Myths & Errors in the Precious Metals Markets

I was giving a speech in September on the prospects for gold. One of the points I made was that the gold market continues to be over-run by misconceptions, erroneous thinking, and a great many people who simply do not understand how the gold market works. This enormous degree of misinformation causes problems for the market, as producers want gold to be seen as legitimate by sophisticated individual and institutional investors. It also causes enormous opportunities. By **JEFFREY M. CHRISTIAN**, CPM Group.

IT WAS AN interactive presentation at a luncheon. One of the guests volunteered that I was referring to the conspiracy theorists. "No", I said, "I am thinking about the great many executives at mining companies, mutual funds, and other gold market institutions who, for example, do not understand how gold flows through the market. I am thinking about all of the marketing hype and bad information that circulates in the mainstream market. Forget the fringe elements."

There are executives at mining companies, hedge funds, and other companies that really, truly, deeply understand these markets. I am glad to that say many are our clients – a joy to work with. With these executives, discussions stay focused on what really matters in these markets. However, they sometimes seem to be a minority in the market.

Gold producers as a group have begun to focus on the market in which they exist. They have begun to realise that investment demand is the key to higher prices. Producers need to tend the bread-and-butter gold jewellery market, which takes up around 90% of their annual output. But they have come to realise that the key to higher prices is held by investors. This is in stark contrast to conditions as recently as 2001, when producers were about to commit to spending US$450 million for an ill-conceived jewellery promotion scheme, saying that investors were inconsequential to the gold market.

Defining the Gold Market

Part of the problem is that many mining executives and others still do not have a clear understanding of how gold trades around the world, how much gold trades, or what the gold market really is. Figure 1 shows the volume of gold cleared through London Bullion Market Association member banks, the volumes of gold futures and options traded internationally, and the physical gold market. The physical market, around 120 million ounces per year, is dwarfed by the billions of ounces that clear every day across the interbank market and the major futures and options exchanges.

When the LBMA began publishing clearing volume data in 1997, and we first produced this chart, many mining executives, gold mutual fund managers, and others were at a loss to understand (much less explain) the yawning gulf between the volumes of gold being traded and the physical market. Most gold market participants today still could not explain why more than six billion ounces of gold trade each year that clearly do not reflect mine production, producer hedging, central bank sales, secondary recovery, jewellery, or even investor demand for physical gold.

This data drives home the point that the gold market is much more than producers, jewellers, and investors. That said, most people in the market do not know what the gold market is, how it operates, and why so much gold trades.

There is a tremendous amount of gold trading around the world that has little to do with these fundamentals. This is a very fat tail wagging the dog, which many in the core market still do not seem to comprehend. They talk about the declines in hedging or central bank lending as being the central factors behind the recent strength in gold prices. They overlook the fact that these trends only explain around 50 million ounces of changes in gold trading volumes, leaving billions of ounces of a historical shift in trading patterns unexplained. (The answer relates to the withdrawal of major banks and brokerage companies from the interbank gold trading market.)

> **"Gold producers ... have begun to realise that investment demand is the key to higher prices"**

Gold is a Financial Asset

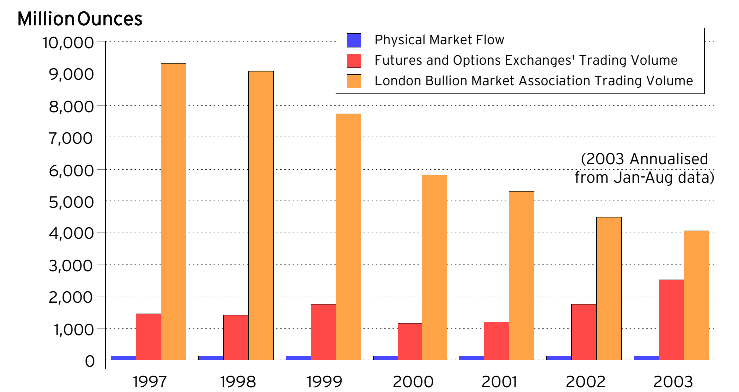
Physical gold is a small fraction of world total trade in commodities – perhaps less than 1%. However, more than half of the commodities-linked derivatives traded in the world are gold related.

