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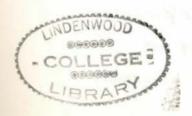
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HOW CULTURAL VALUES AFFECT VALUATION

Joel Jon Forman

An Abstract Presented to the Faculty of the Graduate School of Lindenwood College in Partial Fulfillment of the Requirements for the Degree of Master of Valuation Science



1993

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ABSTRACT

The purpose of this study is to describe the factors which affect numismatic appraisals, particularly from a valuation perspective. One of the most important considerations is the role culture played in helping determine value. Much of our knowledge of the ancient world (China, Babylon, Egypt, Israel, Greece, Rome, Persia, India and other civilizations) is derived from the surviving coinage. The coins from these bygone eras reveal the cultural, religious and moral values which played an incredible role in shaping our modern high technological society. Some of these ancient values are reflected in present day coinage.

This study will carefully examine the different designs on American silver coinage and how these designs affect valuation. An exhaustive analysis is performed on comparing original mintages between the various series in question as well as comparing original mintages with known surviving quantities.

The results of this study will lead to the conclusion that designs which emphasized the American

ideals of Liberty, Justice and Peace have far greater value than the coins which currently employ the ancient Roman concept of the graven image.

This study concludes with recommendations for future research.

HOW CULTURAL VALUES AFFECT VALUATION

Joel Jon Forman

An Culminating Project Presented to the Faculty of the Graduate School of Lindenwood College in Partial Fulfillment of the Requirements for the Degree of Master of Valuation Science

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- 2) The American Numismatic Society; located in New York City.
- 3) Coin World; a weekly numismatic newspaper, located in Sidney, Ohio.

TABLE OF CONTENTS

List of	Tables vi
List of	Illustrations vii
Preface	viii
I.	Introduction 1
	Overview 1
	Conception of Coins 1
	Cultural Values 2
	Collecting Coins 3
	Effects of Roman Cultural Values 5
	Problems in Coinage 6
	Analyzing Coinage 9
	How Cultural Values Affect Valuation 9
II.	Literature Review
	Introduction 13
	Specific Values 13
	Grading System 14
	Denominations of American Silver Coinage
	When are Coins Melted? 20

	Mints and Mint Marks for Silver Coins 20)
	The Number of Coins and Value per Person 22	2
	Analysis of Coins per Person 23	}
	Treasury Policies 25	,
	Contradictions in the Policy 27	,
	What Was Melted 28	3
	Results of the First Phase	
	Melting 28	3
	Phase Two Melting and the Effects 30)
	perales of original of the tier	
III.	Selective Review and Evaluation of Research	3
	Overview 33	3
	Original Dime Mintage Comparison 33)
	Surviving Dime Mintage Comparisons	
	Original Quarter Mintage Comparison	,
	Surviving Quarter Mintage Comparisons	;
	Original Half Dollar Mintage Comparison	
	Surviving Half Dollar Mintage Comparisons	1
	Silver Dollars 39	,

IV.	Results 40
	Overview 40
	Results of Original Dime Mintage Comparisons 40
	Results of Original and Surviving Dime Mintage Comparisons 41
	Summary for the Dimes 42
	Results of Original Quarter Comparisons
	Results of Original and Surviving Quarter Mintage Comparisons 43
	Summary for the Quarters 44
	Results of Original Half Dollar Mintage Comparisons
	Results of Original and Surviving 50 Cent Mintage Comparisons 46
	Summary for the Half Dollars 46
	Silver Coin Summary 47
v.	Discussion 48
	Introduction 48
	Aging 48
	Design 48
	Future Research Recommendations 49
	Conclusions 50

LIST OF TABLES

Table	1.	The Number & Face Value of	
		Coins/person	22
Table	2.	Population Increases from 1950-1990	23
Table	3.	Coinage Increases from 1950-1990	24
Table	4.	Quantity Minted vs. Quantity Remaining	28
Table	5.	Winged Liberty and FDR Original	
		Mintages	34
Table	6.	Original vs. Surviving Dimes	35
Table	7.	Standing Liberty and Washington	
		Original Mintage	35
Table	8.	Original vs. Surviving Quarters	36
Table	9.	Liberty Walking vs. Franklin Original	
		Mintage	37
Table	10.	Original vs. Surviving Halves	38

LIST OF ILLUSTRATIONS

Chart	1.			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•					•	٠	•	•	•	•	•	•	•	•	•	,	53
Chart	2.	,	•	•	•	•	•	•	٠	•	•	•		•	•	•		•	•	•	•		•							٠					•		•				54
Chart	3.	,			•	•	•	•	•	•	•	•		•	•	•						•	•			•				•	•				•			•			55
Chart	4.	,																																							59
Chart	5.				•		•		•	•	•	•	•	•	•	•	•						•					•						•	•					(50
Chart	6.			•	•	•	•	•	•	•	•	•	•	•		•							•			•		•		•	•	•	•	•	•	•	•			(63
Chart	7.	,					•	•	•		•		•			•						•	•					•		•	•	•	•	•	•	•	•	•		(64
Chart	8.	,	•		•				•	•									•			•						•	•	•	•	•	•	•	•		•			(67
Chart	9.	,																							 															(69

PREFACE

The understanding of numismatics is essentially on-the-job training. The first lesson learned in this self taught process is the portability of coins. That is, how coins are used to export a cultural value system to other cultures. The goal is obvious. The sending culture wants the receiving culture to accept their values. Wars usually resulted when the intended receiving culture rejected the sending culture's ideas. The most successful culture to spread its value system using coins were the Ancient Romans.

While many books have been written on numismatics, there is virtually no literature available on how culture impacts valuation. The thinness of the Works

Cited at the end of this study reflects how new this subject is in numismatics. This study is the first of its kind.

Based upon many years of personal observation, the author of this study came to realize the role cultural values have played in the valuation process. From this perspective, the turning point in American numismatics was the Great Depression of the 1930's. During that

time, the United States abandoned its numismatic
tradition of honoring the ideals of Liberty, Justice
and Peace, then replaced it with the pagan Roman
concept of honoring the emperor, or in our case,
deceased presidents and statesmen.

For many years, numismatists have long wondered why there were gross discrepancies in value between pre and post depression silver coinage, especially when mintages and grade (quality) were virtually identical. This study will answer many of these questions, but surely not all of them, for further research will be necessary.

INTRODUCTION

1.1 OVERVIEW

Monetary systems have their roots in antiquity.

Prior to their use, economic survival was based upon local barter (Coin World P. 31). This primitive system was flawed. No uniform standard existed for weights and measures. Each tribe had its own criteria.

Disagreements over relative values often led to warfare, especially if one tribe perceived another tribe as unfair. As the urbanization process began, and trade developed, the difficulties caused by the lack of monetary standardization greatly magnified. Something had to be done.

1.2 CONCEPTION of COINS

In the Torah, Abraham is seen negotiating with the intent of purchasing a cave to bury his wife Sarah (Book of Genesis 23:9). He offers 400 Shekels of Silver (Book of Genesis 23:15). Today's reader might conclude this was a monetary offer to purchase a piece of real estate. The Shekels Abraham offered were based upon his concept of weights and measures. This description in the Torah of economic activities precedes monetary systems by at least 1,400 years.

About 2,600 years ago, money was invented in Lydia. This area is now the western half of the modern nation of Turkey (World Book Encyclopedia Vol. 13 P.

592). Made of electrum, a process of combining gold and silver (World Book Encyclopedia Vol. 13 P. 592), this process took hold quickly and spread to other civilizations. For the first time, there was a recognized and accepted standard where the value of goods and services could be agreed upon.

Within 100 years after money was invented, an entirely new economic system evolved. Certain professions arose: bankers, accountants, counterfeiters and minters. As empires grew, conquerors brought their monetary systems into the occupied areas. In far away China, the world's first calculator, the Abacus, and currency (paper money) were conceived about the same time (World Book Encyclopedia Vol. 13 P. 593). The Abacus was used to assist the financial community in record keeping. However, no one knows the exact year, or the dynasty involved, when either was invented. There is a general consensus the time is somewhere between 2,600 to 4,000 years ago. Currency was introduced to Europe when Marco Polo returned from China.

1.3 CULTURAL VALUES

From the inception of coinage, coins had designs which reflected a society's cultural values, whether they be religious, moral or political. These cultural value designs often created problems. Both the ancient

Greeks (Sear P. xxi) and the ancient Romans (Sear P.

15) had a hierarchy of gods. The chief god of the

Greeks was Zeus. His Roman counterpart was Jupiter.

Each had a different graven image. These clashing

cultural values, which were designed on the coinage,

led to constant warfare between the Greeks and the

Romans. Each believed their particular graven image was

correct, while the other's graven image was false.

Across the Mediterranean, Israelite culture forbids any graven images. When the Romans conquered Israel, they brought their Roman coinage with them which contained graven images. In biblical Israel, the local population fought back, resenting the violation of their cultural values. Eventually, the Romans decimated well over half of the population after torching the cities. An important lesson emerged. If there is resistance to imposed foreign cultural values, the local population faces annihilation. The people perished, while the coins survived.

1.4 COLLECTING COINS

Over many centuries, people tried to obtain complete sets of coins. These complete sets were a combination of:

- 1) Denomination (Face value of the coin)
- Design (Imprint on the coin)
- Mint mark (City where the coin was made)

- 4) Metallic composition (Gold, silver or base metal such as copper, nickel or zinc)
- 5) Date (Year coin was made)

Modern coin collecting, as we know it today, is credited to the Rothschild family. This world renown family started a banking business in Germany in the latter years of the 18th century (World Book Encyclopedia Vol. 16 P. 448). As part of their banking activities, they were requested to obtain coins for the royal families of Europe. In this endeavor, they were most successful. They quickly realized the crown heads of Europe would be willing to pay handsome premiums for many coins.

Specific factors, including:

- 1) Condition (Quality of the coin)
- Date (Year coin was made and distributed)
- 3) Known surviving mintage (Coins which survived the melting pot)
- 4) Mint Mark (City where the coin was produced)
 - 5) Provenance (List of previous owners of the coin)

all enhanced the desirability of certain coins. Without realizing it, the Rothschild's defined the criteria which would eventually form the basis of numismatic appraisals. Although the origin of modern day numismatic appraisals is in Europe, the practice

quickly spread throughout the world. The representation of the designs on the coins, which the Rothschild's obtained, often had powerful religious themes.

Royalty's emotional bonding to these cultural values generally raised the values. In essence, cultural values had a decided impact on numismatic value, a value many people gladly paid for.

1.5 EFFECTS of ROMAN CULTURAL VALUES

While the Roman empire has long since disappeared, one of their most important traditions has survived to this day: graven images. Countries with strong Christian traditions, regardless of denomination, have retained the Roman concept of graven images (Kraus and Mishler P. 22). Throughout the years, the European countries, from the Atlantic to the Urals, have seen their coins designed with portraits of influential people: kings, queens, popes, statesmen, among others. The British policy is to have the reigning monarch on the coin of the realm.

Conversely, in the semitic countries, Jewish and Islamic cultural and religious values forbid the placing of the graven image on coins. When the British controlled the holy land in the Mandate period between the World Wars (1920-1948), they did not repeat the mistake Romans and the Crusaders had made centuries earlier when they used graven images on their coins.

Instead, the British issued coins with agricultural designs on them.

1.6 PROBLEMS in COINAGE

From its inception, problems arose when coins were issued. By far, the three major threats were, and continue to be:

- 1) Debasing- The removal of precious metal, gold and silver, then substituting base metals such as copper and nickel.
- 2) Counterfeiting- Unauthorized issuance of coins, non-governmental minting and distribution of coins (ANA P. 1).
- 3) Challengers to the throne- When new rulers assume control of a country, they usually destroyed the coins of their predecessors.

All these practices have plagued countless countries, including the United States. When nations institute monetary systems, they hope it will lead to greater economic stability and prosperity. When both occur, the chances of revolt, insurrection and the eventual overthrow of the government is far less likely to occur. Unfortunately, this has not always been the case.

Debasing is the removal of precious metal (gold and silver) from coinage and substituting a base metal.

As the content of precious metal gradually declines,

inflation and economic instability results. One of the worst examples of debasing occurred in England during the mid 1600's when Oliver Cromwell was a leading figure in Parliament.

