

## Our Rationale for Investing in Physical Gold

*This paper was disseminated to Passport Capital Investors on Jan 14, 2010*

- We remain constructive on gold as a long-term investment. There are several trends in place that we believe are supportive of a higher gold price.
- The demand outlook for gold is favorable in our opinion. The long-term risk of inflation is widely appreciated, and we believe this will support strong investment demand for the foreseeable future. We believe jewelry demand in India will return, perhaps at lower volumes, when price volatility subsides. China will continue to gain strength as a market for jewelry for years to come.
- We believe the supply outlook for gold is also supportive of higher prices. We believe that mined supply, which peaked in 2001, is in a long-term downward trend. We feel that the ability of above-ground gold stocks to satisfy demand is undergoing structural change, and markets may be overestimating their ability to satisfy an increase in demand at current gold prices.
- We believe 2009 will mark an important shift in central banks' behavior in the gold market, as they emerge as a net source of demand – not supply – for the first time in over two decades. An attempt by central banks collectively to affect even a slight shift in their gold holdings as a percentage of their overall reserves could have a powerful impact on prices. The potential impact of such a change on the gold market should not be underestimated.
- We believe the paper-based process that discovers the price of gold may understate its true value. If the price of gold is being understated, rational behavior for investors would be to buy and hoard the metal. We believe this is happening, as investors increasingly purchase physical gold and take it off the market.
- A situation potentially unfolding in the gold market is similar to a short squeeze on a stock. As short sellers depress the price of the stock by shorting the stock naked, buyers may take advantage of the mispricing and start accumulating the stock. Eventually, enough stock will have gravitated to a few hands so that the remaining free float is not sufficient to cover the borrowing needs of short sellers setting the stage for a price spike. We believe that gold is susceptible to a similar squeeze as the metal gravitates to investors who have little intention of lending or selling it at current prices, and central banks step back from the market as a provider of liquidity.
- Holders of paper-based instruments that derive value from gold may not realize expected gains in the event of such a squeeze. To profit from such an event we believe investors must be positioned to deliver physical gold into the market. The Hunt brothers' squeeze on the silver market three decades ago is an interesting parallel in history that suggests a physical squeeze on a precious metals market is possible, and that exchanges may change rules to protect the stability of markets in ways that do not necessarily benefit those holding futures positions.
- Given our bullish view on gold, combined with the possibility that the price discovery process for gold understates the metal's value and leaves it susceptible to a short squeeze, Passport Capital is an owner of allocated, physical gold.

## Gold – A Primer for Our Investors

*“If we immerse ourselves wholly in day-to-day affairs, we cease making fundamental distinctions, or asking the really basic questions. Soon basic issues are forgotten and aimless drift is substituted.” – Murray Rothbard*

*“In the absence of the gold standard, there is no way to protect savings from confiscation through inflation [...] Gold stands in the way of this insidious process. It stands as a protector of property rights.” – Alan Greenspan*

Investors frequently ask us our view on gold. We can think of few subjects that evoke as much interest. We have written this document to share with our investors how we think about gold so that they might better understand this enigmatic commodity, and why we have chosen to invest in physical gold. Our understanding of gold is deeply rooted in the origin of money, banks, central banking and fiat currencies. We start with brief and simplified discussions on these topics. Readers familiar with this may choose to skip ahead.

### Gold, Money and Banking

Gold is a commodity, and like every commodity gold has intrinsic value. In that respect gold is no different than copper, cotton, iron ore, or any other commodity. Gold has value because humans covet it, especially in the form of jewelry. For whatever reason – perhaps because its unique glow seems to capture the radiance of the sun – humans have always been drawn to the metal, and have willingly exchanged it for goods and services. 5,000 years ago Egyptians were mining gold and fashioning jewelry out of it. Gold is uniquely suited to be used in jewelry, more so than any other metal: gold is immediately recognizable by its distinctive yellow color; it is rare; it does not tarnish; and, importantly, it is malleable and can be easily fashioned into jewelry. People have historically ascribed more value to gold than most other commodities not because it is endowed some mystical property, but because it is more rare. People are willing to part with more goods and services for an ounce of gold than an ounce of copper because there is a lot more copper to go around.

Invention of money was one of the great innovations in human civilization because it allowed societies to evolve beyond barter and allowed trade to flourish. Societies with barter markets tend to have massive inefficiencies. The problem with barter is that to engage in trade one must have a coincidence of wants. For example, in a barter economy if you want apples and you are willing to offer corn in exchange, you must find someone who has apples and wants corn. Over time people figured out it was far more efficient to first exchange a good or service for a commodity that was widely in demand, and in turn trade that commodity for what they wanted. The commodity that served this function was called money. The exchange ratio, or price, of a good was discovered by free market forces of supply and demand: the supply of the good versus the supply of the commodity used as money. Metals, corn, barley, salt, fur, shells, tobacco and other commodities have served as money over centuries. Over time, free markets have gravitated toward two commodities for use as money: gold and silver. The properties that made gold and, to a lesser extent, silver uniquely suited for use as jewelry also make it uniquely suited for use as money. Easily recognizable, inert, durable, divisible, fungible, malleable, geographically widely dispersed, and rare, gold was widely acknowledged as the perfect money.



***Lydian gold coin from 600 BC***

Because it was inefficient to use pieces of jewelry as money, gold was molded into recognizable shapes and weights. These were the first gold coins, the earliest of which was issued over 2,600 years ago. While gold coins were more closely associated with money than jewelry, they derived value not from their shape, size or stamp but by weight of gold they contained. In a free market anyone could mint gold coins. Like any other business coin minters would charge a fee for their

service, perhaps an ounce of gold for every hundred ounces minted into coins. Historically, governments have tended to monopolize this business. There is a simple reason for this: it allows governments to control and manipulate the money supply. Who would notice if a government reduced the weight of gold coins ever so slightly or added base metals to the gold? (The expression “debase” derives from this.) The gold siphoned off thus could be spent on other ventures that governments could not, or perhaps preferred not to, fund by taxing citizens.

People who produced more than they consumed ended up with a surplus of gold. For safety reasons people with large surpluses of gold preferred storing it in gold warehouses. These warehouses were the first banks. Like any warehouse, these first banks made money by charging customers a fee for safekeeping customers’ goods (gold) and provided them with receipts that they could exchange for their stored goods. Over time, people figured out that instead of using physical gold in trades, they could simply trade gold receipts. This was an early version of paper money backed by gold. This innovation allowed people to avoid carrying around heavy gold coins, and the coins were not subject to wear and tear. With this innovation most of the gold never really had to leave the bank, which created an interesting opportunity. Bankers realized if they lent out a fraction of the gold to someone who needed a loan – say to an entrepreneur who wanted to start a new business – and the debtor promised to return the gold at a future date, plus a bit more for the service, the bank could make a profit on the side. This scheme would work so long as all the bank’s customers did not try to redeem their gold receipts at the same time. This is the origin of fractional reserve banking, possibly the most important innovation in the history of money. Fractional reserve banking was inherently inflationary because it caused the number of gold receipts circulating in the economy to increase. Consider this scenario. A bank is capitalized with a customer depositing 100 ounces of gold and in return issues the customer 100 gold receipts. At this point 100 gold receipts are circulating in the economy chasing whatever goods and services that economy produces. Now, the bank issues 20 gold receipts to someone as a loan. There are still only 100 ounces of gold in the vault, but there are now 120 gold receipts circulating in the economy. This could drive up prices as the supply of money might have increased relative to the economy’s output. (The economy’s output could also have increased as the availability of credit unleashes entrepreneurs in the economy and increases its productive capacity.) As activity in the economy increases there is more demand for credit, and more gold receipts circulate in the economy. In this way, fractional reserve banking creates a flexible money supply where the demand for credit, and banks’ willingness to extend it, increases or decreases the amount of money circulating in the economy.

Because banks issued more receipts than they had gold in their vaults, at any given time banks had only a fraction of the gold needed to honor their liabilities. If all depositors claimed their gold at the same time, the bank would need to recall all the credit they had issued. This was generally not possible as the duration of the credit that banks extended often did not match the duration of their liabilities. So, if depositors became concerned that the bank may not in fact have their gold and simultaneously converged on the bank demanding their gold, the bank was forced to shut down. This is the classic run on a bank, a phenomenon we have borne witness to recently. To deal with the problem of runs on banks, bankers devised a solution: banks would form a cartel and create a “central” bank. Member banks would turn over their gold to the central bank, and in exchange the central bank would issue gold receipts to member banks. Member banks would stop printing their own receipts and only the central bank’s receipts would circulate in the economy as money. In this structure, in the event of a run on any one bank other banks could lend them their excess reserves. The only way this system would likely fail was if there was a run on all banks simultaneously. Nearly all countries today operate under some version of this structure, with a central bank capitalized by reserves from other banks, and notes issued by the central bank circulate in the economy as money.