Another way to view this is that the ratio of gold derivatives trading to gold physical market transactions is around 50:1, down from 100:1 just a few years ago. This compares nicely with derivatives:physical ratios in Treasuries, currencies, and other financial assets. It stands in stark contrast to ratios in traditional commodities of 5:1, 10:1, or 15:1. Gold is a financial asset, not a commodity.

The Relationship Between Gold Prices & Supply

Another aspect of the gold market subject to incredible statements is the relationship between gold prices and gold mine production. Prices below US$300, from 1997 through 2001, were clearly unsustainably low. We (and oth-

Figure 1. The Gold Market



Source: CPM Group

ers) stated that repeatedly in our reports during that time. Below US$300, gold producers (generally speaking) do not spend on replacement capacity. (Those that have discovered mines with costs of US$150, 100, or 80 per ounce still invested, incidentally, shifting the average cost of production lower.) Gold use in jewellery meanwhile is very affordable. The result is higher demand and, over the long-term, lower production and supply. Thus, prices below US$300 could not be sustained beyond the period when mine capacity in place began to age.

Producers began to accept this in early 2002, using a study that concluded that if prices remained at US$275 for much longer, a major decline in world gold mine production would emerge. By the time the study was really being circulated, gold prices were trading between US$300 and US$325. At these levels, and at the higher levels that have been maintained for much of the past year, a great deal of idled capacity – old and new – can be restarted. New projects that had been deferred earlier can be dusted off, and new expansions and developments not even on the board yet can be envisioned.

“At prices over US$400, there is a tremendous amount of gold that can be mined profitably”

The same analysis that held that prices below US$300 were unsustainably low showed that prices over US$400 were unsustainably high.

Incidentally, gold prices have been above US$400 for a significant length of time only twice. The first time was in the economically and politically dark days from December 1979 through September 1983. The only other time was 1987–1988. At prices over US$400, there is a tremendous amount of gold that can be mined profitably. Also, gold use in jewellery gets really expensive. Jewellers stop using so much per piece, consumers stop buying gold jewellery, and, in many parts of the world, other people start selling massive amounts of gold jewellery. In 1979 there was so little gold used in jewellery and so much gold jewellery being sold for its metal content that gold reports of the time reported ‘negative demand,’ meaning that traditional sources of demand for metal actually were net sources of supply. There was more gold jewellery being sold for scrap than was being made that year. (Gold research back then did not measure non-toll gold scrap recovery. Our group developed a data series for gold scrap recovery for the years since 1977, and began incorporating it in our data in 1982.)

All of this information is readily available today. Even so, we now are hearing gold bulls say that the economic forces at work below US$300 – too low of prices to sustain mine production – also are at work below US$400. That simply is not true, but that will not stop many people in the gold market from believing it.

Gold Hedging

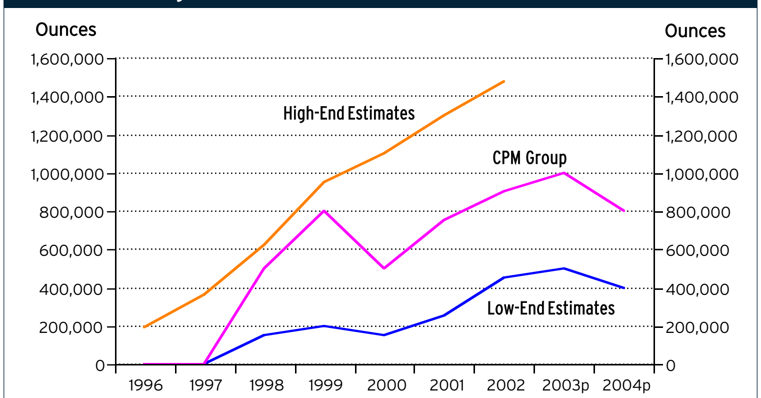
Another incredible myth which refuses to die in the gold market is that forward selling or other forms of hedging by producers leads to an increase in physical supply. The idea, which is patently false, is that bullion banks, in order to hedge their own exposure derived from these forwards, borrow otherwise sterile gold from central banks, selling it in the spot market.