For many years, royal families fought each other. Since civil wars are costly, these actions resulted in the gradual debasement of the coinage. Eventually, Cromwell united the country and the wars stopped. This resulted in a stronger English economy, with its coinage based upon the gold standard. Great Britain enjoyed an extensive empire whose influence was far out of proportion to the size and population of the country itself.

For many centuries, Britain's wealth was unequaled, as the Pound was the world's strongest currency. The two world wars in the twentieth century reduced Britain's economic power and influence. Today, the British are a hollow shell of their former selves. As a result, British cultural values, which were foreign and imposed on their former colonies, have declined. This is particularly true in the Moslem nations.

While debasing coins has governmental sanction, counterfeiting does not. Numismatic literature constantly reviews issues of counterfeit coins, from ancient to modern times. In biblical times, this was a

serious problem. Modern day governments are faced with the same challenges, except today's counterfeiters are far more sophisticated. Now, the greater problem is with counterfeit currency. In the United States, the Secret Service has the responsibility of confiscating both counterfeit coins and currency.

Each year, many counterfeit bills and coins are produced throughout the world. About 30% of all coins from the ancient and medieval empires are counterfeit. Many are modern day forgeries currently made in Beirut, Lebanon (Sear P. 487). Coin World had an extensive article on counterfeit coins in its April 3, 1992, P.3 edition.

Unlike the crude coins from biblical times, today's defects can only be detected with highly technical equipment. This problem will probably continue forever. It is government's task and responsibility to track down and prosecute those who produce these bogus items.

In ancient times, challengers to the throne would often produce their coins with the intent of undermining the then current authority (Coin World articles). The Roman province of Gaul, modern day France, provided the Roman emperors with monumental anguish. Commanders on the fringes of the empire would periodically declare themselves emperor of their

territory. These proclamations stated they were no longer part of the Roman empire. They, then issued their own coins.

Over many decades, different papal factions, backed their own candidate to the throne of Peter. The United States experienced its greatest challenge from 1861 to 1865. At that time, the Confederate States of America rebelled against the authority of the federal government. This resulted in the bloodiest war America has ever fought. In our own time, the Soviet Union ceased to exist in 1991. Today, the independent Eastern European republics have declared their intent to issue their own monetary system. In each and every instance, the designs on the coins and currency will reflect the cultural values of these nations. All designs will follow the ancient Roman concept of using graven images.

1.7 ANALYZING COINAGE

Today, all countries, large and small, issue coins and currency consistent with their cultural values.

This study will be primarily concerned with American silver coins and how the cultural values shown on the coins affect valuation.

1.8 HOW CULTURAL VALUES AFFECT VALUATION

The economic laws of supply and demand form the basis of all value. Numismatics being no exception.

There are many coin series in the world which have a low mintage level, but the demand is still much lower than the supply. These coins have a low value since a surplus exists. Conversely, there are coin series which have a substantially larger mintage, but are far more valuable since the demand is much greater than the available supply. What causes this demand?

Cultural values, based upon religious, moral and political considerations, form the basis of demand for numismatic coinage. These cultural values, which vary from society to society, create a strong emotional bonding which people can identify. As demand increases, the numismatic value of coins rises. People pay handsome sums to possess coins reflecting cultural values, provided these values are consistent with the individual's own religious, moral or political views.

Many collectors obtain coins which agree with their own emotional values. In the United States, few people collect Islamic coins since the vast majority of Americans have a Judeo-Christian heritage and not a Muslim ancestry. In certain areas of the country, such as California, which have a large Oriental population, collectors of Chinese, Japanese and Korean coins can be found. Outside ethnic populated enclaves, most of these coins have little appeal to Americans.

An example of American cultural values being

significant occurred in 1986, when the United States mint issued a set of coins honoring the centennial of the Statue of Liberty. Since our country is a nation of immigrants, the appeal of these coin sets sent prices soaring. The demand, at that time, far exceeded the quantities minted.

Many millions of Americans felt an emotional bonding with these coins, since they were reminded of the hardships their grandparents or great grandparents endured emigrate to America. The author of this study had all four of his grandparents emigrate to the United States. He vividly remembers the stories his grandparents told. The favorite story concerns the initial reaction of his grandparents, upon reaching the safe haven of these shores. All four cried at their first glimpse of the Statue of Liberty, as they sailed into New York harbor. Now they were safe from the Czar's pogroms.

Millions of other Americans have experienced the same emotions, hence the enormous popularity of these historic proof and uncirculated sets. During the height of the celebration period, prices rose to unanticipated heights. America's cultural value, in this case freedom, caused a greater numismatic interest in these coins; which in turn resulted in a rise in market value.

While the Statue of liberty coins were a huge success, an earlier series of medals to honor popular American artists was a failure. Why? This metallic series had the graven images of well known artists, such as Grant Wood, on them. Most people had little emotional attachment to any of the honorees. There was no true cultural value being expressed. Treasury officials tried many promotional gimmicks to create additional interest. Despite widespread publicity in the numismatic press, the series never caught on.

Today, the secondary market is soft. Prices are only slightly above the intrinsic bullion value.

With this an a background, the remainder of this study will describe in detail how the cultural values affect valuation. Why do coins with nearly identical and/or surviving mintages have price ratios of 100:1 or even higher? What factors lead to these discrepancies and what can be done to prevent these ratios from happening again?

LITERATURE REVIEW

2.1 INTRODUCTION

On March 3, 1791, Congress passed a resolution authorizing the establishment of a national mint. About thirteen months later, the Act of April 2, 1792 (Yeoman P. 9) stated that American money would be expressed in dollar decimal units, while cents represented the fractional part of the dollar.

Included in this act was the definition of silver alloy: Silver - 1485/1664 (1485 parts silver to 179 part alloy), which is a fineness of approximately 892.43 fine. The usual alloy combined with silver is copper, since this is a hard and economical metal.

The same Act authorized the first (mother) mint to be built in Philadelphia (Yeoman P. 7). Starting in 1793, the first coins bearing the "United States of America" were officially released. From that humble beginning, well over two centuries of essentially uninterrupted service began. By the middle of the 19th century, legislation set the fineness for silver coins at 90%.

2.2 SPECIFIC VALUES

There are several different types of values with respect to coinage (Merton P. 5).

 Face Value This is the most obvious, with the denomination stamped on the coin. It is the

- only visible nominal value and never changes.
- 2) <u>Intrinsic Value</u> The value of the metal that makes up the coin.
- if it is profitable to melt coins. There is a very simple formula to determine if melting is profitable: Divide \$1.00 by the actual fine silver content of \$1 worth of coins.

 Pre-1965 dimes, quarters and halves have a fine silver weight of .72337 troy ounce.

 Applying the formula: \$1.00/(.72337) = \$1.38.

 This establishes the market price of one troy ounce of silver where the intrinsic fine silver content of each coin becomes equal to the face value of the coin.
 - when a coin has an unusual feature, such as a low mintage, an error or proof like. These coins are highly desirable because of their rarity. However, not all coins have numismatic value. For example, today the U.S. mint produces up to one <u>BILLION</u> cents per month. Since they are so common, there is no numismatic value to them.

2.3 GRADING SYSTEM

The American Numismatic Association (ANA),

headquartered in Colorado Springs, Colorado, has adapted the 70 point grading scale first developed by Dr. William Sheldon for the 1794 large cent. This system defines the quality of a coin. The higher the grade, the greater the value. For any given coin, value can vary tremendously. If the coin is so worn that the date is barely visible, the value is much lower than if the same coin is in pristine condition. Therefore, grading is a key factor in determining value. In 1949, Dr. William Sheldon created a numerical grading scale which ranged from 1 to 70. The latter number represents a perfect coin which has no flaw of any kind. He then broke the scale into different categories. Below is a summary of the Sheldon scale.

defines a manufacturing process not a physical condition. Today's proof coins are reflective and shiny. These coins are specially made and have a brilliant mirror like finish on the surface. When the mint sells these coins, there is always a premium paid. In the early part of the 20th century, the matte proof was used. On this type of coin, the entire surface of the coin is uniformly dull or granular. A satin finish coin has a matte, satiny surface, a process

which is unknown today. The surface of the coins varied with the proof type used. A sandblast proof is a variation of matte proof, where the surface of the coin is sandblasted. A satin finish coin has a matte satiny surface (Editors of Coin World P. 362). These coins are highly sought after by coin collectors and are, as a group, more valuable than most other types of finishes.

- 2) Mint State (MS) Coins - These coins are sometimes described as uncirculated (Editors of Coin World P. 528). They cover an eleven point range, varying from MS-60 to MS-70. They show no trace of wear. However, factors of toning (changes of color of a coin due to tarnishing), blemishes or degree of imperfection cause variations within the mint state. For silver dollars at this level, a shift of one point in either direction can change the value of a coin by thousands of dollars. Today, computer grading is used as an impartial tool to pinpoint the coin's actual grade, by removing the human subjective interpretation. This will permit a more accurate valuation.
- 3) About Uncirculated (AU) These coins range

from AU-50 to AU-59 (Editors of Coin World P. 529). They show only the faintest traces of wear on the coin's high points. At least half of the mint luster is present. Coins in this grade are usually represented as AU-50, AU-55 and AU-58.

- Extremely Fine (EF) These coins range from EF-40 to EF-49 (Editors of Coin World P.529). The design is lightly worn over the coin, but all features are sharp and well defined. Some luster may be present. Usually, coins in this grade appear as EF-40 and EF-45.
- from VF-20 to VF-39 (Editors of Coin World P.529). They show moderate wear on the high points of the design. All the lettering and major features are sharp. Most coins in this grade appear as VF-20 and as VF-30.
- 6) Fine (F) These coins vary from F-12 to F-19 (Editors of Coin World P. 529). They have moderate to considerable even wear. The entire design is bold with overall pleasing appearance. Generally, these coins are shown as F-12.
- 7) <u>Very Good (VG)</u> These coins range from VG-8 to VG-11 (Editors of Coin World P. 529). They

- are well worn, but the main features are clear and bold and rather flat in appearance.

 Normally, these coins are shown as VG-8.
- 8) Good (G) These coins range from G-4 to G-7

 (Editors of Coin World P. 529). The designs

 are visible, but heavily worn. Some areas are

 very faint. Many details are flat. This is

 the lowest collectible grade. With a few

 exceptions, they are usually shown as G-4.
- 9) About Good (AG) These coins are always graded as AG-3 (Editors of Coin World P.529).

 They show extensive wear. Most of the lettering, date and legends are worn smooth.

 The date may be barely visible.

2.4 DENOMINATIONS of AMERICAN SILVER COINAGE

Today, all circulating American coins are made of base (non-precious) metals. However, Silver coins were minted from 1793 to 1964 for use in daily business transactions. There were some years when certain denominations were not minted.

Below is the list of silver coins minted. During this 171 year period, seven different denominations were made. All mintages shown are for coins issued for general circulation only and do not include proof, commemorative and mint set releases. There were years when certain denominations were not minted.

3 Cents- They were issued from 1851 to 1873.

During this 23 year period, a total of 42,736,240

were produced (Department of the Treasury P. 24).

Half Dime- Initially minted in 1792, they
were issued from 1794 to 1873. During this 80 year
period, a total of 97,604,388 were made
(Department of the Treasury P. 24).

Dime- They have been minted from 1796 to the present. Silver dimes were minted until 1964.

During this 169 year period, a total of 10,055,455,835 silver dimes were produced (Department of the Treasury P. 24). Since 1965, all dimes contain base metals.

20 Cents- They were issued from 1875 to 1878.

During this 4 year period, a total of 1,355,000

were produced (Department of the Treasury P. 24).

Quarter- They have been minted from 1796 to the present. Silver quarters were minted until 1964. During this 169 year period, a total of 4,449,108,957 silver quarters were produced (Department of the Treasury P. 24). Since 1965, all quarters contain base metals.

Half Dollar- They have been minted from 1794
to the present. Unlike the dime and the quarter,
there were two different types of silver coins.
The 90% silver coins were minted until 1964.