## The Dollar and Gold

The Founding Fathers selected gold and silver to serve as money in the United States starting with the Mint Act of 1792. The dollar was defined as 1.604 grams of gold or 24.1 grams of silver. By the turn of the twentieth century the dollar was redefined as 1.505 grams of gold, which implied a conversion ratio of dollars to gold ounces of 20.67-to-1. It is important to recognize that the price of gold was not fixed in dollars. Rather, the dollar was defined as a weight of gold, which is to say the dollar was gold.



**Federal Reserve Notes were originally “Redeemable in gold on demand at the United States Treasury, or in gold or lawful money at any Federal Reserve Bank”**

In the absence of a central bank in the United States, banks were prone to runs. After a severe financial crisis in 1907 that saw multiple runs on banks, Congress voted to create a central bank. On December 23, 1913, President Woodrow Wilson signed the Federal Reserve Act bringing the Fed into existence. Banks across the United States joined the Federal Reserve System and turned in their gold to the Fed in exchange for Federal Reserve Notes. These notes were backed by the gold that capitalized the Fed.

In 1932, in the midst of the Great Depression, Franklin D. Roosevelt was elected president on the platform of the New Deal. Americans became increasingly concerned FDR would have to inflate the monetary base to finance the New Deal to the point where gold convertibility would not be honored. This led to a run on the dollar as Americans exchanged their dollars for gold and in some cases moved their gold out of the country. Banks saw deposits dwindle as dollars were redeemed for gold. To stem the run on the dollar, in 1933 FDR made it illegal for Americans to own gold. Americans were forced to turn in all their gold to the government in exchange for US dollars at the 1-to-20 conversion ratio. Once the confiscation was complete, FDR promptly changed the conversion price to 35 dollars, an act of taxation by inflation that effectively transferred 40% of the gold held by the Fed for American citizens to the US government. However, the US dollar was still not completely severed from gold. While American citizens could not redeem dollars for gold, foreign governments were permitted to redeem dollars accumulated in international trade for gold.



**FDR confiscated Americans' gold in 1933**

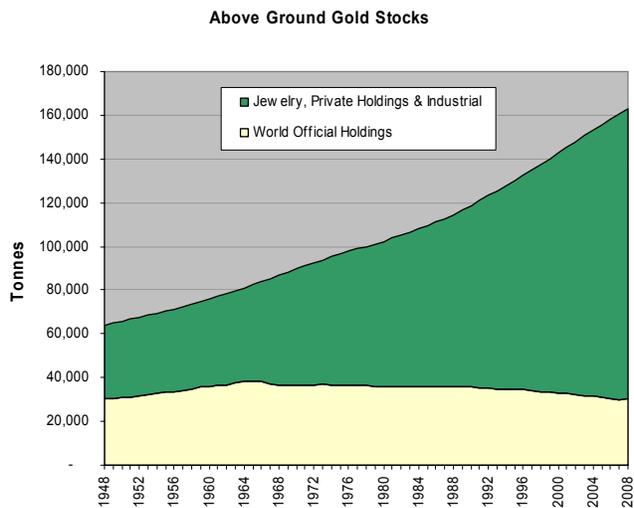
The United States emerged from World War II as the country with the strongest link to gold. European countries had severely inflated their currencies to fund the Wars and did not have provisions for converting their currencies to gold. Following the War, countries across the world decided to return to the gold standard, but in a somewhat circuitous way. The United States agreed to keep the dollar convertible to gold at the ratio of 35-to-1 for foreign governments. Foreign governments agreed to peg their currencies to the US dollar at pre-determined ratios. The United States agreed to actively intervene in the gold market to keep the price of gold at \$35, and foreign countries agreed to actively intervene in foreign exchange markets to maintain their currency's peg to the dollar. Conceptually, the dollar was defined in gold terms, and all other currencies were defined in dollar terms, so by extension the entire world was on the gold standard. This was the essence of the Bretton Woods agreement. If the US inflated the supply of dollars excessively, it risked a run on the dollar as foreign countries could trade in their dollars for gold at the fixed exchange ratio. This was, in theory, supposed to keep the United States honest. The United States, however, did inflate its currency to fund an increasing balance of payments deficit. An increasing number of dollars circulating in the world with respect to gold meant that the free market price of gold tended higher than the \$35 peg. To maintain the peg, the US intervened actively in the gold market in London and Zurich and sold gold from the Fed's vaults. From 1948 to 1972 the United States' official gold holdings fell from 21,682 tonnes to 8,584 tonnes. In March 1968 the US stopped intervening in the gold market and allowed the free market price of gold to rise. However, the US agreed that foreign governments would still be allowed to convert dollars to gold at the \$35 peg. The two-tier system that separated the free market price of gold from central banks' price did not work for long. Foreign governments, who were piling up overvalued US dollars, grew increasingly concerned about holding a depreciating asset and pursued their option to convert their dollars to gold. In August 1971, facing a dwindling gold stock and an increasing numbers of foreign governments exchanging dollars for gold, Nixon reneged on the covenant of convertibility. It is instructive to review Nixon's TV address as it offers a cynical reminder of how governments react in times of financial crisis and how they tend to rationalize their actions.

*"In the past seven years, there has been an average of one international monetary crisis every year. Now who gains from these crises? Not the working man; not the investor; not the real producers of wealth. The gainers are the international money speculators. Because they thrive on crises, they help to create them. In recent weeks, the speculators have been waging an all-out war on the American dollar. The strength of a nation's currency is based on the strength of that nation's economy and the American economy is by far the strongest in the world. Accordingly, I have directed the Secretary of the Treasury to take the action necessary to defend the dollar against the speculators. I have directed Secretary Connally to suspend temporarily the convertibility of the American dollar... Now, what is this action – which is very technical – what does it mean for you? Let me lay to rest the bugaboo of what is called devaluation. If you want to buy a foreign car or take a trip abroad, market conditions may cause your dollar to buy slightly less. But if you are among the overwhelming majority of Americans who buy American-made products in America, your dollar will be worth just as much tomorrow as it is today. The effect of this action, in other words, will be to stabilize the dollar." – Richard Nixon, August 1971*

Nixon blamed the inescapable consequence of inflating the monetary base beyond bounds imposed by reserves backed by gold on "international monetary speculators" as the United States refused to honor its obligations under Bretton Woods. The two-tier system was abandoned, the direct association between the dollar and gold was severed, and currencies were allowed to float against each other. The dollar, however, maintained its status as the principal global reserve currency. This is the world in which gold and currencies are priced today.

## Gold – Supply, Demand and Price

The history of gold gives us critical insight into the metal. First, because gold has historically served as money, it continues to derive demand as an alternative to government-issued fiat money. Second,



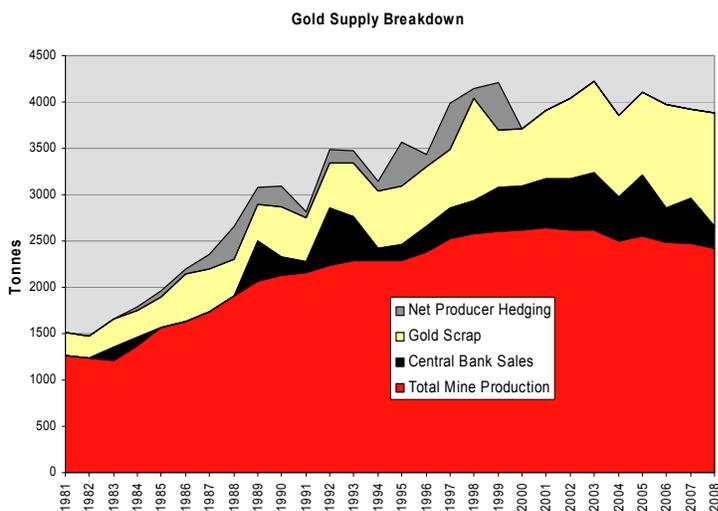
Source: JP Morgan Research

**Above-ground stocks have increased ~1.5x since 1948**

the price of gold is inextricably linked to the supply of and demand for dollars. While gold is priced in multiple currencies, our comments on the price of gold refer specifically to the US dollar price of gold. It is entirely possible that the price of gold in different currencies will move in a different direction than the price of gold in dollars. In order to have a view on gold, it is necessary to have a view on dollars. Forces that impact the supply of and demand for dollars – central bank policy, demand for credit in the economy and banks’ ability and willingness to extend it, the propensity of the US government to issue debt and willingness of foreign governments to purchase it, the status of US dollars as the currency for settlement of international trade, and faith in fiat money – will impact the price of gold. For now we assume things are static in the world of dollars and take a closer look at the forces that impact the supply of and demand for gold.

## Supply

Most of the gold ever mined is still available today and virtually all of it is potential supply. In this aspect, gold is different than most commodities. Unlike energy and soft commodities, gold is not consumed or irreversibly transformed.



