

CHAPTER 1

What's All the Fuss About?

THE LURE OF PRECIOUS METALS

“Good as gold,” “silver lining,” “platinum record”—these familiar expressions are all references to supreme value. It is not a coincidence that precious metals are interwoven into concepts of value, good fortune, and accomplishment. Examine each metal, one by one.

Gold

See it. Hold it. Move it from hand to hand and bring it up to the light. If you have ever seen and held an ingot of pure 24-karat gold you know it is not just a commodity. There is something fascinating about this metal. I believe it truly has mystical powers over human emotions. When I was 12 years old, I visited the Federal Reserve vault in New York City to see the so-called backing for the U.S. currency. Gold and silver were still linked to the money supply. It was illegal for private U.S. citizens to own bulk quantities of gold. There it was. Bricks of gold lay before me in absolute glowing splendor. I was excited. I was moved! After all, I was being raised on stories of pirates and treasure rather than *Beavis and Butthead* or *South Park*. My father told me about spending gold. He gave me a \$5 gold piece just before my visit to the vault. Gosh, it was fun. I'll never forget it. Perhaps that is why gold has held a unique place in the hearts and minds of men and women. It is the world's most beautiful metal by any standard.

Years after my visit to the New York Federal Reserve, I was invited into the vault of a private bullion dealer. It was just after the U.S. gold pro-

hibition had been lifted in 1975. Although the quantity I saw there was not as impressive as that in the New York Federal Reserve, I was invited to lift the pure ingots. Some readers will understand when I say the weight-to-size ratio is astounding. We all may know gold is one of earth's heaviest elements. Yet, to lift a gold brick with a grunt or feel a hand-sized ingot that weighs a more than two pounds is totally unexpected, enlightening, and exhilarating. There is simply nothing like it. No matter how unemotional you may want to be toward this metal, a personal encounter with gold in bulk is a profound experience for most of us.

Virtually every society holds gold as a symbol of value. Whether it has been demonetized by governments and central banks or is remonetized, gold maintains a parity relationship with all the world's currencies. Simply put, gold is a fact of human existence and I doubt we will ever mature to the point where we all consider it just a commodity.

From the time I had my personal encounter to the hours I spent writing this book, I have always enjoyed my gold craving. This is not to say that I am a "gold bug." In fact, from 1980 through the turn of the millennium/century, I was more of a bear than a bull. Still, the craving persisted like a sugar junkie trying to give up chocolate. I love to see and feel pure gold ingots. It's delightful. It's fascinating. It is awe-inspiring. The effect gold has on people is its very salvation. Reality suggests that gold has limited usefulness beyond its perceived value. Industrial demand, although extremely important, is fractional in relation to investment demand. It is said that most of the gold mined throughout history is accounted for today. Very little gold is totally consumed. Most is stored and sometimes worshiped.

Silver

Turn your attention to silver. Although silver may be less mouthwatering to some, you need only see a proof-struck coin to understand how silver rose to reverence. With its mirror complexion and white sparkle, silver represents the perfect complement to gold. Together, silver and gold form a complete picture. If you don't believe me, make an effort to view polished gold and silver side by side. I doubt you could honestly say you had absolutely no urge to own a bit of each.

From my first birthday through my teens, I had an uncle who sent me one silver dollar each year—one for my first year, two for my second, and so on. Every so often, I would go into my closet and take out the thick cotton bag with a reddish brown drawstring that safely held my silver stash. Although it was hardly appropriate treatment for the venerable coins, I enjoyed clinking them into a small pile. (I admit that I polished one even after being told it would adversely affect its value.) Like gold, silver has an



Silver dollars surround U.S. \$10 and \$20 gold pieces.

innate appeal. Maybe this is because of its reflective properties. Perhaps it is the ring when a silver coin is dropped just right. It is a lustrous metal that beautifully applies to eating and serving utensils, jewelry, mirrors, and ornaments.