During the 171 year period when 90% silver coins were made, a total of 1,572,267,412 coins were produced (Department of the Treasury P. 24). From 1965 to 1970, the silver content was reduced to 40%. During this six year period, a total of 601,943,076 40% silver half dollars were made (Yeoman P. 156). Since 1971, all half dollars contain base metals.

\$1- Silver coins were minted intermittently from 1794 to 1935. During this 142 year period, a total of 855,661,153 were produced (Department of the Treasury P. 20). There were no dollar coins made from 1936 to 1970. From 1971 to 1981, the dollar coin contained only base metals.

2.5 WHEN ARE COINS MELTED?

Starting in 1934, American citizens could not possess monetary gold in the United States. At that time, the United States went off the gold standard (Yeoman P. 175). The vast majority of these gold coins were melted. Three decades later, silver coinage was destined to go through a similar experience. For coins which have always been composed of base metal, there is no incentive to melt, for the face value far exceeds the intrinsic value and they contain no precious metal.

2.6 MINTS and MINT MARKS FOR SILVER COINS

Mint marks (Yeoman P. 65) are small letters on

coins showing where the coins were produced. Prior to 1979, coins struck at Philadelphia do not have a mint mark shown. The only exception to this policy occurred during World War II. Then, the five cent pieces, from 1942 to 1945, had the letter "P" on them. Starting in 1979, the letter "P" appeared on the dollar coin. The rest of the denominations followed suit beginning in 1980, except for the cent. In addition to the mother mint in Philadelphia, the following letters, to identify the silver coin mint of origin, have been used (Yeoman P. 59):

- 1) CC- Carson City, Nevada; 1870 to 1893
- 2) D- Denver, Colorado; 1906 to the present
- 3) O- New Orleans, Louisiana; 1838 to 1909
- 4) P- Philadelphia, Pennsylvania; 1793 to the present
- 5) S- San Francisco, California; 1854 to the present

In some years, coins were made and issued at San Francisco without any mint mark shown.

As the United States expanded westward, the population grew rapidly. This growth was a combination both of natural increase and immigration. Most of the newcomers came from Europe. Some decades saw larger numbers of people arriving to these shores than others. As the population increased, so did the number of coins

minted. This was due to increased demand.

2.7 THE NUMBER of COINS and VALUE per PERSON

As required by the Constitution, the census must be taken at the beginning of each new decade. Below, Table 1 shows the relationships between the total number of coins minted during the census year (in millions), the total number of people residing in the country during the census year (in millions), the number of coins available per person, the face value (FV) of the total number of coins minted during the census year (in millions of dollars), and the face value (FV) of coins issued per person.

Table 1
The Number and Face Value of Coins per Person

	Total	Total	Coins/	FV of	FV/
Decade	Coinage	Popt'n	Person	Coins	Person
1800	3.338	5.308	0.628	\$.571	\$0.11
1810	3.056	7.239	0.422	\$1.116	\$0.15
1820	6.493	9.638	0.674	\$1.865	\$0.19
1830	8.357	12.866	0.650	\$3.156	\$0.25
1840	10.558	17.069	0.619	\$3.427	\$0.20
1850	14.588	23.192	0.629	\$33.892	\$1.46
1860	28.907	31.443	0.919	\$25.939	\$0.83
1870	16.760	39.818	0.421	\$24.927	\$0.63
1880	74.102	50.156	1.477	\$90.111	\$1.80
1890	124.025	62.948	1.970	\$61.055	\$0.97
1900	175.750	75.995	2.313	\$137.649	\$1.81
1910	213.964	91.972	2.326	\$111.505	\$1.21
1920	631.422	105.711	5.973	\$50.214	\$3.20
1930	266.056	122.775	2.167	\$8.731	\$0.07
1940	1,209.479	131.669	9.186	\$50.158	\$0.38
1950	928.736	151.326	6.137	\$41.891	\$0.28
1960	2,810.700	179.323	15.674	\$97.828	\$0.55
1970	7,904.219	203.302	38.879	\$344.481	\$1.69
1980	16,439.333	226.546	72.565	\$747.092	\$3.30
1990	16,540.000	249.633	66.257	\$779.700	\$3.12

SOURCES: Department of the Treasury P. 92 and the U.S. Census Bureau

The face value (FV/person) column in Table 1 shows the boom and bust cycles of the American economy.

2.8 ANALYSIS of COINS PER PERSON

Overall, as Table 1 shows, the long term trend shows both a rise in the number of coins per person and the face value of coins per person. However, there are notable exceptions. In certain census years, the number of coins per person and face value of coins per person dropped. During those years, our country was in economic decline. The most dramatic drop took place in 1930, when the United States was caught in the Great Depression. Chart 1, in the appendix, shows the pictorial relationship for the number of coins per person. Conversely, during periods of inflation, the number of coins per person rose tremendously. From the late 1960's to the early 1980's, inflation became rampant. This is reflected in the huge increase in the number of coins per person for 1970 and 1980. During these decades, the population and the increase in the population grew as follows (in millions):

Table 2

Population Increases from 1950-1990

YEARS	POPULATION	PREVIOUS	DECADE	INCREASE
1960	179.3	28	. 0	The State
1970	203.3	24	. 1	

1980	226.5	23.2	
1990	249.6	23.1	

SOURCE: U.S. Bureau of the Census

For all practical purposes, the 1950 to 1990 population increases have been virtually linear. The corresponding coinage production for these years are as follows (in billions):

Table 3
Coinage Increases from 1950-1990

COINAGE	INCREASE	from	PREVIOUS	DECADE
2.811	1.882			-111
7.904	5.093			
16.439	8.535			
16.540	0.101			
	2.811 7.904 16.439	2.811 1.882 7.904 5.093 16.439 8.535	2.811 1.882 7.904 5.093 16.439 8.535	2.811 1.882 7.904 5.093 16.439 8.535

SOURCE: Department of the Treasury

Unlike the population increase, the coinage production increase has been virtually an exponential one until 1990.

The tremendous increase in coin production since the mid-1960's has had a devastating effect on values. With so many coins produced, the numismatic value of these coins, with the possible exception of proof coins, has been virtually non-existent. These coins follow the Roman concept of honoring the emperor but do not contain any precious metal. To the vast majority of collectors, these coins have no appeal or value. For all practical purposes, they are not collected.

In the mid-1960's, many millions of United States

silver coins could be found in circulation. Twenty
years later, nearly none exist in pocket change. During
this transitional period, most of the silver coins made
since the Great Depression of the 1930's vanished
forever. Some were hoarded. Most were melted in two
phases.

Melt, Henry Merton describes the process he used in the first phase to melt silver coins. This occurred in the late 1960's. By the time he finished, U.S. silver coins virtually disappeared from daily use. The rest of this chapter is largely devoted to Mr. Merton's book, for it is, by far, the most revealing account of what happened. Anticipating the future, some collectors had the foresight to save silver coins what they could find. They realized these retaining silver coins had substantial potential value in the years to come.

2.9 TREASURY POLICIES

The beginning of the end started on May 18, 1967, when the U.S. Treasury banned "the melting, treatment and export of United States silver coins" (Merton P. 11). Starting on July 14, 1967, less than two months later, the U.S. Treasury enacted two policies which led to the largest unauthorized mass melting of U.S. silver coins in the nation's history:

1) All bags of mixed coins, bags containing both

silver and clad (present copper-nickel) coins
coming into the Federal Reserve Banks, were
withheld from circulation. These bags of
dimes and quarters (no half dollars were
withheld) were to be sorted. Once the coins
were sorted, the Treasury kept the silver
coins, but returned the clad coins to
circulation (Merton P. 2).

2) The current fixed price of \$1.29 for silver was discontinued. Anyone holding silver certificates could still redeem them for fine silver at \$1.29 per ounce, but a free silver market was created (Merton P. 2).

As long as the Treasury retained the \$1.29 fixed price on silver, there was no profit in melting U.S. silver coins. However, after Treasury withdrew the \$1.29 price support, silver's spot price rose. Now with a base price of \$1.38, combined with a free market for silver, the nine cents differential made U.S. silver coins attractive to melt. And they were melted, by the millions.

The rise in silver prices, brought about by the elimination of the fixed \$1.29 price, created a new set of entrepreneurs - illegal smelters. Instead of discouraging private melting of U.S. silver coins, Treasury policies created the opposite effect. These

two policies were the major factors in the increasing disappearance of U.S. silver coins.

2.10 CONTRADICTIONS in the POLICIES

Compounding the problem was the Treasury's approach. Up to May 17, 1967, it was perfectly legal to melt all U.S. silver coins. The following day, Treasury banned melting. However, the ban was NOT a law passed by Congress, and signed by the President. It was, instead, only a decision by Treasury officials. Nearly two years later, May 12, 1969, this ban was lifted (Merton P. 3).

Motivated by profit factors of 100%, or more, clandestine smelters went quickly to work. The attraction of huge profits, combined with a small work load, was irresistible. Eventually, the majority of the melted coins were shipped overseas, particularly to Europe, where the price of silver was considerably higher than the domestic price in the U.S. (Merton P. 4).

Despite the cost of shipping. air freight, and insurance a greater profit could be obtained in Europe than in New York. Even though the Treasury retained the silver coins from the mixed bags, they ended up with only 212 million fine ounces of silver. This represented about 15% of the total coinage of dimes and quarters minted from 1916 through 1964. Illegal

smelters accounted for the rest of the melting (Merton P. 4).

2.11 WHAT WAS MELTED

Very few pre-1934 coins were melted. Those that were could be classified as completely worn, where even the date was unrecognizable. During the melting process, the information obtained came from steno pads, notebooks, comments by the smelters, invoices, coin deliveries and so forth. All this information was held private until the statue of limitations had run out. Only now can the true and full story be told.

Table 4 compares the total number of dimes,
quarters and half dollars originally minted with the
maximum number remaining. This melting concerns only
those coins minted from the years 1934 to 1964
inclusively.

Table 4

Quantity Minted vs. Quantity Remaining

Coin	Number minted	Max. Remaining	% Remaining
Dimes	8,615,086,957	2,094,428,881	24.31%
Quarters	3,793,739,793	959,011,945	25.28%
Halves	1,327,726,622	584,031,899	43.99%
Total	13,736,553,372	3,637,452,725	26.48%

SOURCE: Merton P. 56

2.12 RESULTS of the FIRST PHASE MELTING

By the early 1970's, only a fraction of the silver coins made from 1934-1964 survived. Specifically, 24.31% of the dimes, 25.28% of the quarters and 43.99%

of half dollars were still available. Overall, the remaining number of dimes, quarters and halves is 26.48% of the original mintage. Interestingly, the dimes and quarters have a much lower survival rate then the halves. Historically, dimes and quarters are the workhorses of circulating coinage. Halves, on the other hand, have the lowest circulation rate. This traditional relationship is reflected in the remaining percentages, as shown in Table 4. Since there were far fewer circulating half dollars, they had a much higher ratio in avoiding the melting pot.

Why were only the 1934-1964 coins melted and not pre-1934? Since the Great Depression of the 1930's, the design of American coinage has drifted away from the goals and ideals America has long espoused: liberty and justice. Instead, government policy consisted of honoring the emperor. In our case, remembering deceased individuals, primarily presidents. Since the 1930's, the following changes have been made:

Quarter 1932- The Standing Liberty design was removed and George Washington was the replacement.

Nickel 1938- The Buffalo N2ickel was redesigned
with Thomas Jefferson as the
replacement.

Dime 1946 - The Winged Liberty was replaced by

Franklin D. Roosevelt.

Half 1947 - The magnificent Liberty Walking was replaced by Benjamin Franklin. In 1964, John Kennedy replaced Franklin.

Dollar 1971 - The dollar coin was reissued, after a hiatus of 36 years, with Dwight

Eisenhower. This short lived series

(1971-1978) was replaced with an even shorter series, the Susan B.

Anthony dollar (1979-1981).

The results of this massive meltdown had a strange effect on value. For the most part, prices have not yet reflected the drastic drop in availability of these melted coins.

2.13 PHASE TWO MELTING and the EFFECTS

Mr. Merton's book details the silver coin melting of the late 1960's. However, there was a second mass melting of silver coins. During the first quarter of 1980, the Hunt brothers made a conscious effort to corner the national silver market. In the process, the price of silver went up to \$50 per ounce and remained there for several months.