Source: Macquarie Research

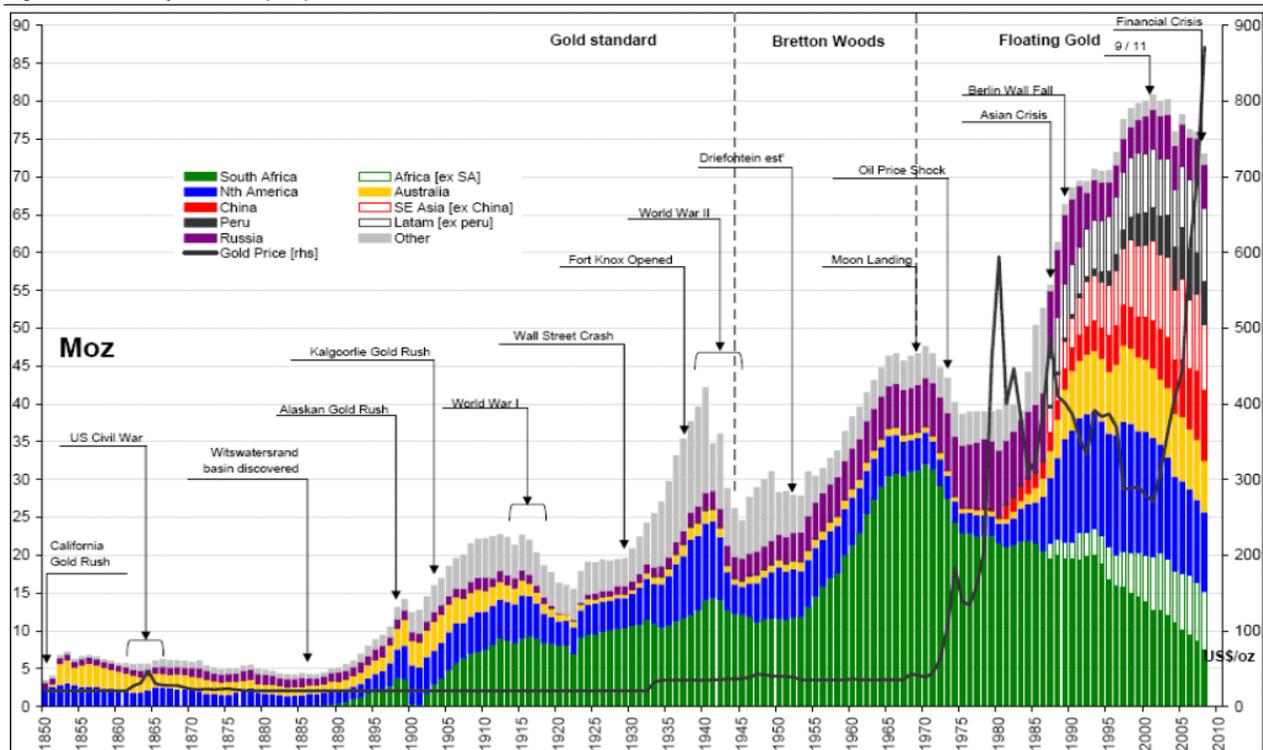
**Scrap supply has spiked as mine supply has retreated**

Unlike industrial commodities like copper and iron ore, gold is typically not tied up in long cycle applications, embedded within cables and concrete. It is relatively easy and inexpensive to smelt gold jewelry and reintroduce it back into the market as supply. The availability of massive above-ground stocks that can turn into supply at the right price has historically tempered spikes in the price of gold.

Since 1948 above-ground stocks of gold have increased about 145%, as mines have dug more gold out of the earth using modern exploration and mining technologies. Mine supply, however, is now in decline among the historically major producing countries of South Africa, United States, Australia and Canada. The declining supply from mature mining districts has been partially offset by the emergence of China as a major producer in recent years. The increase in production in China, the former Soviet Union and Peru, however, has not been able to stem the global trend of declining mine production. As the chart below shows, mine supply peaked in 2000-2001 and appears to be in secular decline, even as gold prices have risen from a low of \$256 in 2001 to over \$1000 in recent years. Higher gold prices over

a span of several years have not induced the expected response of higher supply. Gold is the most widely prospected mineral on earth, and notwithstanding more capital being allocated to gold exploration – from about \$1 billion in 2002 to \$4 billion in 2007 – the rate of discovery of gold

**Fig 1 World mine production (Moz)**



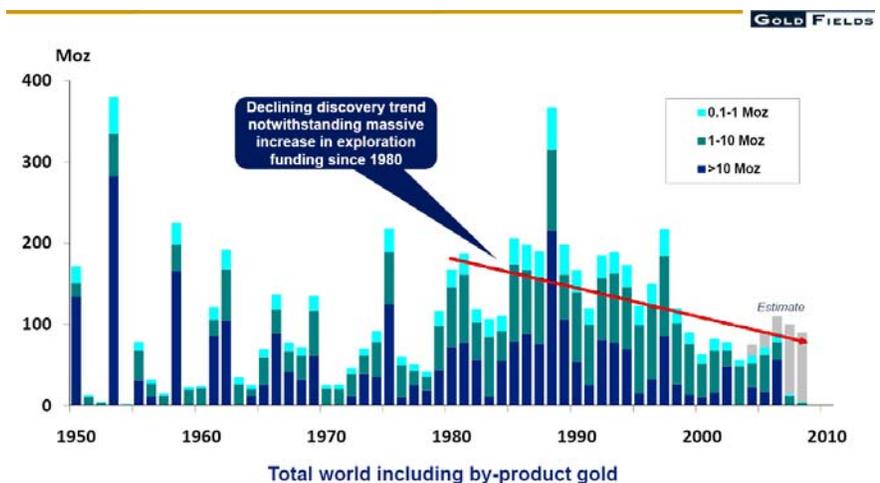
Source: I-Graph, World Gold Council, GFMS, BHP Billiton, Macquarie Research, February 2009  
 Note: The data is from multiple sources that do not always match perfectly and accuracy may not be perfect.

**Mine production peaked in 2001**

deposits has broadly been on a declining trend since the nineties. As the low hanging fruit is exhausted, major gold projects today are increasingly marginal assets with lower grades, higher development costs, greater domicile risk and lower internal rates of return.

Demand for gold every year typically exceeds the incremental amount of gold supplied by mines. Demand not met by mined gold is satisfied by a mobilization of above-ground stocks. Jewelry sold for scrap and bullion sales have generally provided the additional supply needed to balance the market. As mine supply has tended lower this past decade, scrap supply has moved higher to bring the market in balance. In 2008 mine supply hit a 12-year low and scrap supply hit an all time high.

Besides scrap, producer hedging and central bank sales can contribute to supply. Currently producers are reversing the hedging transactions (“de-hedging”), and this is



Note: Figures increased by 27% to reflect deposits not in the database or those deposits with no reported discovery date  
 Source: GFL/MinEx Consulting

**Gold discoveries are falling despite massive increase in exploration**

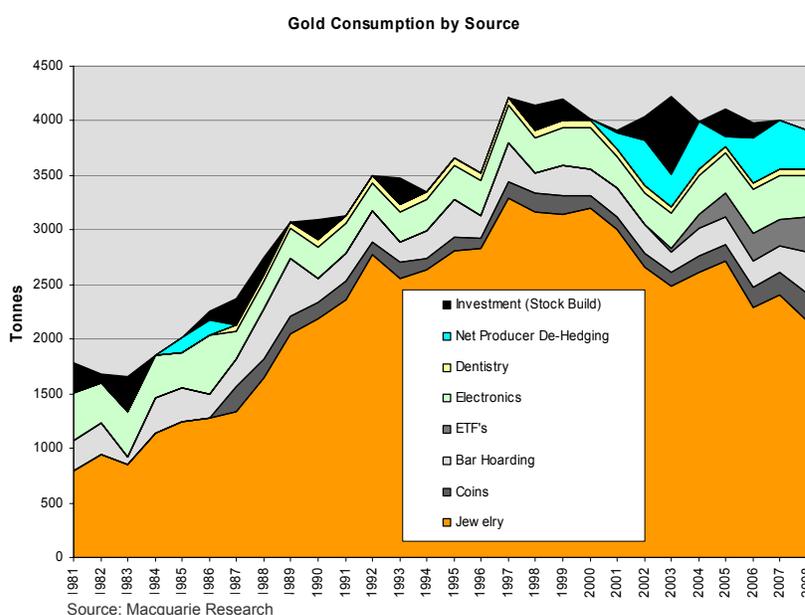
contributing to demand. Central banks can contribute to supply or demand depending on whether they are selling or buying gold; we discuss their critical role in the gold market separately.

## Demand

Two broad sources generally drive demand for gold: its use in jewelry, and its use as a potential substitute for fiat money. The latter source of demand is broadly referred to as investment demand.