This theory is based on an erroneous understanding of how gold trades. Anyone who studied money and banking in school will understand how bullion banks monetize gold on their books (most of which, incidentally, is not physical gold, but rather forward commitments of various sorts). By mushing together diagrams of how bullion banks borrow gold from banks and diagrams of forward sales, those who either do not understand, or do not want others to understand, come up with a convoluted scheme in which this is done. The problem is, it is wrong.

In reality, banks will borrow as much gold from others at low gold lease rates as they can, whenever they can, regardless of any hedging business. This is because the gold-dollar interest spread allows them to lock in cheap money through these trades.

In the early 1980s, when we were the research department at J. Aron, and then Goldman Sachs, we were involved in much of the early gold lending business with central banks. We borrowed gold from central banks because we could, and because it was really cheap money. Our hedge book was entirely separate. All banks run that way, if they are run properly and intelligently. One investment bank that we knew of did not do this, in the late

Figure 2. Chinese Platinum Demand Estimates



Sources: Trade sources, Johnson Matthey, CPM Group (15 Sep 2003)

1980s and early 1990s. It exited the bullion business shortly thereafter.

A second, larger problem with this thesis is that many groups in the gold market have invested their reputations in it, and now they cannot admit that this is wrong. An even larger problem (waiting to pop) is that some bullion banks have helped spread this erroneous view among their clients, including major mining companies and investors. It would be an enormous scandal that could throw the entire gold and gold equity industries into turmoil, at least for a time, should market regulators decide to pop this bubble. Banks misleading their best clients – incredible, you say.

This myth started with the 1988 and 1989 Consolidated Goldfields reports on gold. Before that time, no one said that forward selling increased the flow of physical gold into the market, and that the bullion banks borrowed physical gold from otherwise sterile central bank gold holdings in order to cover their exposure to their gold forward purchase agreements. At this time, the new World Gold Council (founded in 1987) was taking a lot of heat from its members. Gold producers were paying around US$71 million per year to the WGC, and watching as the gold price fell. The WGC's reaction was to tell its members that: (a) the WGC was charged with stimulating gold jewellery demand; (b) gold jewellery demand in fact was rising sharply, and; (c) the price weakness was the producers' own fault, since it had been caused by their forward sales. A significant part of the cost of the Consgold report was covered each year at that time by the WGC, which purchased the right to distribute the report free of charge to readers.

As a result, you now have a gold market that is alone (with the silver market, which became infected with the hedge myth in the middle of the 1990s) in listing hedging as a source of supply. Otherwise estimable banks publish massive tomes of market studies on commodities, going from aluminum to zinc. In each and every market, physical supply consists of mine production, scrap recovery, and net trade with transitional economies. The exceptions are gold and silver. The authors are at a loss to explain why hedging is a source of supply for these metals, but not for petroleum, aluminum, copper, or any number of other commodities in which there is a sizable portion of output sold forward.

Chinese Silver

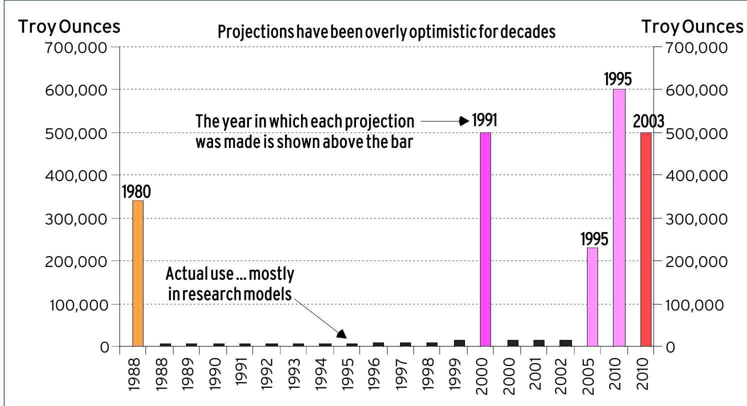
In addition to the hedging myth, silver is plagued by the myth of Chinese government stock sales. As with almost all other metals, China has become a major location for smelting and refining, and, as a consequence, a major source of exports. China now accounts for more than one fifth of the world's refined output of copper, aluminum, lead, and zinc, among other metals. Silver is one of them.