While this was going on, untold millions of additional silver coins were sent to smelters.

Unfortunately, no official records are known to have

been kept. However, there are two reliable indicators concerning availability. This author spoke to one representative from SILVERTOWNE, a company which actively participated in obtaining the silver coins for this melt cycle. This Winchester, Indiana based company estimates about half of the remaining 1934-1964 silver coins were melted at that time. Secondly, based upon the difficulty of trying to obtain many silver coins in the 1990's, which were common and available ten years earlier, today's estimate of the 1934-1964 silver coins equals 10%-15% of original mintage.

In this second melting phase, pre-1934 silver coins also saw their way to the smelters. With intrinsic silver levels so high, the bullion value of the silver coins often exceeded the numismatic value. Thus, the temptation was often too great to resist. At that time, economically it paid to melt the silver coins. During this second melt, the low grade circulated coins apparently were the main targets, including millions of pre-1934 silver coins. As a result, the quantity of pre-1934 silver coins today is far fewer than in 1980. Based upon personal observations, which consist of comparing the known surviving mintages of the first melt with the number of pre-1934 coins available for purchase today, the author of this study estimates the total number of 90% silver

American coins left is between 10% to 12% of the total made from 1793 to 1964. The numismatic market has not yet realized the effects of the first melt, while the consequences of the second has scarcely been acknowledged.

SELECTIVE REVIEW AND EVALUATION OF RESEARCH

3.1 OVERVIEW

Today, silver dimes, quarters and half dollars of different series have different values. Why? This chapter will analyze different combinations of all three denominations with the same grade taking into account both the original and the surviving business strike mintage. All values, shown in the charts in the appendix, for this analysis were derived from the January 1992 Coin World Trends.

There are three assumptions made in this analysis:

- Dimes, quarters and half dollars exist in all grades, from Good to Mint State, in all series being compared
 - 2) All original mintage figures are derived from Coin World Almanac.
- 3) All surviving mintage are derived from Henry Merton's book "The Big Silver Melt."

3.2 ORIGINAL DIME MINTAGE COMPARISON

Now compare the last two dime series minted, the Winged Liberty (1916-1945) and the Franklin D. Roosevelt (1946-1964), using only the original mintage. The six combinations, with one coin from each series, reflect the nearly identical original mintage figures for each pairing as shown in Table 5.

Table 5
Winged Liberty and FDR Original Mintages

Winged	Liberty Series	Frankl:	in Roosevelt Series
Year	Original Mintage	Year	Original Mintage
1920S	13,820,000	1955D	13,959,000
1938	22,190,000	1954S	22,860,000
1919	35,740,000	19485	35,520,000
1937	56,860,000	1951D	56,529,000
1936	87,500,000	1959	85,780,000
1945	159,130,000	1959D	164,919,790

SOURCE: Yeoman P. 125-128

The author of this study tracked the prices for the following seven grades: VG, F, VF, EF, AU, MS-60 and MS-63 for well over six months using *Coin World Trends*. The values, shown in Chart 2 in the appendix, are representative of the magnitude of the continuing price differences between the two series.

3.3 SURVIVING DIME MINTAGE COMPARISONS

How do the different dime series compare to each other? The following dime series, as shown in Table 6, will be used to compare original with surviving mintage:

- 1) Liberty Seated (1837-1891), using original mintage
- 2) Liberty Head (1892-1916), using original mintage
- Winged Liberty (1916-1945), using surviving mintage
- 4) FDR (1946-1964), using surviving mintage

Table 6
Original VS. Surviving Dimes

Libe	rty Seated	Lil	perty Head	Sur	viving Coin
Year	Mintage	Year	Mintage	Year	Mintage
1843	1,370,000	1894	1,330,000	1938D	1,384,000
1872	2,395,500	1893S	2,491,401	1937S	2,435,000
1891S	3,196,116	1910D	3,490,000	1937D	3,536,500
1856	5,780,000	1915	5,620,000	1954S	5,715,000
1883	7,674,673	1908D	7,490,000	1949	7,735,000
1876CC	8,270,000	19030	8,180,000	1958	8,196,000
1875	10,350,000	1909	10,240,000	1945S	10,061,000
1876	11,460,000	1910	11,520,000	1941D	11,408,500
(None	Available)	1904	14,600,357	1935	14,707,500
	15,310,000	(None	Available)	1946D	15,261,000

SOURCE: Merton P. 57-59; Yeoman P. 119-127

The values, shown on the four pages in chart 3 in the appendix, is representative of the magnitude of the continuing differences in the prices between the various series.

3.4 ORIGINAL QUARTER MINTAGE COMPARISON

Now compare the last two quarter series minted, the Standing Liberty (1916-1930) and the George Washington (1932-1964), using only the original mintage. The six combinations, with one coin from each series, as shown in Table 7, reflect the nearly identical original mintage figures for each pairing.

Table 7
Standing Liberty and Washington Original Mintage

Standi	ng Liberty Series	George	Washington Series
Year	Original Mintage	Year	Original Mintage
1927S	396,000	1932S	408,000

1919S	1,836,000	1937S	1,652,000
1930	5,632,000	1935S	5,660,000
1923	9,716,000	1938	9,472,000
1917Var2	13,880,000	1952S	13,707,800
1920	27,860,000	1950	24,920,126

SOURCE: Yeoman P. 139-142

The author of this study tracked the prices for the following seven grades: G, F, VF, EF, AU, MS-60 and MS-63 for well over six months using *Coin World Trends*. The values, shown in Chart 4 in the appendix, are representative of the magnitude of the continuing price differences between the two series.

3.5 SURVIVING QUARTER MINTAGE COMPARISONS

How do the quarter series compare to each other?

The following quarter series, as shown in Table 8, will be used to compare original with surviving mintage:

- 1) Liberty Seated (1838-1891), using original mintage
- 2) Liberty Head (1892-1916), using original mintage
- Washington (1932-1964), using surviving mintage

Table 8
Original VS. Surviving Quarters

Liberty Seated		Liberty Head		Washington	
Year	Mintage	Year	Mintage	Year	Mintage
18540	1,484,000	19010	1,612,000	1937S	1,652,000
1855	2,857,000	18940	2,852,000	1938S	2,832,000
1891	3,920,000	19030	3,500,000	1953S	3,504,000
1876CC	4,944,000	1905	4,967,523	1937	4,925,000

(None	Available)	19080	6,244,000	1950	6,243,000
1858	7,368,000	1907	7,192,000	1939D	7,092,000
1877S	8,996,000	1901	8,892,000	1948	8,799,000
1877	10,911,200	1898	11,100,000	1951	10,876,500
1876	17,816,000	(None	Available)	1945	18,593,000

SOURCE: Merton P. 60-61 and Yeoman P. 133-140

The values, shown in chart 5 in the appendix, is representative of the magnitude of the continuing differences in the prices between the various series.

3.6 ORIGINAL HALF DOLLAR MINTAGE COMPARISON

To begin, compare the last two halves series minted, the Liberty Walking (1916-1947) and the Ben Franklin (1948-1963), using only the original mintage. The six combinations, with one coin from each series, as shown in Table 9, reflect the nearly identical original mintage figures for each pairing.

Table 9

Liberty Walking VS. Franklin Original Mintage

y Wal	king Series	Benjami	n Franklin Series
Ori	ginal Mintage	Year	Original Mintage
	3,003,800	1948	3,006,814
(Rev)	5,554,000	1952S	5,526,000
	8,098,000	1950D	8,031,600
	9,522,000	1951D	9,475,200
	13,450,000	1954	13,188,203
	24,192,000	1952D	25,395,600
	Orio	(Rev) 5,554,000 8,098,000 9,522,000 13,450,000	Original Mintage Year 3,003,800 1948 (Rev) 5,554,000 1952S 8,098,000 1950D 9,522,000 1951D 13,450,000 1954

SOURCE: Yeoman P. 161-163

The values, shown in Chart 6 in the appendix, give the prices for the following six grades: F, VF, EF, AU, MS-60 and MS-63. Values were tracked for well over six months using Coin World Trends. The magnitude

of the continuing price differences between the two series is quite noticeable.

3.7 SURVIVING HALF DOLLAR MINTAGE COMPARISONS

How do the half dollar series compare to each other? The following half dollar series, as shown in Table 10, will be used to compare original with surviving mintage:

- 1) Liberty Seated (1839-1891), using original mintage
- 2) Liberty Head (1892-1915), using original mintage
- 3) Benjamin Franklin (1948-1963), using surviving mintage

Table 10
Original VS. Surviving Halves

Liberty Seated		Liber	Liberty Head		Benjamin Franklin	
Year	Mintage	Year	Mintage	Year	Mintage	
1839	1,972,400	1910S	1,948,000	1958	1,967,000	
18610	2,532,633	1900S	2,560,322	1957	2,545,000	
1854	2,982,000	1904	2,992,000	1960	3,086,000	
1843	3,844,000	1907D	3,856,000	1951D	3,790,000	
1876S	4,528,000	1900	4,762,000	1961	4,527,500	
1877S	5,356,000	19080	5,360,000	1954	5,368,500	
1875	6,027,800	(None	Available)	1949	5,614,000	
18580	7,294,000	(None	Available)	1960D	7,286,500	
1877	8,304,000	(None	Available)	1953D	8,360,000	

SOURCE: Merton P. 62-63 and Yeoman P.154-158

The values, shown in chart 7 in the appendix, are representative of the magnitude of the continuing differences in the prices between the various series.

3.8 SILVER DOLLARS

Silver dollars are the largest of the silver denominations. They were made with various designs of Liberty and Peace. All are allegorical in nature. None featured any graven image as the dimes, quarters, and half dollars did. No silver dollars were issued from 1929-1933 inclusive. In 1918, under the provisions of the Pittman Act, 270,232,722 silver dollars were melted by the United States government (Yeoman P. 167). This represented about 30.31% of the 891,627,077 silver dollars minted up to that time. Today, silver dollars are popular with collectors, particularly the Liberty Head series. In mint condition, silver dollars are valued from a few hundred dollars to several thousand dollars apiece.

From 1971 to 1981, two copper-nickel clad dollar coins, the Eisenhower and Susan B. Anthony (sarcastically referred to as the Susan B. Agony dollar) series, were minted. The Anthony dollar caused the government an unexpected problem. About 500 million are presently languishing in bank vaults and government warehouses, since they do not circulate. In MS-63 condition, individual coins from these two series can be purchased for under \$5.00. Both series are based upon the Roman concept of the graven image.

RESULTS

4.1 OVERVIEW

This chapter discusses the results of the analysis for all the coins covered in the previous chapter.

4.2 RESULTS of ORIGINAL DIME MINTAGE COMPARISONS

As chart 2 in the appendix shows, the Franklin D. Roosevelt (FDR) dimes consistently have a much lower value for coins in the same grade when compared to the Winged Liberty dimes. This is especially true for coins in Mint State. In the examples shown, except for the first pairing, the value of the MS-63 Winged Liberty is many times higher than it's FDR counterpart. As the grade increases from Very Good to Mint State, the ratio of the prices between the series increases dramatically coin for coin and grade for grade.

The 1920S Winged Liberty dime had an original mintage of 99% of the 1955D Franklin D. Roosevelt dime. According to Henry Merton's book, there were no 1955D dimes melted. Therefore, the number of dimes, for this pairing, is nearly identical on the open market. Yet, the values are vastly disproportionate in MS-63. With:

- 1) No mintage discrepancy
- 2) No melting taking place
- 3) Both coins containing 90% silver
- 4) Both coins having the same dimensions and specific gravity

the only other factor which accounts for the wide difference in price is the purpose of design. Winged Liberty, often referred to as the "MERCURY" dime, is a representation of Liberty even though the design has a strong resemblance of Mercury, an Ancient Roman pagan god. The FDR series follows the Roman concept of honoring the emperor with the graven image.

4.3 RESULTS of ORIGINAL and SURVIVING DIME MINTAGE COMPARISONS

As chart 3 in the appendix shows, the Liberty
Seated and Liberty Head series have a much higher value
for coins in the same grade when compared to both the
Winged Liberty and FDR series. This is particularly
true when comparing the Liberty Seated with both the
Winged Liberty and FDR dimes in MS-63. Why? For in the
minds of many people, there is a linkage of the Winged
Liberty to Mercury. This reduces the value of the
Winged Liberty dimes. They are valued higher than the
FDR dimes, but lower than the other two series.