**Jewelry:** The use of gold in jewelry continues to be the biggest, albeit declining, component of demand and accounts for over half of consumption. Demand for gold in jewelry fluctuates with price, price volatility, and the strength of the local currency and economy in jewelry purchasing countries. The most important source of jewelry demand has historically been India, where there are long-standing religious and traditional reasons to purchase gold. Indian jewelry consumption by weight has decreased since 2000 as gold prices have moved up. While the weight of jewelry purchased in India has declined, the amount of dollars Indians spend on gold jewelry has actually increased since 2000. One of the major factors adversely impacting Indian jewelry purchases is price volatility. In recent years, China has emerged as a major consumer of gold jewelry, and the relevance of China as a consumer of gold jewelry is expected to increase with time.

**Investment:** Investment demand is generally driven by the market's expectation of monetary inflation – how much governments will increase the supply of fiat currency – and perceived risk in financial markets. The creation of gold ETFs starting in 2004 offered investors a convenient way to buy bullion and spurred investment demand. Investment demand has steadily increased over the last few years, in absolute tonnes as well as overall share of gold demand. As the risk of future monetary inflation is broadly understood and confidence in the stability of global financial markets remains suspect, we expect investment demand will remain strong.



**Producer de-hedging:** The act of hedging by a producer creates supply by accelerating the timing of the sale of gold. The reversal of this transaction, de-hedging, creates demand. The process of hedging works as follows. Say a gold miner is concerned about potential declines in the price of gold and elects to lock in future prices. They approach a bullion bank and enter into a forward sale agreement and lock in a price in the future at which they will sell a certain quantity of gold to the bank. The bank borrows an equivalent amount of gold from a central bank and pays the central bank a “leasing” fee. (It is important to note at this point the central bank assumes counterparty risk with the bullion bank. Central banks are increasingly cautious about this.) The bullion bank immediately sells the gold into the spot market. This phase of the hedging process creates supply as gold that was gathering dust in the vault of a central bank has now entered the market. The bullion bank invests the cash proceeds and earns an interest on it, usually LIBOR. As the miner delivers gold against the forward contract, the bullion bank pays the miner from the cash invested and delivers the gold to the central bank. This phase of the transaction creates demand. In the nineties, producers hedged a massive 2,406 tonnes of gold, which was one of the factors that exacerbated the

decline in the price of gold during that decade. This past decade the process has been reversing, which has created demand and supported prices. Producers are estimated to cumulatively have only 249 tonnes of gold hedges remaining at the end of 2009, and at the current rate of de-hedging will have closed out most of their hedges in a couple of years.

Industrial: Some gold is also used in dentistry and electronic appliances, where it is valued because it is inert and a good conductor of electricity. These applications use minor amounts of gold and are relatively price insensitive. The amount of gold used in industrial applications has remained relatively stable at little over 10% of overall demand.

### **Price**

The dollar price of gold is generally discovered by the interaction of the supply of and demand for gold with the supply of and demand for dollars. We believe that there are a couple of trends in the supply of gold that will support higher gold prices. First, we believe mined supply of gold is in secular decline. While there will likely be years where mined supply is higher year over year, we believe that the long-term trend is downward. Mined supply, however, is only part of the supply picture for gold, which brings us to the second point. The price of gold is massively influenced by the availability, and the perception of availability, of above-ground stocks. Indeed, above-ground stocks of gold are a massive multiple of the gold dug out of the ground every year – currently about 2,400 tonnes of gold are mined every year, which is about 1.5% of the estimated 163,000 tonnes of gold floating around the world in the form of jewelry and bullion. The amount of gold in the hands of central banks, investors and consumers, and their willingness to part with it, has a significant impact in the discovery of the price of gold. For example, if the market perceived that central banks intended to sell some of their estimated 30,000 tonnes of gold, the price of gold would likely respond very negatively. We believe that above-ground gold stocks' ability to satisfy incremental demand is undergoing structural change.

To explain our thinking here, we must first understand the behavior of investment demand. Demand for gold for investment behaves very differently than demand for gold for jewelry. Demand for gold for jewelry generally behaves like demand for most commodities: as price rises demand falls. Demand for gold for investment, however, does not always follow this basic principle. In response to rising gold prices, investment demand may in fact increase. If, for example, the price of gold is driven up by concerns over monetary inflation or systemic risk – the risk of cascading failures across the global financial system that collectively renders the system non-functional – a rising gold price might offer a validation of investor concerns and potentially drive more investors to gold. It is important to reflect upon the motivation of those holding gold as an investment. We believe the motivation of many of these investors is not speculation but wealth preservation. These investors tend to be long-term holders less likely to be influenced by short-term price action. In the event of a price spike in gold driven by fear of systemic risk or inflation, we think these holders are not likely to dump their gold for dollars – if anything, the events that drove the price of gold higher might validate their concerns and give them even more reason to hold on to the yellow metal. As more physical gold gravitates to such hands, the amount of above-ground stocks available to meet supply should decrease, and we believe this will support higher gold prices.

## Central Banks

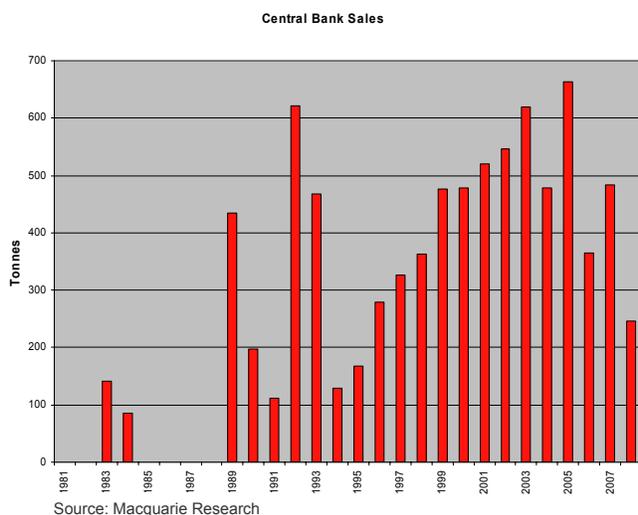
Central banks continue to hold very large amounts of gold, a vestige of the gold standard days. A little over 30,000 tonnes of gold, about a fifth of above-ground stocks, are held by central banks.

Country	Tonnes	% of Reserves
1 United States	8133.5	68.7%
2 Germany	3407.6	64.6%
3 IMF	3005.3	
4 Italy	2451.8	63.4%
5 France	2435.4	64.2%
6 China	1054.0	1.5%
7 Switzerland	1040.1	28.8%
8 Japan	765.2	2.4%
9 Netherlands	612.5	51.7%
10 Russia	607.7	4.7%
11 India	557.7	6.4%
12 ECB	501.4	19.6%
13 Taiwan	423.6	4.1%
14 Portugal	382.5	83.8%
15 Venezuela	356.4	35.7%
16 United Kingdom	310.3	15.2%
17 Lebanon	288.8	26.5%
18 Spain	281.6	34.6%
19 Austria	280.0	52.7%
20 Belgium	227.5	31.8%
21 Algeria	173.6	3.8%
22 Philippines	154.7	12.1%
23 Libya	143.8	4.6%
24 Saudi Arabia	143.0	10.2%
25 Singapore	127.4	2.3%
26 Sweden	125.7	8.6%
27 South Africa	124.8	10.5%
28 BIS	120.0	
29 Turkey	116.1	5.2%
30 Greece	112.4	71.5%

Source: IMF

Central banks today have no commitment to back their notes by gold and are free to sell their gold into the market. The Swiss were the last to leave the gold standard (until 2000 40% of the Swiss franc was backed by gold). Since 1999, central banks, especially European central banks following the lead of the Bank of England, have sold large amounts of gold – 4,880 tonnes in all – into the market. Central banks' rationale for selling gold at that time was to move away from a non-interest bearing asset whose value had been in secular decline for nearly two decades to other assets that offered better returns. Price action since has proven their timing terrible. European banks would have been \$40 billion richer had they not switched out of gold. In any case, recent central bank activity would suggest they have a greatly diminished desire to sell their gold holdings. It would not surprise us if central banks turned into significant buyers of gold in the years to come as they attempt to diversify away from dollar-denominated assets. China's central bank, the largest foreign holder of US dollar denominated assets, announced in April 2009 that they have quietly increased their gold reserves from 600 tonnes in 2003 to 1,054 tonnes.

The Fed is the largest holder of gold in the world. Today the Fed is estimated to own 8,134 tonnes of gold, about 27% of official sector stocks. In 1948, the Fed owned 21,682 tonnes of gold – an astonishing 34% of all the known gold in the world at that time – but this was pared down to 8,584



tonnes by the time Nixon ended gold convertibility. Since then the Fed has sold very little of its gold into the market. The Fed stores about half of its gold, 4,603 tonnes, at a bullion vault at the Fort Knox army base in Kentucky. The remaining gold is held at vaults at West Point, the Philadelphia and Denver mints and the San Francisco Assay Office. A favorite refrain of conspiracy theorists is that the US overstates its gold reserves and most of it was sold off in the sixties to keep the price of gold close to the peg. In defense of the conspiracy theorists, no independent audit of the Fed's gold has been conducted since the fifties. Also, since the Fed does not lend gold, it is not possible

to get a sense of the depth of the Fed's gold hoard, or lack thereof. The Fed also is custodian for gold owned by other central banks. As of mid-2004 the gold vault at the New York Fed held 8,273 tonnes of foreign governments' gold. If official statistics are to be believed, 25 to 30 percent of all the official sector gold in the world is domiciled in the United States.