At dawn, the sky lights up with a fiery golden hue. In the evening, the moon reflects a silvery pattern on an ocean, a lake, or a bay. Gold and silver are the most inspiring colors in nature. If you disagree, examine our literature. Study the history. Nothing on earth short of life itself has been more revered than gold or silver. That's what the fuss is about.

Platinum

Of course, the family is not really complete. Platinum joins silver and gold with its appealing bright and deep silvery shine. The weight and uncanny hardness add to the attraction. This is a difficult metal to refine. It is relatively new in our history, yet it has made remarkable inroads as a supreme value. Platinum has character all to itself. As we will examine, this metal along with its sisters palladium and rhodium can claim unique chemical properties. Unlike gold, with its stability and noble physical properties,

the platinum group is reactive. Platinum's tight molecular lattice provides catalytic capabilities for small-molecule compounds like hydrocarbons. Platinum is a valuable industrial commodity with vast applications and irreplaceable functions.

Platinum's unique color and resistance to oxidation have elevated it to the highest standard for jewelry. Most importantly, platinum's hue blends more attractively against pronounced skin color, which makes it desirable in Asian countries and the Indian subcontinent. Platinum jewelry demand in China and Japan as well as India have created an important price influence that rivals jewelry demand for gold.

Given the current rarity of platinum group metals in combination with increasing uses in industry and personal ornamentation, there is an important role for platinum in any precious metals investment strategy.

Palladium

The trio of gold, silver, and platinum represented the precious metals group for most of the twentieth century. Yet palladium is an important member of the platinum group and enjoys expanding popularity. Until 1989, palladium remained relatively obscure. Its first real public appearance came with the announcement of cold fusion by two University of Utah professors in March of that year. Palladium was hailed as the potential source of clean, cheap, limitless energy. Prices surged from less than \$100 to more than \$180 per ounce. When cold fusion was condemned as fraud and folly by the scientific community, palladium prices promptly plunged to a low under \$78 per ounce. However, an impression was made.

Very modest interest in cold fusion continues and may eventually result in a commercially feasible process using palladium. Later chapters review this potential in greater detail. In the aftermath of the initial cold fusion fiasco, palladium gained other respectability as a substitute for platinum in automotive and truck catalytic converters. This is not to say that cold fusion was the reason palladium was used for catalytic applications. It is to say that the news gave rise to more palladium awareness.

Palladium also gathered momentum with the explosive growth in electronic components, dental alloys, and chemical processes. As we will review, technology trends and environmental concerns are a driving force behind demand for this metal.

Rhodium

Are you familiar with rhodium? With the exception of exotic and forbidden metals like purified uranium and plutonium, rhodium has held some of the most spectacular values per ounce of any precious metal. Rhodium

saw prices above \$7,000 per ounce in the 1980s. It is vital for certain processing technologies and is essential in the three-way catalytic converter. When you consider a metal that can vary more than \$4,000 an ounce, you are looking at the ultimate speculative precious metal—for now.

Unfortunately, as of this writing, rhodium can be traded only as a cash commodity. There are no futures contracts or exchange-traded options for rhodium. This dearth means investors cannot use leverage to participate in rhodium trading. In addition, it is difficult to buy rhodium if you are not a dealer or user. In short, rhodium is not an easy investment.

ORIGINS OF PRECIOUS METALS

In addition to examining precious metals investing, it is helpful to understand the metals themselves. What is gold? Where did it come from? Is there some cosmic reason why it is so rare and intriguing? Similar questions apply to silver, platinum, and palladium. To appreciate their place in our universe, we must go back in time to the very beginning of matter. Most of us are aware of the big bang theory. It postulates that our universe and all within it formed in a huge cosmic explosion billions of years ago. Obviously, this massive event involved enormous heat and energy that we are just beginning to comprehend through advanced nuclear physics. In reality, we have very little understanding about the origins of matter. The world's greatest minds are still pondering the forces that bind the universe together. Scientists continue searching for a universal theory that explains how and why the cosmos in its entirety functions. You may hear about new unified field theories and perfect symmetry. Eventually, someone will get it right. However, this book focuses on the formation of the elemental chain or periodic table, which is reasonably established through observation.