The Liberty Seated dime represents the pinnacle of American ideals; Liberty. This magnificent coin has Liberty seated holding a shield with "LIBERTY" in a diagonal ribbon across it. Liberty's left hand holds a pole with a Liberty Cap Motif, the symbol of freedom which was derived from the cap given to slaves freed in ancient times.

4.4 SUMMARY for the DIMES

The Winged Liberty and FDR dimes are back-to-back series. Three pairings had nearly identical original mintage. As shown in Table 2, the 1920S Winged Liberty had a mintage of 99% of the 1955D FDR dime; the 1938 Winged Liberty had a mintage of 97.11% of the 1954S FDR dime, while the 1945 Winged Liberty had a mintage of 96.49% of the FDR dime.

For those pairings with nearly identical mintage, both original and surviving, a collector would expect to find a higher percentage of FDR dimes in the higher grades since they circulated for a much shorter period of time. However, for all pairings, in all grades, the values are much higher for the coins with the Liberty design, as shown in charts 2 and 3 in the appendix, than their FDR counterparts.

The principles of liberty have far more appeal to the American public than pagan Roman rituals. This has resulted in much higher prices for coins representing liberty compared to the coins which have the graven image of Franklin D. Roosevelt.

4.5 RESULTS of ORIGINAL QUARTER MINTAGE COMPARISONS

As chart 4 in the appendix shows, the George
Washington quarters consistently have a much lower
value for coins in the same grade when compared to the
Standing Liberty quarters. This is especially true for

coins in Mint State. In the examples shown, the value of the MS-63 Standing Liberty is many times higher than it's George Washington counterpart. As the grade increases from Good to Mint State, the ratio of the prices between the series increases dramatically coin for coin and grade for grade.

The 1919S Standing Liberty quarter had an original mintage greater than the 1937S George Washington quarter, while the 1930 Standing Liberty quarter had an original mintage of 99.51% of the 1935 Washington quarters. Yet, for both pairings, the values are disproportionate in all grades. With:

- 1) No mintage discrepancy
- No melting taking place
- 3) Both coins containing 90% silver
- 4) Both coins having the same dimensions and specific gravity

the only other factor which accounts for the wide difference in price is the purpose of design. The Standing Liberty is a representation of liberty. The George Washington series follows the Roman concept of honoring the emperor with the graven image.

4.6 RESULTS of ORIGINAL and SURVIVING QUARTER MINTAGE COMPARISONS

As chart 7 in the appendix shows, the Liberty
Seated and Liberty Head series have a much higher value

for coins in the same grade when compared to the George Washington series. This is particularly true when comparing the Liberty Seated quarters with the George Washington Quarters in MS-63. Like the dimes, the ratios of the prices are hundreds of times in favor of the Liberty Seated series.

The Liberty Seated quarter represents the pinnacle of American ideals; Liberty. This magnificent coin has Liberty seated holding a shield with "LIBERTY" in a diagonal ribbon across it. Liberty's left hand holds a pole with a Liberty Cap Motif, the symbol of freedom which was derived from the cap given to slaves freed in ancient times.

4.7 SUMMARY for the QUARTERS

The Standing Liberty and George Washington quarters are back-to-back series. Two pairings had nearly identical original mintage. As shown in Table 7, the 1927S Standing Liberty had a mintage 97.06% of the 1932S Washington Quarter, while the 1930 Standing Liberty had an original mintage of 99.51% of the 1935S Washington Quarter. With nearly identical mintage, the circulation and wear rate of the respective pairings was approximately the same. A collector would expect to find the same percentage of wear for each pairing in all grades. Statistically, both series would be, from a collectible viewpoint, indistinguishable.

4.8 RESULTS of ORIGINAL HALF DOLLAR MINTAGE COMPARISONS

As chart 6 in the appendix shows, the Benjamin Franklin halves consistently have a much lower value for coins in the same grade when compared to the Liberty Walking halves. This is especially true for coins in Mint State. In the examples shown, the MS-63 Liberty Walking is many times higher than it's Benjamin Franklin counterpart. As the grade increases from Fine to Mint State, the ratio of the prices between the series increases dramatically coin for coin and grade for grade.

Comparing the original mintage figures reveals a fascinating pattern. The 1935D Liberty Walking half had an original mintage of 99.9% of the Benjamin Franklin half. The 1952D Ben Franklin half had an original mintage of 95.32% of the 1941 Liberty Walking Half. In the middle four original mintage comparisons, the Benjamin Franklin half had a mintage that varied from 99.18% to 99.79% of the Liberty Walking Half. Yet, for all six pairings, the values are disproportionate in all grades. With:

- 1) No mintage discrepancy
- No melting taking place
- 3) Both coins containing 90% silver
- 4) Both coins having the same dimensions and

specific gravity

the only other factor which accounts for the wide difference in price is the purpose of design. The Liberty Walking is a representation of liberty. The Benjamin Franklin series follows the Roman concept of honoring the emperor with the graven image.

4.9 RESULTS of ORIGINAL and SURVIVING 50 CENT MINTAGE COMPARISONS

As chart 7 in the appendix shows, the Liberty
Seated and Liberty Head series have a much higher value
for coins in the same grade when compared to the
Benjamin Franklin series. This is particularly true
when comparing the Liberty Seated quarters with the
Benjamin Franklin halves in MS-63. Like the dimes and
quarters, the ratios are hundreds of times in favor of
the Liberty Seated series.

The Liberty Seated half has Liberty seated holding a shield with "LIBERTY" in a diagonal ribbon across it. Liberty's left hand holds a pole with a Liberty Cap Motif, the symbol of freedom which was derived from the cap given to slaves freed in ancient times.

4.10 SUMMARY for the HALF DOLLARS

The Liberty Walking and Benjamin Franklin halves are back-to-back series. As shown in Table 10, five pairings had nearly identical original mintage, with all ratios in excess of 98%! The 1952D Benjamin

Franklin half had a mintage 95.32% of the 1941 Liberty Walking half. Even with a smaller original mintage, the Walking Liberty half has a value much higher then its Benjamin Franklin half counterpart.

The original mintage of the 1876S Seated Liberty half is only 500 higher than the surviving mintage of the 1961 Benjamin Franklin half. One would expect the values, to be virtually identical. They aren't. The Benjamin Franklin half is worth a mere fraction of the 1876S Seated Liberty half.

The Benjamin Franklin half circulated for a much shorter time than the other halves series. A collector would expect to find a higher percentage of Benjamin Franklin halves in higher grades than the earlier series. Yet, the values are much higher for the coins with the Liberty designs, as shown in Charts 6 and 7 in the appendix, than their Ben Franklin counterparts.

4.11 SILVER COIN SUMMARY

The principles of liberty have far more appeal to the American public than pagan Roman rituals. This has resulted in much higher prices for coins representing liberty compared to the coins which have the graven image of Franklin D. Roosevelt, George Washington and Benjamin Franklin.

DISCUSSION

5.1 INTRODUCTION

Valuation is based upon the principles of supply and demand. This study emphasized demand, as the primary variable. Supply is a given. Within this free market relationship, the following factors influence valuation:

- 1) Aging
- Design

5.2 AGING

To many people, the age of a coin must be taken into account. There is a perception that if a coin has survived many decades or perhaps many centuries, it is highly valuable. On this assumption, genuine ancient coins should be priceless. They aren't. Coins from the biblical world often generate strong emotional, usually religious, responses. A coin which was used during the ancient Judean, Byzantine, or Church periods represent many centuries of turmoil and trauma. Despite their age and history, ancient coins are lower in price than common United States gold coins. While age is a factor, it not a prime consideration.

5.3 DESIGN

By far, the largest and most important factor determining the value of coins is the design on them. The Liberty Seated and Liberty Head series cross all

denominations (dimes, quarters and halves). Whether one compares original or surviving mintage, the coins in these series consistently had much higher values than their counterparts with the graven images.

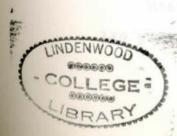
Conscientiously or otherwise, Americans prefer their coinage to represent the national goals and ideals of Liberty, Justice and Peace.

If our early presidents, Washington, and particularly Jefferson, were alive today, they would be appalled to see themselves on the national coinage. As a Unitarian, Jefferson did not believe in the use of graven images. Yet, his profile adorns the five cent piece. If he were alive today, his fury would be uncontrollable.

5.4 FUTURE RESEARCH RECOMMENDATIONS

There are numerous areas for future research. Not all can be listed. However, below are some current issues which need to be studied:

- The monetary systems of the former Soviet
 Union.
- 2) The monetary systems of the former Warsaw
 Bloc countries before they were overrun and
 held captive. The former East Germany is a
 perfect example of how cultural values are
 inconsistent. As an official atheistic
 country, the government minted a five Mark



coin in 1985 to honor the Restoration of

Dresden Women's Church. In 1983, the East

German government issued a twenty Mark coin

honoring the 500th birthday of Martin Luther.

The conflict between theory and practice was

never resolved.

- 3) The effects of computer grading on valuation.

 How does one determine what is important for
 the software to consider along with the
 ability to control the software to prevent
 unauthorized changes? An unscrupulous person
 can modify a grading program, for a
 substantial fee, to raise, or lower, the
 grades for a set of coins. Then restore the
 program back to its original configuration so
 no one will ever be the wiser.
 - The temptation counterfeiters will have with color copy machines is enormous. These nearly perfect counterfeit currencies can only be detected by the most sophisticated equipment. How do nations guarantee the integrity of their currency? This bogus money can only be detected by experts- sometimes.

5.5 CONCLUSIONS

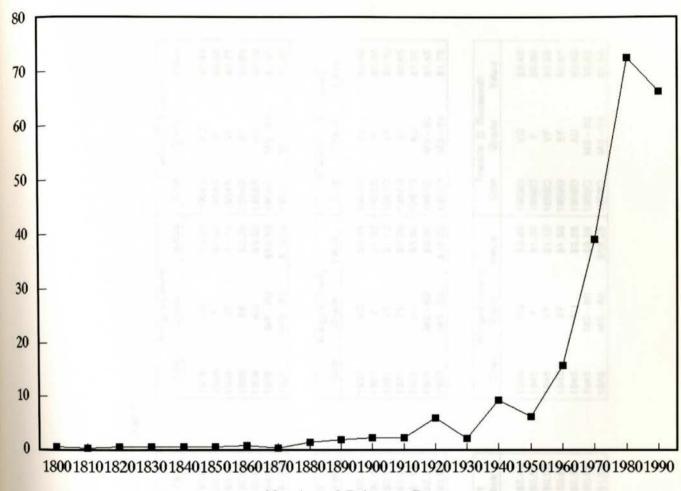
History is mankind's best teacher. For the first 140 years as a nation, our coinage reflected our

ideals. Today, in a post Soviet Union era, these same goals are beginning to blossom around the world. The rights we so often assume, and take for granted, are taking root in many countries.

Since the Great Depression, our coin designs have gone astray. The author of this study highly recommends a complete and total redesign of all American coinage, both obverse (front) and reverse (back). Traditionally, our national values never consisted of portraying early presidents, especially those who opposed the use of the graven image.

Redesigning our coinage may result in changes to our denominations, which should include a \$1 coin. The reintroduction of silver into the higher denominations will remove the fiat and debasement attitude which surrounds our present coinage. Today, we are on the threshold of our third century as a nation. As the most powerful and influential country this planet has ever seen, it deserves only the best. Let us start with inspiring designs on our national coinage.