2009 will probably mark the first year in two decades where central banks have been net buyers of gold as opposed to net sellers. We believe this may represent a structural shift in central bank behavior, and going forward the market must adjust to thinking of central banks as a source of demand rather than a source of supply. The potential long-term implication of changes in central banks behavior on the gold market should not be underestimated. We estimate that if central banks attempted to increase their gold holdings as a percentage of their reserves to 5%, at current prices

the G20 alone would need to purchase about 2,500 tonnes of gold – about one year’s mine supply – with the biggest buyers likely being China and Japan. To get their gold holding to 10% of reserves, the G20 central banks would have to purchase 8,900 tonnes of gold, almost 4 years of mine supply. The point here is that today most central banks have little gold and a lot of dollar-denominated assets, and we believe even a subtle attempt to shift this balance would have a material impact on the price of gold.

### **Markets in Gold**

Markets for gold can be broadly separated into the spot market, where title to physical gold changes hands, and a derivatives market of forwards, futures, and options that overlays the physical market. Transactions in the gold market are conducted over-the-counter (OTC) for spot, forwards, options and other derivatives, and over exchanges for exchange-traded futures and options.

The largest spot market in the world for gold is the London bullion market, which is a 24-hour international OTC market. (In an OTC market, buyers and sellers deal directly with each other and assume counter-party risk with each other.) The London bullion market is organized under the London Bullion Market Association or LBMA. The LBMA is a trade association that brings market participants together – miners, fabricators, central banks, investors and speculators – to make markets in gold. Banks that participate in the London bullion market are loosely referred to as bullion banks. Transaction sizes in the London market tend to be large – generally in excess of 10,000 ounces – and are aimed at institutions. Gold in the London market is transacted in bulky 400 oz (28.4 lb) bars. The main centers for the OTC markets are London, Zurich and New York, although Dubai and other Far Eastern cities transact significant volumes. The OTC nature of the London bullion market tends to make it a relatively murky world. Volume of spot gold that trades hands within London warehouses of the OTC market is a little over 20 million ounces a day.

The COMEX is the largest exchange-based market for gold derivative contracts. Unlike an OTC market, where participants assume bilateral risk, participants in an exchange-based market assume counterparty risk with the exchange itself, which intermediates all buyers and sellers. A division of the NYMEX based out of New York, the COMEX brings together hedgers and speculators to make markets for gold derivative contracts such as futures and options. Hedgers are typically miners, jewelers and other entities that have a natural position in physical gold and want to protect themselves against price movement in gold. Speculators are investors like hedge funds and index funds who want exposure to price movement in gold. Holders of COMEX futures contracts can settle the contract financially or let the contract go to physical settlement. Because the COMEX functions primarily as a financial market, the majority of contracts are settled financially; typically only about 1% of contracts go to physical settlement. Holders of the futures contracts that let the contract go to physical settlement must take delivery of their gold in 100 oz bars (the size of a standard COMEX contract) in one of COMEX’s depository vaults in New York City. A distinct advantage of taking a COMEX contract to physical delivery is that the holder of the contract does not have to pay a physical premium for the gold, which is generally not the case when buying gold from a bullion dealer. Consequently, we generally believe holding COMEX futures contracts to delivery is a better alternative than buying gold from a bullion dealer. In 2008, the COMEX traded contracts representing 3,837 mn ounces of gold. Other than London OTC and COMEX, major gold markets are made in Dubai, India, Shanghai and Tokyo.



*A 100 oz (6.9 lb) COMEX delivery gold bar*

Exchange/Market	Contract	Volume Traded	2006	2007	2008
London Bullion Market (OTC)	Transfers	<i>mn oz</i>	5,386	5,072	5,579
COMEX	Futures	<i>mn oz</i>	1,592	2,506	3,838
CBOT	Futures	<i>mn oz</i>	900	823	385
Tokyo Commodities Exchange	Futures	<i>mn oz</i>	715	585	472
Shanghai Gold Exchange Spot	Spot	<i>mn oz</i>	22	30	39
Shanghai Gold Exchange	Futures	<i>mn oz</i>	19	28	100
Multi Commodity Exchange (India)	Futures	<i>mn oz</i>	328	254	484
NCDEX (India)	Futures	<i>mn oz</i>	43	21	7
Dubai Gold Commodities Exchange	Futures	<i>mn oz</i>	16	22	24

Source: GFMS

Investors can get exposure to price movements in gold by owning physical gold, publicly traded gold producers, gold ETFs, derivatives and privately held gold mines.

### Physical Gold

The most direct way for us to invest in gold is to buy and hold physical gold. Retail investors can buy physical gold in the form of coins and small bars from bullion dealers. Transactions at this level tend to be relatively inefficient as coins and small bars command premiums over spot gold, and transaction costs can be onerous given the small amounts of capital involved. Institutional investors such as ourselves, who could potentially buy large amounts of physical gold (e.g., 10,000 ounces), can conduct the transaction through a bullion bank. The process is relatively simple. We would open an account with the bullion bank, capitalize the account and instruct the bank to buy gold. At this point we must choose to hold the gold in unallocated or allocated form. We believe the distinction between the two is important. In an unallocated account, we have a general claim on the bullion bank for a certain amount of gold. The bank may or may not have sufficient physical gold to deliver against all unallocated claims at any given time. The bank may choose to synthetically construct gold ownership for unallocated accounts by buying future/forward contracts and periodically rolling them. The bank is also free to lend the gold it has against unallocated claims. Thus, if we owned gold in unallocated form we would assume counterparty risk with the bullion bank. If the bank went bankrupt we would have to get in line with other creditors to get our gold, or whatever was left of it.

Because we wanted to minimize counterparty risk, we elected to own allocated gold. The act of allocation moves title of the gold from the bullion bank to us. At this point we have limited bilateral risk with the bank; the bank is merely acting as custodian to our gold, and we can demand delivery of our gold at any time. The bank will typically assign a set of gold bars to the investor, each bar uniquely identified by a serial number, weight and purity. These bars are generally held in vaults owned by the bullion bank. Bullion banks have large storage facilities in London, Zurich and New York, and most investors choose to take physical delivery in one of these locations. However, most bullion banks can arrange for delivery in other domiciles such as Canada, Australia, Hong Kong, Germany, etc. When deciding where to domicile our gold, we took into consideration the local cost of gold, cost of storage and political risk for different countries. Supply/demand dynamics vary by country causing gold to sell for a slight premium or discount in different countries. For example, at a given time gold for delivery in London may have a bid/ask of \$930.25/\$930.50, while the bid/ask for delivery in Zurich may be \$930.75/\$931.25. Cost of storage will also vary by country, and will depend on whether the bullion bank has their own vault in the country, if they lease space from another bullion bank, or if they lease space from a storage service provider like Brinks. Spot gold is a very liquid market – the most liquid commodity market after crude oil – and inefficiencies in pricing across geographies tend to be arbitrated away quickly. Upon settlement of the physical trade (spot transactions are 2-day forwards and gold is generally delivered to the investor's account within 2 business days), investors have the option of demanding physical delivery of the gold or asking the bullion bank to hold it as custodian. If the investor chooses to take delivery of the gold, they would

send a secure transport vehicle to the bullion vault and pick up the gold. Most investors, including ourselves, do not choose this option. There are good reasons for this. First, most investors do not want to deal with the hassle and risk of arranging safekeeping for gold worth tens of millions of dollars. Second, gold that has left the custodian system will need to be re-assayed before being sold back into the market, and there is a cost in dollars and time for this. Consequently, we choose to store the gold with a bullion bank. For this service, bullion banks charge a nominal fee. This fee is negotiable depending on the size of the transaction, the relationship the investor has with the bullion bank, and the storage destination. We found the cost of storing gold can vary between 2-50 bps of the gold every year. This fee, while low, is not immaterial. We have the right to take delivery of our gold at any time, or alternatively sell the gold back into the market through the bullion bank. Given the size of the gold spot market, tens of thousands of ounces of gold can usually be sold into the market in a matter of minutes without materially impacting prices.

One drawback of us holding allocated, physical gold is that it is a cash transaction that we cannot margin without compromising ownership of title and introducing counterparty into the equation. In addition, the IRS treats gold for income tax purposes as a collectible and taxes long-term capital gains at the 28% bracket. This puts ownership of physical gold at a disadvantage to equities, for which long-term capital gains are currently taxed at the 15%.

