1
	Ratio: Greenbacks to Gold	.62:1
	Ratio: Greenbacks to Bonds	1:1
	\$1000 in Gold	
Steps		
1	On the open market, exchange gold for greenbacks	
	\$1,613	
2	Use the Legal Tender Greenbacks to Purchase War Bonds	
	\$1,613	

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Develop a calculator in Excel to run scenarios of investment amounts.

Gold/Greenback/War Bond Arbitrage		6% Interest on War Bonds - 20 Years	Cumulative Balance
Gold Investment	\$1,000.00		
Greenback Value of Gold Dollar in 1863	\$0.62		
Greenbacks Exchanged for Gold	\$1,605.14		
War Bonds Purchased with Greenbacks	\$1,605.14		
Gain from Arbitrage	\$605.14		
First Year ROI 1864		\$96.31	\$1,701.44
1865		\$96.31	\$1,797.75
1866		\$96.31	\$1,894.06
1867		\$96.31	\$1,990.37
1868		\$96.31	\$2,086.68
1869		\$96.31	\$2,182.99
1870		\$96.31	\$2,279.29
1871		\$96.31	\$2,375.60
1872		\$96.31	\$2,471.91
1873		\$96.31	\$2,568.22
1874		\$96.31	\$2,664.53
1875		\$96.31	\$2,760.83
1876		\$96.31	\$2,857.14
1877		\$96.31	\$2,953.45
1878		\$96.31	\$3,049.76
1879		\$96.31	\$3,146.07
1880		\$96.31	\$3,242.38
1881		\$96.31	\$3,338.68
1882		\$96.31	\$3,434.99
1883		\$96.31	\$3,531.30
ROI			253%

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Calculator with formulas

Gold/Greenback/War Bond Arbitrage		6% Interest on War Bonds - 20 Years	Cumulative Balance
Gold Investment	Variable		
Greenback Value of Gold Dollar in 1863	0.623		
Greenbacks Exchanged for Gold	=C3/C4		
War Bonds Purchased with Greenbacks	=C3/C4		
Gain from Arbitrage	=C6-C3		
First Year ROI 1864		=C\$6*0.06	=C\$6*1.06
1865		=C\$6*0.06	=E8+D9
1866		=C\$6*0.06	=E9+D10
1867		=C\$6*0.06	=E10+D11
1868		=C\$6*0.06	=E11+D12
1869		=C\$6*0.06	=E12+D13
1870		=C\$6*0.06	=E13+D14
1871		=C\$6*0.06	=E14+D15
1872		=C\$6*0.06	=E15+D16
1873		=C\$6*0.06	=E16+D17
1874		=C\$6*0.06	=E17+D18
1875		=C\$6*0.06	=E18+D19
1876		=C\$6*0.06	=E19+D20
1877		=C\$6*0.06	=E20+D21
1878		=C\$6*0.06	=E21+D22
1879		=C\$6*0.06	=E22+D23
1880		=C\$6*0.06	=E23+D24
1881		=C\$6*0.06	=E24+D25
1882		=C\$6*0.06	=E25+D26
1883		=C\$6*0.06	=E26+D27
ROI			=(E27-C3)/C3

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Verify the **253% ROI** at the following site! Bookmark the site.

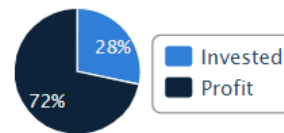
<https://www.calculator.net/roi-calculator.html>

Return on Investment (ROI) Calculator

Amount Invested	<input type="text" value="\$1000"/>
Amount Returned	<input type="text" value="\$3531.30"/>
Investment Time:	
<input type="radio"/> Use Dates	<input checked="" type="radio"/> Use Length
Investment Length	<input type="text" value="20"/> years
<input type="button" value="Calculate"/>	

Result

Investment Gain	\$2,531.30
ROI	253.13%
Annualized ROI	6.51%
Investment Length	20.00 years



Measure the worth in today's values.

<https://westegg.com/inflation/infl.cgi>

\$1,000 in 1863 = \$21,047 in 2019

\$3,531 in 1883 = \$98,057 in 2019

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Closure

The arbitrage and the principle (not necessarily the interest stipulated) on the bonds that would be paid in gold and not greenbacks would be challenged by President Andrew Johnson, statesman George Pendleton, with what was known as the “Ohio Idea,” and others to no avail. Along with the National Banking system, debt became institutionalized and gradually accepted as an American way of life.

Recommended Reading

Hammond, Bray. *Sovereignty and an Empty Purse; Banks and Politics in the Civil War*. (Princeton, NJ: Princeton UP, 1970).

Websites

“The Greenback Question.” <http://www.u-s-history.com/pages/h171.html>.