The first element was hydrogen, the building block of all elements and first on the periodic table with an atomic weight of 1.008. Hydrogen is the primary fuel of the galaxies. It is believed that huge hydrogen clouds condensed under gravity in the early universe. As these massive clouds contracted, enormous pressures began building until hydrogen fused into helium. This process powers most visible stars.

Stellar fusion does not end there. Throughout billions of years, all of a star's hydrogen is eventually fused into helium. Because helium is a denser element, greater forces build up, causing helium to fuse into lithium. As elemental fusion climbs up the periodic table, a star implodes to the point where forces cause an explosion or a black hole. If a star explodes into a nova or supernova, there is a chance it will be reborn.

This is believed to be the process that formed our own sun. The debris or stardust is thought to be the origin of planets. In effect, everything in our physical world is stardust. It stands to reason that the higher the element is on the periodic table, the later its evolution in the fusion process. In addition, it seems logical that the fusion process in higher elements did not last as long as primary reactions. Thus, many higher elements on the table are also more rare. As a percentage of matter in the universe, gold and the platinum group are among the smallest. Not only are these metals rare on earth, it is reasonable to assume they are rare throughout existence. Having established this fact, we might conclude that precious metals truly have a universal appeal if scarcity is a primordial determinant of value. Not only would humankind value these metals, so might any other civilizations sprinkled throughout the universe.

WHY PRECIOUS METALS ARE PRECIOUS

Of course, the positions of precious metals on the periodic table are not their only basis for value. Virtually all precious metals exhibit extraordinary properties that establish value based on function. Moreover, from an earthly viewpoint, gold, silver, and the platinum group are uniquely deposited throughout the globe. Mining and refining processes are difficult. Discovery is tedious. Recovery is expensive. All of this adds to the allure of precious metals. As later chapters explain, each metal has a vital industrial or monetary role.

Eventually, technology or invention can displace usage. By the same token, technology or invention can create new roles and applications. There are strong indications that precious metals may account for political and monetary power at some point in the future. Control over these metals may represent control over government and society. I can assure even the most skeptical reader that my personal love affair with precious metals is shared by most of the world's populations. The psychological attraction binding us to precious metals defines their primary role. Ownership is a sign of power. Power is a means to dominate. For now, humans are an aggressive species. This implies that power and dominance will continue as our motivation throughout the twenty-first century and beyond. If gold, silver, and platinum group metals gain monetary or industrial significance, those who own will be those who lead. This is what the fuss is about.

If you are a citizen of the industrialized West, your perspective is probably much different from that of a citizen of the Far East, Middle East, or India. Throughout most cultures, gold is as much a symbol as a

monetary standard. Consider the simple wedding band: a symbol of love, dedication, and a contract between husband and wife. The ring may weigh only a few grams and have a purity of less than 14 karats. Yet when multiplied by the number of married couples, these small items can amount to robust annual demand that expands with the overall population. More importantly, from 1972 forward, liquidity and wealth began more rapid expansion in regions where a wedding can call for as much as a kilo of gold among even lower classes.

As later chapters detail, liquidity, population, and tradition are likely to dictate the next major gold trends. This will be extremely important as investors decide which precious metals offer speculative opportunities. Only gold carries the extensive ritualistic significance that can define demand.

To a lesser extent, silver can perk up as weddings increase. We are all familiar with Grandma's silver service. Unfortunately, convenience and the fast pace of modern living have tarnished the tradition of "bringing out the silver." Few within the general population have the time or inclination to set a proper table, let alone polish the silver. It is possible for tradition to come full circle. At some point, we may return to elegant and formal dining with appropriate sterling silver settings. However, the current trend points to a declining number of brides registering for silver services. Thus, it is unlikely silver can count on an increase among global populations to the same extent as gold. Some may argue that silver's future lies in its primary industrial application: photography. As global populations become more sophisticated and wealthy, demand for photographic records will grow. More importantly, we should see a steady rise in demand for professional photography, X-ray, and photolithographic printing. Travel, a new baby boom, emerging newspapers and magazines, upgraded health care—the list of positive factors for silver goes on and on.