### **ETFs and Derivatives**

The creation of the SPDR Gold Trust in 2004, better known by its ticker GLD, offered a simple way of indirectly acquiring fractional ownership of physical gold. Investors buy shares of the Trust in the market, and the Trust takes the money and buys physical gold. The market capitalization of GLD on any given day closely reflects, within a few bps, the value of gold bullion owned by the Trust. To ensure its share price reflects the underlying value of gold it owns, GLD continually issues new shares in the trust at NAV or buys back existing shares. Cash received by issuance of new shares is used to buy gold, and shares purchased in the market are funded by liquidation of gold. HSBC is custodian for GLD's gold and stores GLD gold in a vault in London. GLD has an expense ratio of 40 bps, which it recovers by periodically selling gold from the Trust. An investor who holds a share of GLD should see the value of each share erode 0.40% every year versus a comparable investment in physical gold with zero cost of carry. The IRS treats GLD shares like physical gold and taxes capital gains accordingly. We have owned GLD in the past and appreciate the convenience and marginability of this instrument. However, we believe the lower cost of owning physical gold, and the better positioning it offers us in the event of a squeeze on the metal, makes it a more appropriate option for us at this time.

We also have the option of trading futures, forwards, calls, puts, and a mind boggling variety of other derivative products that offer us varying degrees and complexities of exposure to gold. COMEX allows investors to buy contracts for physical delivery of gold on a future date on margin. Investors post initial margin of about 6% and post additional margin if the contract trades down in the market. Futures contracts offer us the advantage of better tax treatment than physical gold, as well as the ability to use margin, while exposing us to counterparty risk with the exchange.

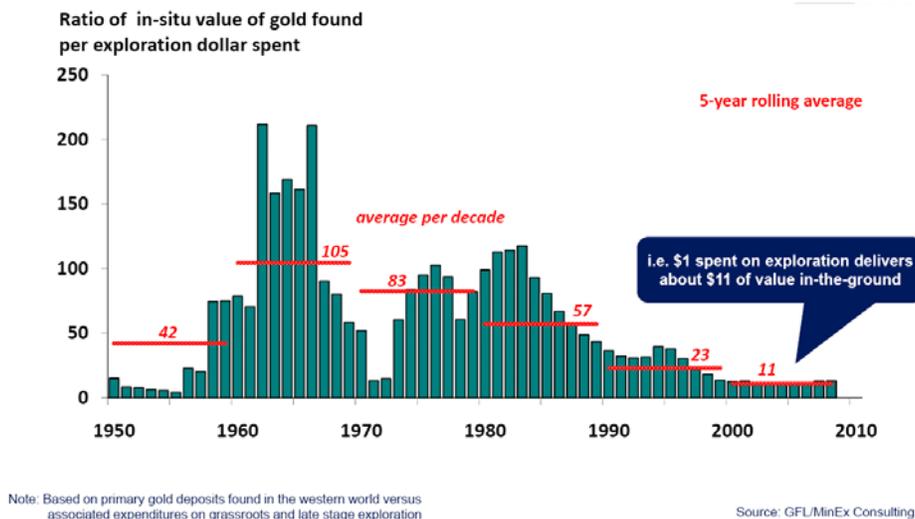
## Equities

We can also gain exposure to gold by owning publicly traded gold producers. The allure of gold stocks is that they give investors additional levels of operating and financial leverage on gold. We believe there are attributes unique to gold producers, which we take into consideration while picking stocks in this sector.

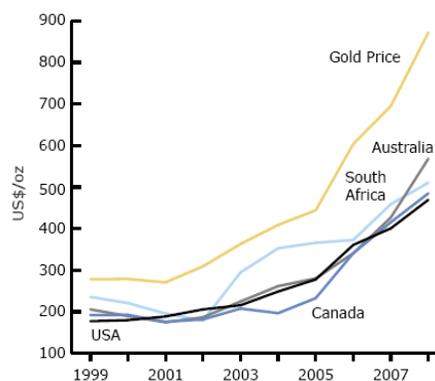
During the last several years the gold sector collectively has struggled to find growth. Gold production peaked in 2001 and has been on a declining trend since. As the sector's production collectively shrinks, participants compete with each other to maintain or increase production ounces. Producers add production ounces by exploration or acquisition.

The return on exploration dollars has been in decline since 1980 and the trend has worsened during the last decade. The declining efficacy of exploration is reflected in the incrementally lower grade of gold discoveries. The alternative for companies is to buy ounces of production via M&A. This can be an expensive way to grow because gold miners tend to trade at lofty valuations, especially compared to other mining companies. Large cap gold miners are currently trading in excess of 20x forward earnings. An evaluation of the stock price performance of gold companies since 2005 reveals that the strong performers generally have been companies with production growth, while companies with flat or shrinking production profiles have underperformed. The market has rewarded growth and punished its absence. This is not lost upon gold miners and they generally pursue growth aggressively. Gold miners frequently re-invest cash flows back into the business in their search for the incrementally more expensive ounce of production. The pursuit of growth at any cost is reflected in increasingly marginal projects currently being developed. Major gold mining companies today are developing projects with single digit internal rates of return, often in countries with high domicile risk.

As investors with a value bias, we struggle with employing a buy-and-hold approach toward most gold equities. (Management and insiders at most gold companies evidently agree with this assessment as they own very little of the companies they manage.) Paying 20-times forward earnings for a company that may overpay to acquire ounces via M&A or invest billions of dollars in a low IRR project in a country where tenure risk is directly proportional to the mine's profitability is not our idea of a great investment. Owning gold companies for operating leverage to rising gold prices is an understandable strategy, but one that must be pursued cautiously. As gold price rises, so do input costs (chiefly labor and fuel) and local currencies, and this can neutralize much of the operating leverage offered by higher gold prices. Nevertheless, we do believe there is exceptional potential to pick alpha within the sector. Passport's approach is to identify early stage assets and companies with



## "Big Four" Total Cash Costs



**Cash costs have trended up with gold price since 2001, neutralizing operating leverage**

near term growth, where we can assess

the quality of the asset and geological upside by eyes-on-the-ground. We also own gold producers when valuations are attractive and we are comfortable with management, operating and domicile risk.

### **The Case for Owning Physical Gold**

We believe there is a strong case to own physical gold today, and we currently hold allocated, physical gold stored in Zurich.

Long-term bull case for gold remains compelling. We have touched upon many of the arguments that are supportive of a higher gold price. Orchestrated efforts by central banks across the world to address deep rooted economic problems by the deal-with-it-later fix of massively increasing money supply could lead to inflation in the future. We believe an increasing appreciation of this possibility will drive strong investment demand for the foreseeable future. We believe that Indians will return to the jewelry markets, although perhaps at lower volumes, once volatility in price subsides and gold has established itself in a new trading band. We believe demand out of China will increase in strength for many years to come, and China may in the not-too-distant future surpass India as the world's largest consumer of gold. The supply side of the picture also appears supportive of our thesis. The amount of gold mined out of the earth appears to be in long-term decline. We believe physical gold is gradually being taken off the market by investors who are motivated by wealth preservation and have long-term investment horizons. The ongoing flow of the metal to these accounts may reduce the ability of above-ground stocks to meet increases in demand at current prices. In the long-term the role of the US dollar as the dominant global reserve currency may be in jeopardy given the projection of seemingly endless twin deficits and massive unfunded future liabilities of the US government. As governments across the world look for alternatives to the dollar, we believe gold is an obvious choice and going forward central banks are more likely to accumulate gold than dispose of it.

Paper-based price discovery may be understating true value of the metal. Futures and forward markets in commodities serve a valuable function: they allow those who do not want commodity price risk to transfer it to those who do want it. In these markets commercial and speculative participants interact to discover the price of gold for delivery at a future date. In the case of gold, the most liquid contract is the one for delivery three months into the future. The price of spot gold – for immediate delivery of physical metal – is in turn determined by discounting the 3-month benchmark price backward. Does this reveal the true price of the physical metal or is this a case of the tail wagging the dog? We think perhaps the latter. The interaction between buyer and seller that discovers the price of a futures contract is a paper-based process with little connection to the world of physical gold. Roughly 99% of COMEX gold contracts are settled financially, which means that the vast majority of interactions between buyer and seller that reveal the price of gold has no connection to or impact on the physical metal.

An analysis of CFTC data reveals that the vast majority of gold futures contracts are sold short by commercial participants (or “commercials”), and the majority of these contracts are owned by speculators. This makes sense as commercials (miners, jewelers, etc.) have, in theory, natural long positions in gold and they may want to hedge themselves against commodity price movement. (It is impossible to determine how much of the commercial short positions reflect genuine hedging needs of market participants and how much is speculative in nature.) It is interesting to note that commercial short positions in gold are generally dominated by a handful of US banks. For example, four US banks held 25.6% of the December 2009 gold contract's short positions and only 0.4% of the long positions. In contrast, non-US banks had a more balanced position: fifteen non-US banks held 5.5% of the December 2009 short positions and 1.4% of the long positions. The size and concentration of shorts held by US banks in the gold futures market significantly exceeds those they hold in most commodities. The motivation behind these short positions may be the pursuit of a thin arbitrage between the contango in gold and LIBOR.