APPENDIX



Number of Coins per Person

Chart 2

	Winged Libe	erty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
19208	VG	\$2.10	1955D	VG	\$0.80		
19205	F	\$3.50	1955D	F	\$0.80		
19208	VF	\$7.00	1955D	VF	\$0.80		
19208	EF	\$16.50	1955D	EF	\$0.85		
19208	AU	\$32.50	1955D	AU	\$0.90		
19208	MS-60	\$60.00	1955D	MS-60	\$0.95		
19208	MS-63	\$185.00	1955D	MS-63	\$1.00		

	Winged Liber	ty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
1938	VG	\$0.35	19548	VG	\$0.45		
1938	F	\$1.00	1954S	F	\$0.65		
1938	VF	\$1.10	19548	VF	\$0.75		
1938	EF	\$2.00	19548	EF	\$0.85		
1938	AU	\$3.50	19548	AU	\$0.90		
1938	MS-60	\$10.50	1954S	MS-60	\$1.20		
1938	MS-63	\$15.25	19548	MS-63	\$1.55		

	Winged Libe	rty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
1919	VG	\$2.00	1948S	VG	\$0.40		
1919	F	\$3.00	19485	F	\$0.60		
1919	VF	\$5.00	1948S	VF	\$0.70		
1919	EF	\$7.25	19485	EF	\$1.20		
1919	AU	\$13.50	1948S	AU	\$1.65		
1919	MS-60	\$24.00	19485	MS-60	\$2.75		
1919	MS-63	\$55.00	19485	MS-63	\$3.50		

	Winged Libe	rty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
1937	VG	\$0.35	1951D	VG	\$0.40		
1937	F	\$1.00	1951D	F	\$0.60		
1937	VF	\$1.10	1951D	VF	\$0.70		
1937	EF	\$2.00	1951D	EF	\$0.85		
1937	AU	\$3.50	1951D	AU	\$1.00		
1937	MS-60	\$9.00	1951D	MS-60	\$1.45		
1937	MS-63	\$16.00	1951D	MS-63	\$1.75		

	Winged Libe	rty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
1936	VG	\$0.35	1959	VG	\$0.40		
1936	F	\$1.00	1959	F	\$0.50		
1936	VF	\$1.10	1959	VF	\$0.55		
1936	EF	\$2.00	1959	EF	\$0.60		
1936	AU	\$3.50	1959	AU	\$0.65		
1936	MS-60	\$9.00	1959	MS-60	\$0.85		
1936	MS-63	\$16.00	1959	MS-63	\$1.00		

	Winged Libe	rty	Franklin D. Roosevelt				
Coin	Grade	Value	Coin	Grade	Value		
1945	VG	\$0.35	1959D	VG	\$0.40		
1945	F	\$1.00	1959D	F	\$0.50		
1945	VF	\$1.10	1959D	VF	\$0.55		
1945	EF	\$1.50	1959D	EF	\$0.60		
1945	AU	\$2.25	1959D	AU	\$0.65		
1945	MS-60	\$9.25	1959D	MS-60	\$0.85		
1945	MS-63	\$12.25	1959D	MS-63	\$1.00		

Chart 3 (Sheet 1 of 4)

Lib	erty Seated I	Dimes	Li	berty Head D	imes		oin	
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1843	VG	\$7.00	1894	VG	\$13.50	1938D	VG	\$1.50
1843	F	\$10.50	1894	F	\$52.50	1938D	F	\$1.75
1843	VF	\$24.00	1894	VF	\$70.00	1938D	VF	\$2.50
1843	EF /	\$40.00	1894	EF	\$105.00	1938D	EF	\$4.00
1843	AU	\$100.00	1894	AU	\$185.00	1938D	AU	\$9.00
1843	MS-60	\$275.00	1894	MS-60	\$300.00	1938D	MS-60	\$14.50
1843	MS-63	\$820.00	1894	MS-63	\$750.00	1938D	MS-63	\$16.00

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1872	VG	\$5.00	1893S	VG	\$10.50	1937S	VG	\$0.90
1872	F	\$7.50	1893S	F	\$20.00	19378	F	\$1.30
1872	VF	\$11.00	18935	VF	\$28.50	1937S	VF	\$1.75
1872	EF	\$30.00	18935	EF	\$50.00	19375	EF	\$3.25
1872	AU	\$110.00	18935	AU	\$120.00	1937S	AU	\$5.75
1872	MS-60	\$165.00	1893S	MS-60	\$250.00	19375	MS-60	\$14.25
1872	MS-63	\$315.00	18935	MS-63	\$465.00	1937S	MS-63	\$16.75

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
18915	VG	\$4.00	1910D	VG	\$3.00	1937D	VG	\$0.90
18915	F	\$6.75	1910D	F	\$7.50	1937D	F	\$1.30
1891S	VF	\$11.50	1910D	VF	\$15.50	1937D	VF	\$1.75
1891S	EF	\$29.00	1910D	EF	\$42.50	1937D	EF	\$3.75
1891S	AU	\$65.00	1910D	AU	\$95.00	1937D	AU	\$6.25
18915	MS-60	\$175.00	1910D	MS-60	\$210.00	1937D	MS-60	\$19.25
1891S	MS-63	\$475.00	1910D	MS-63	\$465.00	1937D	MS-63	\$27.50

Chart 3 (Sheet 2 of 4)

Lib	Liberty Seated Dimes			Liberty Head Dimes			Surviving Coin		
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value	
1856	VG	\$11.75	1915	VG	\$1.55	1954S	VG	\$0.45	
1856	F	\$16.75	1915	F	\$3.25	19548	F	\$0.65	
1856	VF	\$22.50	1915	VF	\$6.50	19548	VF	\$0.75	
1856	EF	\$65.00	1915	EF	\$19.00	19548	EF	\$0.85	
1856	AU	\$180.00	1915	AU	\$44.00	1954S	AU	\$0.90	
1856	MS-60	\$400.00	1915	MS-60	\$110.00	19548	MS-60	\$1.20	
1856	MS-63	\$750.00	1915	MS-63	\$165.00	1954S	MS-63	\$1.55	

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1883	VG	\$3.50	1908D	VG	\$1.90	1949	VG	\$1.00
1883	F	\$7.25	1908D	F	\$5.50	1949	F	\$1.25
1883	VF	\$10.00	1908D	VF	\$10.00	1949	VF	\$1.75
1883	EF	\$19.00	1908D	EF	\$27.50	1949	EF	\$2.75
1883	AU	\$52.50	1908D	AU	\$57.50	1949	AU	\$4.00
1883	MS-60	\$120.00	1908D	MS-60	\$135.00	1949	MS-60	\$10.00
1883	MS-63	\$280.00	1908D	MS-63	\$190.00	1949	MS-63	\$11.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1876CC	VG	\$3.50	19030	VG	\$3.00	1958	VG	\$0.45
1876CC	F	\$6.75	19030	F	\$5.50	1958	F	\$0.75
1876CC	VF	\$11.00	19030	VF	\$11.00	1958	VF	\$0.85
1876CC	EF	\$22.50	19030	EF	\$32.50	1958	EF	\$0.90
1876CC	AU	\$60.00	19030	AU	\$115.00	1958	AU	\$1.00
1876CC	MS-60	\$180.00	19030	MS-60	\$250.00	1958	MS-60	\$1.15
1876CC	MS-63	\$365.00	19030	MS-63	\$575.00	1958	MS-63	\$1.25

Chart 3 (Sheet 3 of 4)

Liberty Seated Dimes		Liberty Head Dimes			Surviving Coin			
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1875	VG	\$3.60	1909	VG	\$1.75	1945S	VG	\$0.35
1875	F	\$6.25	1909	F	\$3.25	19458	F	\$1.00
1875	VF	\$11.00	1909	VF	\$6.50	19458	VF	\$1.10
1875	EF	\$22.50	1909	EF	\$19.00	19458	EF	\$1.60
1875	AU	\$67.50	1909	AU	\$42.50	1945S	AU	\$2.50
1875	MS-60	\$125.00	1909	MS-60	\$100.00	1945S	MS-60	\$9.35
1875	MS-63	\$275.00	1909	MS-63	\$165.00	1945S	MS-63	\$12.00

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1976	VG	\$3.50	1910	VG	\$1.40	1941D	VG	\$0.35
1976	F	\$6.25	1910	F	\$4.25	1941D	F	\$1.00
1976	VF	\$9.00	1910	VF	\$7.50	1941D	VF	\$1.10
1976	EF	\$19.00	1910	EF	\$20.00	1941D	EF	\$1.75
1976	AU	\$55.00	1910	AU	\$45.50	1941D	AU	\$3.00
1976	MS-60	\$125.00	1910	MS-60	\$110.00	1941D	MS-60	\$9.75
1976	MS-63	\$275.00	1910	MS-63	\$170.00	1941D	MS-63	\$13.50

Coin	Grade	Value	Coin	Grade	Value
1904	VG	\$2.00	1935	VG	\$0.35
1904	F	\$5.00	1935	F	\$1.00
1904	VF	\$8.00	1935	VF	\$1.10
1904	EF	\$22.00	1935	EF	\$2.00
1904	AU	\$49.00	1935	AU	\$4.25
1904	MS-60	\$100.00	1935	MS-60	\$10.50
1904	MS-63	\$165.00	1935	MS-63	\$15.50

Chart 3 (Sheet 4 of 4)

Lib	erty Seated I	Dimes		Surviving Co	in
Coin	Grade	Value	Coin	Grade	Value
1891	VG	\$3.50	1946D	VG	\$0.40
1891	F	\$6.25	1946D	F	\$6.00
1891	VF	\$9.50	1946D	VF	\$0.70
1891	EF	\$18.00	1946D	EF 15	\$0.90
1891	AU	\$52.50	1946D	AU	\$1.00
1891	MS-60	\$120.00	1946D	MS-60	\$1.15
1891	MS-63	\$270.00	1946D	MS-63	\$1.35

Chart 4

	Standing Li	berty		Washingto	n
Coin	Grade	Value	Coin	Grade	Value
19275	G	\$7.00	19328	G	\$28.00
19275	F	\$50.00	19328	F	\$35.00
19275	VF	\$145.00	19328	VF	\$47.50
19275	EF	\$950.00	19328	EF	\$65.00
19278	AU	\$2,100.00	19328	AU	\$95.00
19275	MS-60	\$3,450.00	19328	MS-60	\$210.00
19278	MS-63	\$5,750.00	19328	MS-63	\$400.00

	Standing Lib	erty		Washington	n
Coin	Grade	Value	Coin	Grade	Value
19198	G	\$41.00	19378	G	\$1.30
19198	F	\$90.00	19375	F	\$2.85
19198	VF	\$190.00	19375	VF	\$3.50
19198	EF	\$350.00	19378	EF	\$4.00
19198	AU	\$525.00	19378	AU	\$9.00
19198	MS-60	\$650.00	19378	MS-60	\$18.00
19198	MS-63	\$1,250.00	19378	MS-63	\$25.00

	Standing Lib	erty		Washingto	n
Coin	Grade	Value	Coin	Grade	Value
1930	G	\$3.00	19358	G	\$1.90
1930	F	\$5.25	19358	F	\$4.00
1930	VF	\$13.00	19358	VF	\$5.00
1930	EF	\$26.50	19358	EF	\$7.50
1930	AU	\$55.00	19358	AU	\$16.50
1930	MS-60	\$125.00	19358	MS-60	\$42.50
1930	MS-63	\$235.00	19358	MS-63	\$70.00

	Standing Libe	erty		Washingto	n
Coin	Grade	Value	Coin	Grade	Value
1923	G	\$14.50	1938	G	\$2.40
1923	F	\$18.00	1938	F	\$3.85
1923	VF	\$22.00	1938	VF	\$7.00
1923	EF	\$35.00	1938	EF	\$9.75
1923	AU	\$65.00	1938	AU	\$24.00
1923	MS-60	\$135.00	1938	MS-60	\$35.00
1923	MS-63	\$210.00	1938	MS-63	\$45.00

	Standing Lib	erty		Washingto	n
Coin	Grade	Value	Coin	Grade	Value
1917V2	G	\$12.50	19528	G	\$0.90
1917V2	F	\$15.75	19528	F	\$1.85
1917V2	VF	\$21.75	19528	VF	\$2.00
1917V2	EF	\$40.00	19528	EF	\$2.30
1917V2	AU	\$80.00	19528	AU	\$4.50
1917V2	MS-60	\$125.00	19528	MS-60	\$7.25
1917V2	MS-63	\$210.00	19528	MS-63	\$9.75

Coin	Grade	Value	Coin	Grade	Value
1920	G	\$13.50	1950	G	\$0.90
1920	F	\$16.00	1950	F	\$1.85
1920	VF	\$23.00	1950	VF	\$2.00
1920	EF	\$35.00	1950	EF	\$2.30
1920	AU	\$65.00	1950	AU	\$2.80
1920	MS-60	\$115.00	1950	MS-60	\$3.25
1920	MS-63	\$205.00	1950	MS-63	\$4.85

