

Silver Supply-Crisis Looms

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February 28, 2010

I have spent a considerable amount of time discussing how a supply-crunch is looming in the gold market. With retail investment demand soaring, and central banks switching from large, net-sellers to large net-buyers, the world's gold-shortage will continue to intensify - despite the fact that nearly every ounce of gold ever mined still exists (in some form) around the world. Of course, countless thousands of tons of this gold is incorporated into some of the world's most-revered artefacts and religious symbols - and thus (for all intents and purposes) it is gone forever.

Meanwhile, mine production has remained essentially flat - despite a quadrupling of the price of gold over the last decade. While there has been a slight hiccup in supply in 2009, it is difficult to see this as a sign of a changing trend - given that with the exception of China, production of gold for all the world's major gold-producers has been flat or falling.

This comes in a world with both rapid population-growth and rapid income-growth in many of the world's "developing economies". This is of huge significance to the precious metals markets since a) these economies represent the majority of the world's population; and b) they are cultures with strong, historical attachments to precious metals. With both population-growth and income-growth exceeding the increase in supply of precious metals, these rare commodities are literally becoming more precious every day.

As I have also discussed, the supply/demand dynamics of the silver market are vastly different from the gold market. It is those differences which guarantee that the looming spike in the price of silver will be several multiples greater than the increase in the price of gold.

Regular readers are familiar with the two, key differences between the gold market and the silver market. First, silver is the world's most-versatile metal. It has been the source of more new patents than for any other metal. This has resulted in many market-Neanderthals mistakenly concluding that silver is an "industrial metal", not a precious metal.

There can be no absolutely no doubt that silver is a precious metal, in every respect. It has the same malleability and aesthetic appeal of all other "precious metals", which is why it has been widely used (equally with gold) for jewelry, and as the best "money" our species has ever devised (see "What is Money?"). This has been the case for nearly 5,000 years.

It is because of the vast uses for silver in a nearly infinite number of current and future industrial applications that the second, different dynamic exists in the silver market: most of the world's refined silver has been effectively "consumed" - and is gone forever.

Because silver is so truly "precious", in many of silver's industrial uses it is used in trace-amounts. In such tiny quantities, there is no practical/economic way to recycle this silver. It is because of the enormous industrial demand for silver that decades of price-fixing by the anti-gold cabal of Western bankers has had a much greater impact on the silver market than the gold market.

It is elementary economics that any good which is under-priced will be over-consumed. The more radically under-valued the good, the more extreme the over-consumption. The consequences are clear: more than 90% of the world's silver stockpiles and inventories are gone, forever (see "History of Silver, Part III: Inventories Gone").

Thus, at a time when decades of over-consumption have nearly totally depleted the world's available silver, the gold/silver price ratio remains near an historical extreme - in gold's favor. With the amount of elemental silver in the Earth's crust approximately 17 times the amount of elemental gold, it is no surprise that for 5,000 years the gold/silver price-ratio has averaged 15:1.

Today, the gold/silver price-ratio has been ranging between 60:1 and 70:1. This ratio would be totally unsustainable even if all of the world's silver were still available for demand - rather than gone forever. However, with 90% of the world's available silver gone, what this means is that the gold silver price-ratio is at its most-radical extreme (by at least a factor of ten) than at any other time in 5,000 years.

This comes at a time when all of the world's (respected) gold commentators are stating unequivocally that the current price of gold dramatically undervalues that metal, as well. While it is very difficult to come up with estimates of total, available gold versus total available silver, some analysts have attempted to make such estimates. They vary widely, and thus do not have much analytical value - except to observe that the highest ratio of available silver to available gold that I have seen is 6:1. At the other extreme, some analysts are suggesting there is now more available gold in the world than silver.

The price-fixing in the gold market is leading to an obvious "squeeze" - which is becoming more and more difficult for the bankers to hide, even with their bogus, "bullion-ETF's" radically diluting the investor dollars flowing into this sector (see "Even Gold Experts Fooled by Bullion-ETF's"). However, this will be purely a "market event", in that the consequence will be a massive rise in the price of gold, and the destruction of the "gold shorts" - who are sitting with the largest concentration of "short" positions in the history of commodities, but it will have little direct impact on our economies.

In contrast, when the looming silver supply-crisis strikes this will produce a global, industrial crisis. Unlike gold, which must only satisfy investment/monetary demands, silver is becoming an essential raw material of the 21st century global economy. This can be illustrated by simply listing some of the current and future industrial uses of this most-precious metal.