Of course, not every cloud has its silver lining. Technology, which gave silver its industrial life, could soon take a toll on the so-called white metal. Computer imaging and digital photography loom on the horizon as the greatest threat to as much as 30 percent of all annual silver production. As decreasing photographic demand for silver accelerates, can new technologies absorb the slack? Applications that include silver biostatic properties and electrical conductivity may eventually dwarf photography as the primary industrial application for silver. For investors, the question is, "When?"

It is interesting that precious metals are among the least understood investments. Perhaps this is because few people are aware of historical roles for these elements. Even the most sophisticated investors may harbor distorted views of how gold and silver have been used over the centuries. Essentially, the view of precious metals may be clouded by all the

fuss. Is it surprising to learn that gold and silver have played very brief roles as global monetary instruments? Is it shocking to find that precious metals have not performed well as long-term investments? Is it unimaginable to discover that precious metals are among the weakest hard-asset performers?

Understand that much of the modern-day fuss about precious metals was spawned by only two events. First was the gold rush that began in the western United States in 1849. This was the first inspiration for a dramatic increase in gold supply since the discovery and early exploration of the New World. Although many Americans narrowly believe the gold rush was limited to the United States, those with a more general knowledge are aware that the event circled the globe and lasted through 1920. (In fact, there is a gold rush today.)

The second great event was the post-energy crisis inflation of the 1970s that pushed precious metals to unthinkable heights and threatened to unravel our trust in the global monetary system. Silver approached \$50 an ounce (See Figure 1.1). Gold reached levels above \$800 (See Figure 1.2). Platinum soared to \$1,000 an ounce, and palladium blasted beyond \$400.

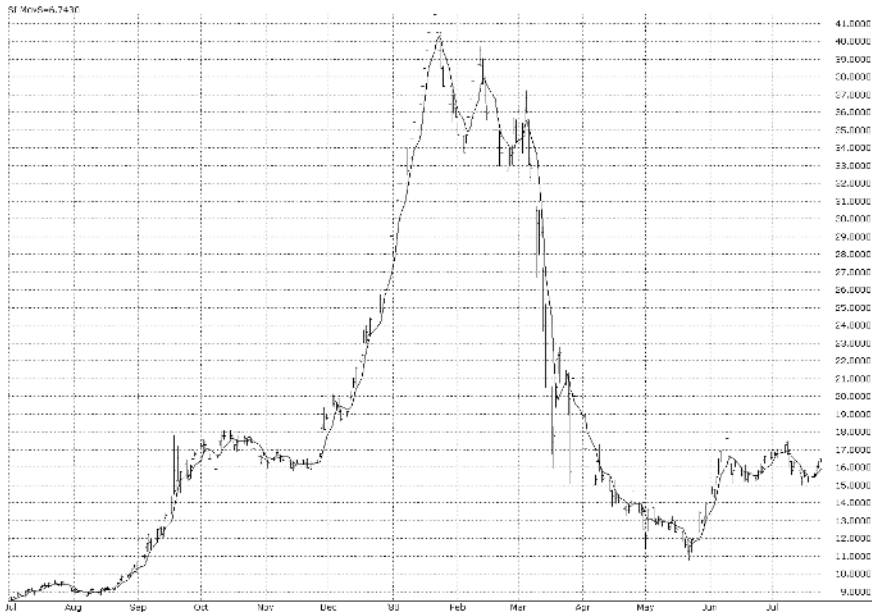


FIGURE 1.1 Silver made its most memorable move of the twentieth century during 1979–1980. Inflation fears and a speculative scheme by the Hunt brothers drove prices to spectacular levels. (Source: eSignal.com)