Chart 5 (Sheet 1 of 3)

Liber	ty Seated C	Quarters	Libe	erty Head Q	uarters	Wa	arters	
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
18540	VG	\$13.75	19010	VG	\$22.00	1937S	VG	\$4.00
18540	F	\$22.00	19010	F	\$49.00	1937S	F	\$4.75
18540	VF	\$35.00	19010	VF	\$180.00	1937S	VF	\$11.00
18540	EF	\$77.50	19010	EF	\$295.00	1937S	EF	\$19.00
18540	AU	\$285.00	19010	AU	\$525.00	1937S	AU	\$47.50
18540	MS-60	\$950.00	19010	MS-60	\$675.00	1937S	MS-60	\$75.00
18540	MS-63	\$2,250.00	19010	MS-63	\$1,650.00	1937S	MS-63	\$92.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
<1855>	VG	\$10.00	18940	VG	\$5.75	1938S	VG	\$3.50
<1855>	F	\$20.00	18940	F	\$21.00	1938S	\ F	\$5.00
<1855>	VF	\$29.50	18940	VF	\$32.00	1938S	VF	\$8.00
<1855>	EF	\$55.00	18940	EF	\$70.00	1938S	EF	\$9.50
<1855>	AU	\$185.00	18940	AU	\$125.00	1938S	AU	\$20.00
<1855>	MS-60	\$525.00	18940	MS-60	\$315.00	1938S	MS-60	\$34.00
<1855>	MS-63	\$1,500.00	18940	MS-63	\$775.00	1938S	MS-63	\$42.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1891	VG	\$11.00	19030	VG	\$6.00	1953S	VG	\$0.95
1891	F	\$16.50	19030	F	\$21.50	1953S	F	\$1.95
1891	VF	\$27.50	19030	VF	\$40.00	1953S	VF	\$2.10
1891	EF	\$46.50	19030	EF	\$82.50	1953S	EF	\$2.80
1891	AU	\$115.00	19030	AU	\$190.00	1953S	AU	\$3.00
1891	MS-60	\$235.00	19030	MS-60	\$425.00	1953S	MS-60	\$3.25
1891	MS-63	\$475.00	19030	MS-63	\$950.00	1953S	MS-63	\$4.50

Chart 5 (Sheet 2 of 3)

Liber	ty Seated Q	uarters	Lib	Liberty Head Quarters			Washington Quarters		
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value	
1876CC	VG	\$15.00	1905	VG	\$3.25	1937	VG	\$1.85	
1876CC	F	\$24.00	1905	F	\$15.00	1937	F	\$2.85	
1876CC	VF	\$35.00	1905	VF	\$26.50	1937	VF	\$3.50	
1876CC	EF	\$70.00	1905	EF	\$55.00	1937	EF	\$4.00	
1876CC	AU	\$125.00	1905	AU	\$100.00	1937	AU	\$9.00	
1876CC	MS-60	\$350.00	1905	MS-60	\$180.00	1937	MS-60	\$18.00	
1876CC	MS-63	\$725.00	1905	MS-63	\$320.00	1937	MS-63	\$25.00	

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
			19080	VG	\$3.25	1950	VG	\$0.95
			19080	F	\$13.25	1950	F	\$1.85
NONE AVAILABLE			19080	VF	\$22.75	1950	VF	\$2.00
			19080	EF	\$50.00	1950	EF	\$2.30
			19080	AU	\$100.00	1950	AU	\$2.80
				MS-60	\$180.00	1950	MS-60	\$3.25
			19080	MS-63	\$310.00	1950	MS-63	\$4.85

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1858	VG	\$11.00	1907	VG	\$3.25	1939D	VG	\$2.90
1858	F	\$17.50	1907	F	\$13.25	1939D	F	\$3.75
1858	VF	\$22.50	1907	VF	\$22.75	1939D	VF	\$5.75
1858	EF	\$47.50	1907	EF	\$50.00	1939D	EF	\$7.50
1858	AU	\$115.00	1907	AU	\$100.00	1939D	AU	\$11.00
1858	MS-60	\$285.00	1907	MS-60	\$180.00	1939D	MS-60	\$22.50
1858	MS-63	\$665.00	1907	MS-63	\$310.00	1939D	MS-63	\$29.00

Chart 5 (Sheet 3 of 3)

Liber	Liberty Seated Quarters			Liberty Head Quarters			Washington Quarters		
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value	
1877S	VG	\$11.00	1901	VG	\$3.25	1948	VG	\$1.15	
1877S	F	\$19.00	1901	F	\$13.25	1948	F	\$1.85	
1877S	VF	\$27.50	1901	VF	\$22.75	1948	VF	\$2.00	
1877S	EF	\$45.00	1901	EF	\$50.00	1948	EF	\$2.30	
1877S	AU	\$120.00	1901	AU	\$100.00	1948	AU	\$2.60	
1877S	MS-60	\$250.00	1901	MS-60	\$185.00	1948	MS-60	\$3.25	
18775	MS-63	\$525.00	1901	MS-63	\$310.00	1948	MS-63	\$4.75	

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1877	VG	\$11.50	1898	VG	\$3.50	1951	VG	\$0.95
1877	F	\$16.00	1898	F	\$13.50	1951	F	\$1.85
1877	VF	\$21.00	1898	VF	\$23.00	1951	VF	\$2.00
1877	EF	\$45.00	1898	EF	\$50.00	1951	EF	\$2.30
1877	AU	\$110.00	1898	AU	\$100.00	1951	AU	\$2.50
1877	MS-60	\$235.00	1898	MS-60	\$190.00	1951	MS-60	\$3.25
1877	MS-63	\$500.00	1898	MS-63	\$310.00	1951	MS-63	\$5.25

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1876	VG	\$11.00				1945	VG	\$1.15
1876	F	\$16.00				1945	F	\$1.85
1876	VF	\$21.00				1945	VF	\$2.00
1876	EF	\$45.00	N	ONE AVAILA	BLE	1945	EF	\$2.30
1876	AU	\$110.00				1945	AU	\$3.50
1876	MS-60	\$235.00	100			1945	MS-60	\$4.00
1876	MS-63	\$500.00	hit.			1945	MS-63	\$4.50

Chart 6

	Liberty Walk	ing	Benjamin Franklin				
Coin	Grade	Value	Coin	Grade	Value		
1935D	F	\$4.10	1948	F	\$5.00		
1935D	VF	\$8.00	1948	VF	\$6.00		
1935D	EF	\$24.50	1948	EF	\$7.00		
1935D	AU	\$47.50	1948	AU	\$9.00		
1935D	MS-60	\$85.00	1948	MS-60	\$16.00		
1935D	MS-63	\$175.00	1948	MS-63	\$26.50		

Li	berty Walki	ng	E	Benjamin Fran	nklin
Coin	Grade	Value	Coin	Grade	Value
1917S(Rev)	F	\$15.00	19528	F	\$1.90
1917S(Rev)	VF	\$22.50	1952S	VF	\$4.00
1917S(Rev)	EF	\$40.00	19525	EF	\$5.00
1917S(Rev)	AU	\$87.50	1952S	AU	\$9.75
1917S(Rev)	MS-60	\$200.00	19525	MS-60	\$26.00
1917S(Rev)	MS-63	\$975.00	1952S	MS-63	\$35.00

	Liberty Walk	ing	Benjamin Franklin				
Coin	Grade	Value	Coin	Grade	Value		
19415	F	\$3.75	1950D	F	\$3.85		
1941S	VF	\$5.25	1950D	VF	\$3.90		
19418	EF	\$9.00	1950D	EF	\$4.45		
19415	AU	\$32.50	1950D	AU	\$8.50		
19415	MS-60	\$75.00	1950D	MS-60	\$27.50		
19415	MS-63	\$105.00	1950D	MS-63	\$40.00		

	Liberty Walki	ng	Benjamin Franklin				
Coin	Grade	Value	Coin	Grade	Value		
1937	F	\$3.50	1951D	F	\$1.90		
1937	VF	\$5.25	1951D	VF	\$5.00		
1937	EF	\$7.00	1951D	EF	\$6.40		
1937	AU	\$16.00	1951D	AU	\$9.50		
1937	MS-60	\$32.50	1951D	MS-60	\$30.00		
1937	MS-63	\$42.50	1951D	MS-63	\$47.50		

	Liberty Walk	ing	Benjamin Franklin				
Coin	Grade	Value	Coin	Grade	Value		
1943S	F	\$3.75	1954	F	\$1.90		
19438	VF	\$5.00	1954	VF	\$2.75		
1943S	EF	\$8.00	1954	EF	\$3.40		
1943S	AU	\$22.50	1954	AU	\$5.00		
19435	MS-60	\$35.00	1954	MS-60	\$8.50		
1943S	MS-63	\$47.50	1954	MS-63	\$11.00		

	iberty Walkin	ng	Benjamin Franklin			
Coin	Grade	Value	Coin	Grade	Value	
1941	F	\$3.50	1952D	F	\$1.90	
1941	VF	\$4.50	1952D	VF	\$2.75	
1941	EF	\$6.00	1952D	EF	\$3.75	
1941	AU	\$9.75	1952D	AU	\$5.00	
1941	MS-60	\$25.00	1952D	MS-60	\$11.00	
1941	MS-63	\$37.50	1952D	MS-63	\$15.00	

Chart 7 (Sheet 1 of 3)

Lib	Liberty Seated Halves			Liberty Head Halves			Benjamin Franklin Halves		
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value	
1839	F	\$49.00	19108	F	\$26.00	1958	F	\$3.00	
1839	VF	\$85.00	19108	VF	\$55.00	1958	VF	\$3.50	
1839	EF	\$145.00	1910S	EF	\$155.00	1958	EF	\$5.00	
1839	AU	\$205.00	19108	AU	\$275.00	1958	AU	\$6.00	
1839	MS-60	\$425.00	19108	MS-60	\$400.00	1958	MS-60	\$8.50	
1839	MS-63	\$2,350.00	19108	MS-63	\$1,850.00	1958	MS-63	\$9.50	

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
18610	F	\$41.75	19008	F	\$32.50	1957	F	\$2.15
18610	VF	\$52.50	1900S	VF	\$65.00	1957	VF	\$3.25
18610	EF	\$85.00	1900S	EF	\$180.00	1957	EF	\$4.00
18610	AU	\$150.00	1900S	AU	\$285.00	1957	AU	\$5.00
18610	MS-60	\$450.00	1900S	MS-60	\$475.00	1957	MS-60	\$7.50
18610	MS-63	\$1,375.00	1900S	MS-63	\$1,650.00	1957	MS-63	\$11.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
<1854>	F	\$40.00	1904	F	\$22.00	1960	F	\$1.90
<1854>	VF	\$50.00	1904	VF	\$52.50	1960	VF	\$2.25
<1854>	EF	\$140.00	1904	EF	\$125.00	1960	EF	\$2.75
<1854>	AU	\$280.00	1904	AU	\$240.00	1960	AU	\$3.00
<1854>	MS-60	\$600.00	1904	MS-60	\$345.00	1960	MS-60	\$5.50
<1854>	MS-63	\$1,600.00	1904	MS-63	\$825.00	1960	MS-63	\$7.00

Chart 7 (Sheet 2 of 3)

Lib	Liberty Seated Halves		Lit	Liberty Head Halves			Benjamin Franklin Halves		
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value	
1843	F	\$40.00	1907D	F	\$26.00	1951D	F	\$1.90	
1843	VF	\$55.00	1907D	VF	\$53.50	1951D	VF	\$5.00	
1843	EF	\$85.00	1907D	EF	\$120.00	1951D	EF	\$6.40	
1843	AU	\$155.00	1907D	AU	\$255.00	1951D	AU	\$9.50	
1843	MS-60	\$370.00	1907D	MS-60	\$370.00	1951D	MS-60	\$30.00	
1843	MS-63	\$875.00	1907D	MS-63	\$655.00	1951D	MS-63	\$47.50	