Power

As I have mentioned in previous commentaries, silver has reflective, chemical, and conductive properties which are superior to all other metals. This provides two key uses for silver in the production of solar energy. As the world's most-reflective metal (reflecting 97% of all solar energy), silver is used to make the world's best mirrors - a vital component of solar energy production. In addition, because silver is such a superb catalyst, it also can improve the efficiency of "solar cells", by being blended with these semi-conductor materials to increase the power-output of any such power unit by approximately 12% (as reported by The Silver Institute).

In an energy-starved world, it is already a "given" that the entire world will have to dramatically increase the percentage of power from such clean-and-"green" power sources. With "peak oil" an obvious reality, and thus oil prices certain to increase to multiples of the current price, even a sharp rise in the price of silver would not reduce the demand for this power source, and there is no substitute for silver - as peak efficiency of these solar power units must be achieved for solar energy to be a viable energy source (in any kind of large-scale applications)

In the U.S. alone, 5 million ounces of silver are used each year in the production of mirrors. However, the vast majority of such production are of conventional mirrors (i.e. what we hang on our walls), since solar power is in its infancy. As this application grows in importance, those U.S. consumption numbers can be expected to jump dramatically. Projecting that consumption over the entire globe, and it is easy to see global demand for silver - just for mirrors/solar energy - amounting to several, hundred million ounces per year.

For those nations not willing (or able) to undertake the massive capital investments (and environmental risks) associated with becoming reliant upon nuclear power, solar energy will continue to become a more attractive alternative to fossil fuels.

In the massive, global "battery" market, the newest generation of batteries uses a silver-oxide compound, replacing the previous generation of lithium-ion batteries. The silver-based batteries are not only much more "environmentally friendly" than the lithium batteries, but also contain no flammable compounds - which have caused (for example) a number of lap-top computers to spontaneously burst into flame. This is making silver-based batteries the new battery of choice for mobile phones and lap-top computers (along with many other electrical applications). With these markets increasing exponentially - on a global basis - silver consumption in batteries is also just in its infancy.

Medicinal/Hygienic

As important as silver is becoming as a power source, that usage of silver is destined to be eclipsed by the consumption of silver due to another one of its superior properties: as an anti-bacterial agent. I have stressed this particular, new explosion in demand on a number of previous occasions, most recently in "Silver Upholstery the Newest Source of Demand".

The number of potential applications in this area is nearly-infinite, thus the uses listed below comprise only a small sample of silver's potential in this area. Its anti-bacterial uses can be divided into hygiene-based applications along with genuine "medical" applications.

In the former category, the first use of silver on a massive, commercial level has been to use silver in clothing. It is used in socks, and other military-issue clothing because its anti-bacterial properties retard the development of bacterial infection - eliminating a hygiene problem which has plagued armies for thousands of years.

However, because it is bacteria which is the source of human odor from perspiration, the use of silver in sportswear has exploded into one of the largest, single applications of silver. As I have mentioned previously, this one usage already consumes more than 1,200 TONS of silver per year - used in the manufacturing of 50 million tons of polyester sportswear (annually), alone.

Once again, current consumption of silver for this usage is merely beginning. In the world's largest commercial-materials trade show, a fabric-maker called CF Stinson Company just won the 2009 "Gold Award for Healthcare Fabrics" for producing the world's first commercially-available silver upholstery.

The potential usage in this one category of silver consumption is nothing short of mind-boggling. Obviously, every hospital will at least consider the cost/benefits of using silver upholstery in all of its furnishings - given that the spread of (anti-biotic resistant) bacterial infections in hospitals is one of THE most serious health-issues in the world's hospitals.

Data from the UK shows that 300,000 hospital patients/visitors/workers currently develop bacterial infections from those hospitals each year. Worse, the biggest aspect of this problem is in the spreading of anti-biotic resistant bacterial strains, most-notably MRSA ("Methicillin-Resistant Staphylococcus").

This rapidly-growing problem is expected to result in 5,000 deaths per year. Putting aside the terrible, human consequences of those deaths, legal liability from all those hospital-based infections could threaten the solvency of medical systems all over the world - now that science has unlocked the power of silver to win a battle against 'bugs' which was already lost using anti-biotics.

What is most significant about silver's anti-bacterial properties (compared to every other anti-bacterial substance currently known to science) is that it biologically impossible for bacteria to ever develop "resistance" to silver-based compounds.