To our knowledge, there are no requirements enforced by CFTC for short positions to be physically backed by gold. Combined with an absence of position limits for commercials, these participants can effectively sell an unlimited number of gold contracts short. This is akin to a stock that can be shorted naked without limit, i.e., the short seller has no obligation to borrow stock before selling it short. Margin requirements for commercials are 25% lower than for speculators, which afford them greater leverage on their capital. We believe the price of gold discovered thus reflects commercial participants' desire, combined with an unrestricted ability, to sell a paper proxy for gold and speculative participants' desire to purchase them. Discounting this price to arrive at the price of physical gold may not always, in our view, reflect the fundamental supply and demand for the metal.

If the price of gold is being understated, rational behavior for investors would be to take advantage of the mispricing and start accumulating the physical metal. We believe this is happening. While it is impossible to gather hard statistics on this, we believe that the percentage of gold held in allocated accounts has steadily increased over the last few years, perhaps from as low as 1-5% to as high as 10-15%. While the amount of physical gold in the world does not occupy much space (all the gold ever mined would fit into a cube roughly 67 feet in width), we have heard of vaults in certain domiciles that have run out of storage space. Central banks, which hold a vast amount of physical gold, have in the past provided liquidity to the physical gold market by lending the metal or selling their reserves. However, central bankers across the world are facing the same problem as investors – how to protect assets against currency debasement and systemic risk – and we believe this time around they will be wary of parting with their gold.

We see further parallels between the story unfolding in gold to a short squeeze on a stock. Imagine an equity where short sellers do not have an obligation to borrow the stock. As the stock price is depressed by supply artificially conjured up at the whim of short sellers, buyers that recognize the mispricing step in and start accumulating the stock. At some point, buyers will have accumulated enough stock so that the short sellers are no longer able to source the stock from the remaining free float to deliver it in case they are called upon to do so. In this scenario the stock may spike higher as short sellers scramble to source stock from the dwindling free float and bid prices higher to coax out the next marginal seller. As increasing volumes of gold gravitate to accounts that have little intention of lending it out, and central banks step back from the market, the paper-based price discovery of gold leaves the physical metal susceptible to a similar short squeeze should the holders of futures contracts demand delivery. An analogous scenario actually played out in the silver market three decades ago. The Hunt Brothers' silver squeeze provides a fascinating real life example of what could happen if a larger proportion of gold futures contracts were held to delivery.

### **The Hunt Brothers' Silver Squeeze**

The Hunts were a Texan oil family that inherited several billion from their oil tycoon father H. L. Hunt. It appears that the initial motivation of the Hunt brothers – Bunker and Herbert – was wealth preservation and their interest in silver stemmed from their belief that the dollar, completely severed from gold, was destined to be inflated away. (Bunker Hunt once famously commented, “Any damn fool can run a printing press.”) The Hunts wanted to convert their billions into a hard, fungible asset. In 1973 it was still illegal for Americans to own gold in bullion form, so silver was a natural choice. The Hunts started accumulating physical silver in 1973. Their modus operandi was to take delivery of futures contracts on COMEX. The Hunts started buying silver in 1973 and by early 1974 had bought 55 mn oz of the metal. The Hunts moved the silver to Switzerland as they were concerned about government appropriation of silver. The Hunts' action had an immediate impact on the price of silver, which started moving up in response. In 1973 annual silver mine production was around 254 mn oz and above ground stocks were estimated around 600-800 mn oz. (Unlike gold, silver is consumed in industrial applications and consequently does not have large, readily accessible above-ground stocks.) Of the above-ground stocks, only 200 mn oz were estimated to have been in a form that was readily deliverable against futures contracts. So when the Hunts took delivery of 55 mn oz of silver they made the physical market tighter and the price of silver moved higher. As later alleged by the US government, encouraged by their

initial success the Hunts tried to corner the entire physical silver market.

Over the next 5 years the Hunts were relatively quiet in the silver market, but in 1979 the Hunts took big steps. In 1979, the Hunts partnered with Saudi interests and formed a syndicate that bought silver contracts on COMEX. As charged by the CFTC later, this action was not motivated by wealth preservation but was an attempt to manipulate and control the silver market. In the fall of 1979, the Hunts and their partners took delivery of 43 mn oz of silver and by the end of December 1979 the Hunts' syndicate controlled 53% of COMEX stocks, 69% of CBOT's and 57% of the March 1980 contract open interest. It appears that continued demands on delivery of contracts by the Hunts posed a risk to the exchanges. The COMEX, which had previously managed to negotiate a deal with the Hunts syndicate to reduce their December positions and take off some pressure off the shorts, started changing the rules in response. In late 1979, COMEX stipulated no investor could hold contracts of over 3 mn oz of silver and raised the margin requirement. At that time, the Hunts had 90 mn oz due for delivery in March. On Jan 7 1980, the COMEX decreed that any trader holding more than 10 mn oz of silver contract must liquidate their position by Feb 18. The CFTC backed the ruling. On January 18, silver peaked on the COMEX, closing at \$46.80. On Jan 21, the COMEX stopped trading silver and announced they would only accept liquidation orders and short covering orders. The price of silver began a long and steep decline. COMEX increased margin requirements again on February 4, from \$50,000 per contract to \$60,000 and made the move retroactive, putting a capital squeeze on the Hunts. The Hunts had established huge silver futures positions on margin, and a decline in the price of silver, coupled with higher margin requirements, triggered margin calls. On March 25 1980, the Hunts failed to meet a \$135 mn margin call, which marked the end of their alleged plan to dominate the silver market. Their brokers started liquidating their physical silver positions that they had used as collateral. The Hunts were subsequently charged by the CFTC with attempting to corner a commodity market and sued by many market participants that had lost money trading silver. They filed for bankruptcy in 1988, with their net worth reportedly whittled down to a couple of hundred million down from several billion.

There are significant differences between the gold and silver market, and there are also many important side notes to this story not discussed here, so any extrapolation from the Hunts' saga must be made cautiously. Based on most accounts, the Hunts' initial rationale to invest in physical silver was understandable. Their initial motivation appears to have been wealth preservation, and they might have succeeded in that regard had they avoided the use of margin. This incident reveals that when a disproportionate number of precious metals contracts have been taken to delivery, exchanges have changed rules in response, which would suggest that the exchange perceived the risk of a failure to deliver was unacceptably high. This incident also tells us that exchanges will do what is necessary to ensure their survival and stability of markets, potentially at the detriment of those holding long positions, and regulators will stand by them during times of crisis.

We must hold physical gold to profit during a short squeeze. We believe to profit during a short squeeze in gold, we must be in a position to deliver physical metal, which means we must own it. A paper substitute for gold may not necessarily provide the same results. COMEX put rules in place in February 2005 permitting delivery of gold-backed ETFs instead of physical gold into a futures contract. TOCOM changed rules to permit delivery of GLD against a futures contract starting October 2008. While we are not aware of any instance of either exchange actually delivering an ETF into a futures contract, we believe these rules were put in place for a reason. These rules create a pressure release valve in the event of a short squeeze. By allowing market participants to deliver paper proxies for gold instead of physical metal, these rules protect participants with large short positions from scrambling for physical gold and being placed in financial peril in the event of a short squeeze. Because holders of most gold-backed ETFs do not have the explicit right to redeem their shares for physical metal, we believe this completes the circle and potentially removes physical gold from the process of discovering its price.

Cheaper alternative than ETF. Setting aside the Black Swan possibility of a short squeeze in gold, the simplest reason to own physical gold is that it will, in our view, provide returns superior in the long run to many gold equities, and is a cheaper alternative to owning gold through an ETF. Investors can own gold through bullion banks for 2-30 bps per year, which is cheaper than paying a gold-backed ETF 40 bps a year in expense fees. Even if investors take COMEX contracts to

delivery and leave the bars with one of COMEX's depository institutions in New York, it will generally cost them less than 30 bps a year. Leaving gold bars in the custodianship of a bullion bank or a COMEX vault in an allocated account is, in our view, a safe option as the gold is not on the custodian institution's balance sheet. Holding physical gold also provides us with the option of choosing a domicile that is consistent with our views on sovereign risk. Consequently, Passport has chosen to hold physical gold in Zurich, a domicile with which we are comfortable.