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1876S	F	\$30.50	1900	F	\$22.00	1961	F	\$1.90
1876S	VF	\$36.00	1900	VF	\$52.50	1961	VF	\$2.25
1876S	EF	\$68.00	1900	EF	\$125.00	1961	EF	\$2.75
1876S	AU	\$150.00	1900	AU	\$240.00	1961	AU	\$3.00
1876S	MS-60	\$440.00	1900	MS-60	\$335.00	1961	MS-60	\$5.00
1876S	MS-63	\$850.00	1900	MS-63	\$625.00	1961	MS-63	\$7.00

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1877S	F	\$31.50	19080	F	\$27.00	1954	F	\$1.90
1877S	VF	\$37.50	19080	VF	\$57.50	1954	VF	\$2.75
1877S	EF	\$68.00	19080	EF	\$135.00	1954	EF	\$3.40
1877S	AU	\$150.00	19080	AU	\$245.00	1954	AU	\$5.00
1877S	MS-60	\$400.00	19080	MS-60	\$345.00	1954	MS-60	\$8.50
1877S	MS-63	\$875.00	19080	MS-63	\$645.00	1954	MS-63	\$11.00

Chart 7 (Sheet 3 of 3)

Lib	erty Seated H	Halves	Lit	perty Head Ha	lves	Benj	amin Franklin	Halves
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1875	F	\$30.50	100	7	14.00	1949	F	\$4.50
1875	VF	\$43.00				1949	VF	\$5.00
1875	EF	\$70.00	N	ONE AVAILA	BLE	1949	EF	\$6.00
1875	AU	\$145.00	100			1949	AU	\$10.00
1875	MS-60	\$325.00	100			1949	MS-60	\$29.00
1875	MS-63	\$750.00		1000-000		1949	MS-63	\$57.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
18580	F	\$32.00				1960D	F	\$1.90
18580	VF	\$47.50				1960D	VF	\$2.25
18580	EF	\$77.50	N	ONE AVAILA	BLE	1960D	EF	\$2.75
18580	AU	\$155.00				1960D	AU	\$3.00
18580	MS-60	\$450.00				1960D	MS-60	\$5.00
18580	MS-63	\$1,225.00				1960D	MS-63	\$7.00

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1877	F	\$30.50				1953D	F	\$1.90
1877	VF	\$36.00	1364			1953D	VF	\$2.75
1877	EF	\$68.00	N	ONE AVAILA	BLE	1953D	EF	\$3.75
1877	AU	\$140.00	Talta			1953D	AU	\$5.00
1877	MS-60	\$325.00	41004			1953D	MS-60	\$9.25
1877	MS-63	\$800.00	7555			1953D	MS-63	\$14.00

Chart 8 (Sheet 1 of 2)

	Shield			Liberty Hea	ıd		Jefferson	
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1868	F	\$5.55	1903	F	\$4.00	1951	F	\$0.07
1868	VF	\$7.50	1903	VF	\$6.00	1951	VF	\$0.15
1868	EF	\$17.75	1903	EF	\$17.00	1951	EF	\$0.30
1868	AU	\$38.50	1903	AU	\$45.00	1951	AU	\$0.35
1868	MS-60	\$70.00	1903	MS-60	\$72.50	1951	MS-60	\$0.40
1868	MS-63	\$140.00	1903	MS-63	\$120.00	1951	MS-63	\$0.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1876	F	\$16.00	1886	F	\$105.00	1950D	F	\$5.50
1876	VF	\$24.00	1886	VF	\$145.00	1950D	VF	\$6.00
1876	EF	\$37.50	1886	EF	\$220.00	1950D	EF	\$7.00
1876	AU	\$75.00	1886	AU	\$325.00	1950D	AU	\$7.50
1876	MS-60	\$165.00	1886	MS-60	\$465.00	1950D	MS-60	\$7.75
1876	MS-63	\$305.00	1886	MS-63	\$625.00	1950D	MS-63	\$8.00

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1882	F	\$60.00	1884	F	\$15.00	1948S	F	\$0.20
1882	VF	\$72.50	1884	VF	\$23.00	1948S	VF	\$0.35
1882	EF	\$120.00	1884	EF	\$42.50	1948S	EF	\$0.60
1882	AU	\$175.00	1884	AU	\$67.50	1948S	AU	\$0.70
1882	MS-60	\$265.00	1884	MS-60	\$120.00	1948S	MS-60	\$0.80
1882	MS-63	\$350.00	1884	MS-63	\$190.00	1948S	MS-63	\$0.90

Chart 8 (Sheet 2 of 2)

	Shield			Liberty Hea	d		Jefferson	
Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1872	F	\$7.50	1894	F	\$26.00	1938D	F	\$0.75
1872	VF	\$9.75	1894	VF	\$55.00	1938D	VF	\$1.00
1872	EF	\$21.00	1894	EF	\$125.00	1938D	EF	\$1.50
1872	AU	\$39.00	1894	AU	\$135.00	1938D	AU	\$2.75
1872	MS-60	\$92.50	1894	MS-60	\$150.00	1938D	MS-60	\$3.50
1872	MS-63	\$155.00	1894	MS-63	\$240.00	1938D	MS-63	\$4.50

Coin	Grade	Value	Coin	Grade	Value	Coin	Grade	Value
1869	F	\$6.00	1883	F	\$14.00	1943D	F	\$1.00
1869	VF	\$8.25	1883	VF	\$21.00	1943D	VF	\$1.50
1869	EF	\$18.50	1883	EF	\$35.00	1943D	EF	\$2.85
1869	AU	\$39.00	1883	AU	\$62.50	1943D	AU	\$3.15
1869	MS-60	\$75.00	1883	MS-60	\$95.00	1943D	MS-60	\$4.15
1869	MS-63	\$150.00	1883	MS-63	\$150.00	1943D	MS-63	\$5.65

Chart 9 (Sheet 1 of 2)

	In dian Hea	d		Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1861	G	\$11.00	1912D	G	\$3.75
1861	VG	\$13.75	1912D	VG	\$4.25
1861	F	\$19.50	1912D	F	\$6.50
1861	VF	\$35.00	1912D	VF	\$14.50
1861	EF	\$70.00	1912D	EF	\$28.00
1861	AU	\$105.00	1912D	AU	\$53.50
1861	MS-60	\$160.00	1912D	MS-60	\$90.00
1861	MS-63	\$265.00	1912D	MS-63	\$135.00

	In dian Head	i		Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1885	G	\$3.75	19245	G	\$0.65
1885	VG	\$4.00	19248	VG	\$0.75
1885	F	\$9.00	19248	F	\$1.10
1885	VF	\$16.00	19248	VF	\$2.50
1885	EF	\$25.00	19245	EF	\$10.50
1885	AU	\$38.50	19248	AU	\$24.50
1885	MS-60	\$67.50	19248	MS-60	\$85.00
1885	MS-63	\$115.00	19248	MS-63	\$210.00

	In dian Head			Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1909	G	\$1.00	1933	G	\$0.95
1909	VG	\$1.25	1933	VG	\$1.00
1909	F	\$2.00	1933	F	\$1.10
1909	VF	\$3.00	1933	VF	\$1.20
1909	EF	\$8.50	1933	EF	\$2.50
1909	AU	\$15.00	1933	AU	\$8.00
1909	MS-60	\$24.50	1933	MS-60	\$15.50
1909	MS-63	\$45.00	1933	MS-63	\$25.00

	In dian Head	1		Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1884	G	\$2.50	1925D	G	\$0.20
1884	VG	\$2.95	1925D	VG	\$0.30
1884	F	\$4.00	1925D	F	\$0.50
1884	VF	\$9.00	1925D	VF	\$1.90
1884	EF	\$16.50	1925D	EF	\$7.00
1884	AU	\$32.50	1925D	AU	\$13.00
1884	MS-60	\$50.00	1925D	MS-60	\$45.00
1884	MS-63	\$95.00	1925D	MS-63	\$60.00

1600	In dian Head	1		Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1881	G	\$2.00	1921	G	\$0.17
1881	VG	\$2.50	1921	VG	\$0.23
1881	F	\$3.50	1921	F	\$0.50
1881	VF	\$6.00	1921	VF	\$1.05
1881	EF	\$12.00	1921	EF	\$5.50
1881	AU	\$16.00	1921	AU	\$9.00
1881	MS-60	\$28.50	1921	MS-60	\$30.00
1881	MS-63	\$60.00	1921	MS-63	\$45.00

	In dian Head	1		Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1893	G	\$0.95	1920S	G	\$0.20
1893	VG	\$1.25	19208	VG	\$0.25
1893	F	\$1.95	1920S	F	\$0.60
1893	VF	\$3.50	19205	VF	\$1.15
1893	EF	\$9.00	19205	EF	\$4.00
1893	AU	\$15.00	19205	AU	\$12.00
1893	MS-60	\$23.00	19208	MS-60	\$42.00
1893	MS-63	\$47.50	19208	MS-63	\$150.00

Chart 9 (Sheet 2 of 2)

Indian Head			Lincoln		
Coin	Grade	Value	Coin	Grade	Value
1897	G	\$0.85	19298	G	\$0.15
1897	VG	\$1.15	19298	VG	\$0.20
1897	F	\$1.50	19298	F	\$0.30
1897	VF	\$2.50	19298	VF	\$0.40
1897	EF	\$8.50	19298	EF	\$1.40
1897	AU	\$13.75	19298	AU	\$3.00
1897	MS-60	\$22.00	19298	MS-60	\$8.00
1897	MS-63	\$47.00	19298	MS-63	\$16.00

7	Indian Head			Lincoln		
Coin	Grade	Value	Coin	Grade	Value	
1905	G	\$0.70	1940D	G	N/A	
1905	VG	\$0.85	1940D	VG	N/A	
1905	F	\$0.95	1940D	F	\$0.30	
1905	VF	\$1.75	1940D	VF	\$0.50	
1905	EF	\$6.00	1940D	EF	\$0.60	
1905	AU	\$13.00	1940D	AU	\$0.95	
1905	MS-60	\$19.50	1940D	MS-60	\$1.30	
1905	MS-63	\$41.00	1940D	MS-63	\$1.75	

-	Indian Head			Lincoln	
Coin	Grade	Value	Coin	Grade	Value
1906	G	\$0.70	1947S	G	N/A
1906	VG	\$0.85	19478	VG	N/A
1906	F	\$0.95	19478	F	\$0.16
1906	VF	\$1.75	1947S	VF	\$0.22
1906	EF	\$6.00	1947S	EF	\$0.26
1906	AU	\$13.00	1947S	AU	\$0.35
1906	MS-60	\$19.50	1947S	MS-60	\$0.50
1906	MS-63	\$41.00	19478	MS-63	\$0.60

Works Cited

- American Numismatic Association (ANA). Counterfeit

 Detection A reprint from the Numismatist
 (1988): 1-4
- American Numismatic Association (ANA). "Membership of Office Population Report" <u>Letter</u> (Fall 1992)
- Bureau of the Census. Phone Call (Fall 1992)
- Coin World. The Basics of Collecting Money (1989): 31
- Coin World. Many articles concerning counterfeit coins.
- Department of the Treasury. <u>Domestic and Foreign Coins</u>
 <u>Manufactured by Mints of the Unites States, 1793-1980</u>: 20, 24
- Editors of Coin World. Coin World Almanac (1990): 362, 528-530
- Krause, Chester L., and Clifford Mishler. <u>Standard</u>
 <u>Catalog of World Coins</u> 20th Edition (1993): 222048
- Merton, Henry A. The Big Silver Melt (1983): 1-5, 11, 56-63
- Sear, David R. Roman Coins and Their Values 4th Revised Edition. (1988): 15
- Sear, David R. Greek Coins and Their Values (1979): xxi
- Sear, David R. <u>Byzantine Coins and Their Values</u> (1987):
- The Torah. Book of Genesis: 23:9, 23:15
- The World Book Encyclopedia. Vol. 13 (1979): 592, 593
- The World Book Encyclopedia. Vol. 16 (1979): 448
- The World Book Encyclopedia. Vol. 21 (1979): 386
- Yeoman, R.S. <u>A Guide Book of United States Coins</u> 45th Edition (1992): 4, 5, 7, 9, 59, 65, 119-128, 133-142, 154-158, 161-164, 175, 176