Thus in addition to using silver alloys in all sorts of hospital tools and surfaces, in addition to using it in hospital clothing and gowns, and in addition to using it in hospital upholstery, a Scottish-based company is currently working with Scotland's medical authorities to perfect a silver-based nasal ointment and antiseptic body-wash to use on people/patients to disinfect them before they are admitted to hospitals.

With this bacterial infection problem spreading globally on an exponential basis, silver-based applications to fight this problem must also increase at least as quickly.

In the world outside of our hospitals, we can expect the usage of silver as an anti-bacterial agent to amount to somewhere between ten times and 1,000 times the amount of silver used inside of hospitals. Obviously if silver is being widely used in hospitals then such usage must also spill-over into all the world's doctor's offices and clinics - both medical and dental.

Once usage spreads in these areas, it is virtually certain that transportation companies would be next to follow-suit. With public transportation (from buses to jets) one of the primary mechanisms for breeding and spreading dangerous diseases, it would be no surprise at all to see the vast majority of global transportation companies to begin to switch to silver-based upholstery for all their seating - and very likely other anti-bacterial uses as well.

At that point, it would be inevitable for anti-bacterial silver applications to show up in all public institutions. Following that, it will naturally spread to applications inside our homes. The more that the spread of these super-bugs causes problems, deaths, and fear, the faster these anti-bacterial silver applications will spread.

Lack of space prevents me from getting into dozens of the other huge, current uses for silver (for instance, 1 out of every 7 pairs of glasses sold in the U.S. has a silver coating). Furthermore, as the price of gold rises, and gold jewelry becomes unaffordable for much of the world's population, obviously silver jewelry will take its place (unless any brave soul wants to suggest to the women of the world that they stop wanting/wearing jewelry).

The future uses for the world's most-versatile metal are only limited by our imagination. The Silver Institute has compiled a list of some of the usages which show tremendous promise for the future. How about silver bandages which literally heal our wounds, along with providing a protective covering? For cancer patients, scientists are working on silver "micro-cubes" - which could be planted beneath the skin, "hunt down" tumors, and then could be triggered beneath our skin (with laser light) and their chemotherapy "pay-load" then directly unleashed inside these tumors. Such targeted use of chemotherapy should not only result in higher cure-rates, but also reduce the extremely unpleasant consequences of chemotherapy - where it is currently used in more of a "brute force" method.

As I have stressed in previous commentaries, beyond the massive quantities of silver which will be demanded for these countless uses, it is the fact that silver is generally consumed in trace amounts which assures that the price of silver is headed to a three-digit number, some time this decade.

Because silver is used in such minute amounts, this means the price of silver could literally increase ten-fold - and only have a tiny impact on demand for many of these large-scale uses. For example, silver represents only 1/40,000th of the total inputs in polyester sportswear, by weight - and there is no possible substitute.

What this means is that unlike the supply-crunch which is coming for the gold market - and which will (eventually) take gold to several multiples of its current price, when the (imminent) silver supply-crisis hits, we can expect the price of silver to increase to several times its current price virtually over-night.

This will come from a combination of two factors. First of all, current inventories have been exaggerated (by 300%) - through the incredibly transparent sham of adding all the bogus, banker-paper of the silver "bullion-ETF's" to "official inventories". This has occurred despite the fact that all of this silver is (by definition) privately-held (and thus not for sale), and despite the fact there is no proof that this "ETF-silver" even exists (see "Your ETF-silver is For Sale").

Secondly, as I've illustrated previously, unlike gold, the demand for silver will be from industrial users, not investors or speculators. With these users needing silver, having no possible substitute available, and with their consumption being (for the most part) totally unaffected by price, these industrial users will buy \$100/oz silver just as readily as they are buying it at \$16/oz.

This is bad news for JP Morgan - the largest silver-short in the history of the world - who will have to compete with all these industrial users for supplies of silver which are obviously inadequate to satisfy industrial demand - let alone allow JP Morgan to "cover" one ounce of the hundreds of millions of ounces of silver short-positions which JP Morgan (and a couple of its fellow Oligarchs) are sitting on.

This gives all silver investors two reasons to look forward to the future: first, to see their investment multiply in value, and second to watch the bankers eat tens of billions of dollars in losses on their short positions - or (much more likely) simply engage in the largest commodities default in the history of human commerce, destroying the COMEX fraud-factory once and for all.

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