### **Closing Thoughts**

The notional volume of gold traded through derivatives markets is a massive multiple of the underlying physical gold market. In 2008, the London OTC market and COMEX traded over 9 billion ounces of gold. The notional value of these two markets alone is nearly 100 times the size of the underlying physical gold market. For many commodities the notional value of derivatives tends to be many multiples of the underlying physical market (e.g., copper is roughly 30 times). Gold, however, is different in that we can envision a scenario where holders of futures or forward contracts demand delivery of the physical metal instead of cash settlement. The ease with which gold can be picked up, stored and liquidated makes this possible and practical. For most commodities, be it copper, corn or crude oil, taking physical delivery, arranging for storage and then liquidating the position would pose a logistical nightmare; gold is a notable exception. A couple of 100 oz COMEX gold bars, each currently worth well over hundred thousand dollars, together take up less space than a typical soda can, and investors can walk away with them from a COMEX vault. If the world gets spooked that the ability of above-ground stocks to meet physical demand is overestimated, or if the risk of systemic failure of global financial markets elevates to the point that people start looking for viable alternatives to fiat currency, there could effectively be a global run to physical gold as people simultaneously converge on gold markets and demand delivery. This has happened before for banks, for a country (the United States), and it happened on a global scale when countries across the world started redeeming their US dollars for gold ultimately leading to the failure of Bretton Woods. We believe it can happen again. An inability of above-ground gold stocks to smoothly deliver on just a marginally higher fraction of forwards/futures that request physical settlement, or an inability of banks to switch unallocated accounts to allocated, could reveal an inadequacy of above-ground stocks to meet demand for physical gold at prevailing prices. We believe this would necessitate a step change in the price of gold to bring supply and demand back in balance. As holders of physical gold we expect to profit in this scenario.

Two questions come to mind as we contemplate this scenario. First, why did this not happen during the Financial Crisis of 2008? In September 2008, the global financial community was caught off-guard in a massive deleveraging spiral triggered by the failure of multiple financial institutions. As credit contracted, investors were forced to liquidate assets to raise dollars and pay down margin accounts. Gold is an asset – a particularly liquid one at that – and we believe it also was sold indiscriminately to raise dollars. What is interesting to note is that gold was among the best performing commodities in 2008, which suggests that buyers did emerge even in the midst of the most vicious deleveraging spiral of our lifetime. The second question is if this scenario unfolds, won't we have government intervention that effectively throws out all rules? It is impossible to answer that question with certainty, but we are generally of the view that such a crisis could be resolved without governments resorting to draconian measures. All things considered, we believe there is a compelling case today for Passport to own allocated, physical gold in a safe domicile.

## **IMPORTANT DISCLOSURES AND RISK CONSIDERATIONS**

- THE FOREGOING REFLECTS PASSPORT MANAGEMENT, LLC'S ("PASSPORT") PARTICULAR VIEWS, BELIEFS AND ASSESSMENTS BASED ON PASSPORT'S RESEARCH, OBSERVATIONS, AND ANALYSES, SUBJECT TO THE ATTACHED DISCLOSURES AND RISK CONSIDERATIONS AND THOSE SET FORTH IN THE FUND DOCUMENTS.
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- WHILE INFORMATION USED IN THESE MATERIALS MAY HAVE BEEN OBTAINED FROM VARIOUS PUBLISHED AND UNPUBLISHED SOURCES CONSIDERED TO BE RELIABLE, NEITHER PASSPORT NOR ANY OF ITS AFFILIATES GUARANTEES ITS ACCURACY OR COMPLETENESS AND ACCEPTS NO LIABILITY FOR ANY DIRECT OR CONSEQUENTIAL LOSSES ARISING FROM ITS USE. THIS INFORMATION IS CONFIDENTIAL AND INTENDED SOLELY FOR THE USE OF PASSPORT AND ITS AFFILIATES AND THE CLIENT OR PROSPECTIVE CLIENT TO WHOM IT IS PRESENTED. IT IS NOT TO BE REPRODUCED OR DISTRIBUTED TO ANY OTHER PERSONS EXCEPT TO THE RECIPIENT'S PROFESSIONAL ADVISORS.
- IN MAKING THEIR DECISION TO INVEST IN THE FUND, PROSPECTIVE INVESTORS SHOULD RELY SOLELY UPON THEIR OWN INDEPENDENT INVESTIGATION, INCLUDING A REVIEW OF THE FINAL DOCUMENTS. NEITHER PASSPORT NOR ANY OF ITS AFFILIATES, EMPLOYEES, OR AGENTS ARE AUTHORIZED TO MAKE ANY REPRESENTATIONS OR WARRANTIES INCONSISTENT WITH OR IN ADDITION TO THOSE CONTAINED IN THE FINAL DOCUMENTS. STATEMENTS MADE HERE WITH RESPECT TO THE FUND ARE NOT NECESSARILY COMPLETE, AND ALL INFORMATION CONTAINED IN THIS PRESENTATION IS SUBJECT TO UPDATING, CHANGE, COMPLETION, REVISION, AMENDMENT AND FINAL VERIFICATION.
- THE INVESTMENT OPPORTUNITIES DESCRIBED HEREIN HAVE GENERALLY NOT BEEN REGISTERED FOR SALE TO THE PUBLIC IN ANY JURISDICTION AND WILL NOT BE MADE AVAILABLE FOR INVESTMENT EXCEPT UNDER CIRCUMSTANCES THAT WILL RESULT IN COMPLIANCE WITH ANY APPLICABLE LAWS AND REGULATIONS. THE INVESTMENT OPPORTUNITIES DESCRIBED HEREIN ARE NOT GUARANTEED BY PASSPORT OR ITS AFFILIATES.
- THE FUND MAY NOT ACHIEVE THE DESIRED RESULTS DUE TO IMPLEMENTATION LAG, OTHER TIMING FACTORS, PORTFOLIO MANAGEMENT DECISION-MAKING, ECONOMIC OR MARKET CONDITIONS OR OTHER UNANTICIPATED FACTORS. THE VIEWS AND OPINIONS EXPRESSED IN THESE PRESENTATION MATERIALS ARE AS OF DECEMBER 31, 2009, ARE SUBJECT TO CHANGE WITHOUT NOTICE, MAY NOT COME TO PASS AND DO NOT REPRESENT A RECOMMENDATION OR OFFER OF ANY PARTICULAR SECURITY, STRATEGY, OR INVESTMENT.
- THE INVESTMENT ENVIRONMENT AND MARKET CONDITIONS MAY BE MARKEDLY DIFFERENT IN THE FUTURE AND INVESTMENT RESULTS WILL FLUCTUATE.
- ANY SPECIFIC PORTFOLIO SECURITIES IDENTIFIED AND DESCRIBED IN THESE MATERIALS DO NOT REPRESENT ALL OF THE SECURITIES PURCHASED OR SOLD BY THE FUND, AND THERE SHOULD BE NO ASSUMPTION THAT INVESTMENTS IN SUCH SECURITIES IDENTIFIED AND DISCUSSED IN THESE MATERIALS WERE OR WILL BE PROFITABLE.

## **RISK CONSIDERATIONS**

- NO ASSURANCE CAN BE GIVEN THAT THE FUND'S INVESTMENT OBJECTIVE WILL BE ACHIEVED. AN INVESTMENT IN THE FUND IS SUBJECT TO SIGNIFICANT RISKS AND IS SUITABLE ONLY FOR INVESTORS OF SUBSTANTIAL FINANCIAL MEANS WHO HAVE NO NEED FOR IMMEDIATE LIQUIDITY IN THIS INVESTMENT.
- THE FUND USES SOPHISTICATED INVESTMENT TECHNIQUES, AND MAY NOT BE SUITABLE FOR ALL INVESTORS. THE FINAL DOCUMENTS WILL DESCRIBE IN MORE DETAIL RISKS OF INVESTING IN THE FUND, AND PROSPECTIVE ADVISORY CLIENTS MUST READ THE DOCUMENTS CAREFULLY BEFORE INVESTING WITH PASSPORT THROUGH THE FUND.
- ANY PERSON CONSIDERING MAKING AN INVESTMENT MUST BE ABLE TO BEAR THE RISKS INVOLVED AND MUST BE ABLE MEET CERTAIN SUITABILITY REQUIREMENTS. SOME OR ALL ALTERNATIVE INVESTMENT PROGRAMS MAY NOT BE SUITABLE FOR CERTAIN INVESTORS. AMONG SUCH RISKS ARE THE FOLLOWING: AN INVESTMENT IS SPECULATIVE AND INVOLVES A SUBSTANTIAL DEGREE OF RISK, AN INVESTMENT MAY BE LEVERAGED, PAST PERFORMANCE RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE PERFORMANCE, AND PERFORMANCE MAY BE VOLATILE, AN INVESTOR COULD LOSE ALL OR A SUBSTANTIAL AMOUNT OF HIS OR HER INVESTMENT, THERE IS NO SECONDARY MARKET FOR THE INVESTORS' INTERESTS IN THE FUND AND NONE IS EXPECTED TO DEVELOP, THERE ARE RESTRICTIONS ON TRANSFERRING INTERESTS IN THE FUND, FEES AND EXPENSES MAY OFFSET TRADING PROFITS. A PORTION OF THE TRADING MAY TAKE PLACE ON FOREIGN MARKETS; AN INVESTMENT IS SUBJECT TO CONFLICTS OF INTEREST.