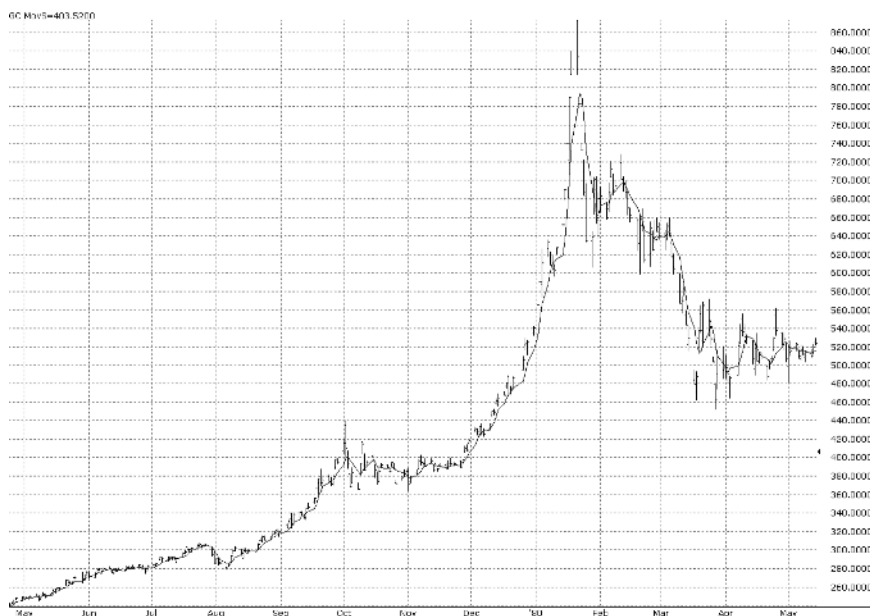


FIGURE 1.2 Gold followed silver in what were labeled the go-go years for precious metals (1978–1980). (Source: eSignal.com)

These were truly spectacular price movements that occurred from 1978 through 1980. As speculative vehicles, precious metals had no match. It seems this single event left an indelible impression among investors and converted gold, silver, platinum, and palladium into would-be investments.

Many may argue that this book should emphasize major events like the use of metal to back currency. They might claim that it should consider the gold realignment of the U.S. dollar by President Franklin Delano Roosevelt. What about the confiscation of gold from U.S. citizens? American history features the Bretton Woods Agreement and President Richard Nixon's closing of the U.S. gold window. Obviously, there are many important developments in the history of precious metals. Although the book may touch on these events, a complete historical perspective is beyond its scope and goal.

HOW PRECIOUS METALS WILL REMAIN PRECIOUS

Rather than simply recap history, it is essential to understand traditional roles and traditional market structures. Obviously, gold and silver have

played significant monetary and political roles. Platinum and palladium have not. The key to understanding the new nature of precious metals markets is to evaluate whether traditional roles can return or if new roles will emerge. Will people ever carry gold or silver coins again? Will central banks ever return to a monetary standard based on silver or gold values? Is the real opportunity in industrial applications like platinum fuel cells, silver-based computer memory cards, gold plasma “sono-luminescence” reactors, or superconductive alloys? In other words, it may be time to turn our attention away from tradition toward the new and different. The future of these markets and associated speculative opportunities depends on such an altered perspective.

Perhaps a historical overview tells us we will always have a special interest in precious metals. That may be the extent of what we can learn from the past. Our history in its entirety has been brief. Consider that if four generations span each century, recorded history covers fewer than 400 generations. People may be surprised to discover that much of what they believe about silver and gold is myth. Yes, gold has been worshiped for centuries but infrequently used as money. Copper and silver have been vehicles for exchange. Patterns and trends suggest this may continue to be true in the future. Major events can cause a revolution in precious metals as well as an evolution.