Much of the copper, lead, and zinc concentrates refined into metal in China contain by-product silver. Much of this silver, (along with tonnes of silver refined from scrapped photographic goods, coins, jewellery, decorative objects, and other materials) is exported. The Chinese market simply does not need that much silver.

All of this is pretty straightforward, unless you are a silver bull, or are trying to construct a reason for others to be bullish about silver. In that case, you want to conclude that the silver being exported from China is coming from secret government stocks. If the silver being exported is from government inventories, and not current refined production, the silver stocks will run out someday, and the price will have to rise sharply as a result of the ending of this source of supply. Never mind that these silver exports have risen hand-in-glove with exports of other metals. Never mind that the Bank of China has stated it is not the source of these exports. Never mind that there is a public list of smelters and refiners that are recovering gold and silver from domestic and imported concentrates.

The reality of the matter is that China has become a major source of newly refined silver, from mine concentrates and scrap, and that it is likely to remain a source of this material for decades to come.

Figure 3. Platinum Use in Fuel Cells ... Always Optimistic



Sources: Trade sources, Johnson Matthey, CPM Group

Platinum Group Metals

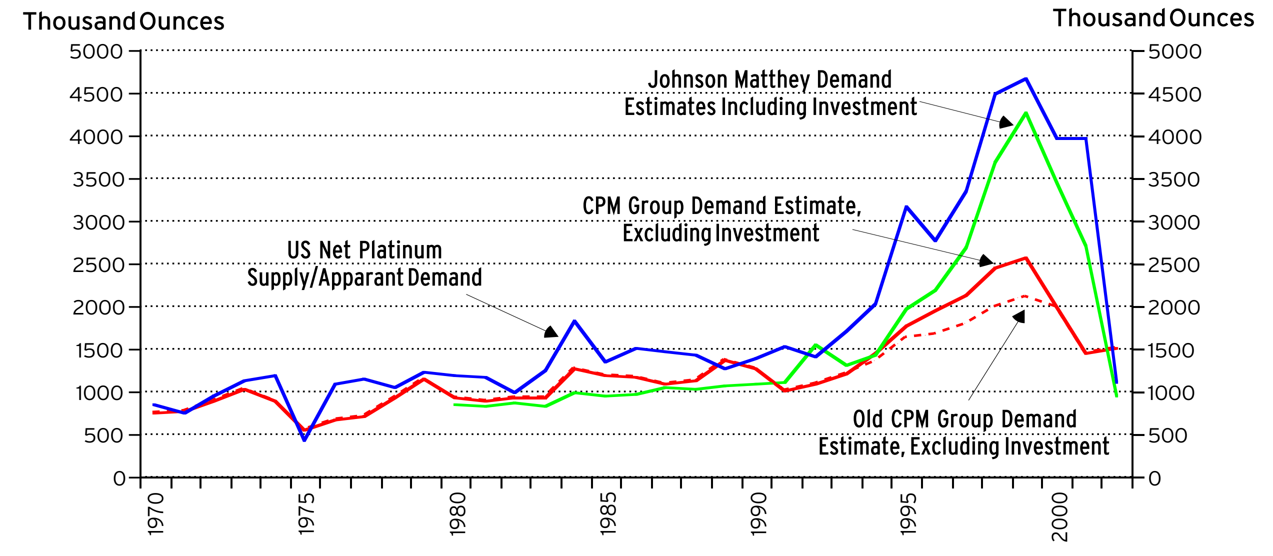
Platinum group metals are even smaller, more concentrated, less understood, and more opaque than gold and silver markets. Statistics and information are hard to come by. Many people assume this is due to the presence of Norilsk Nickel, and formerly the Soviet and Russian governments, as particularly large producers, sellers, and participants in the market.

Certainly, the Russian state secrecy laws have compounded problems with a lack of data and bad information in these markets. However, the overall market is in bad shape – statistically speaking. Few market studies include non-auto secondary supply of these metals, even though in the case of palladium, non-auto scrap accounts for maybe one million ounces of supply each year.

Fabrication demand is a worse problem for the PGM markets. Japanese companies report what appears to be good quality information on demand. There is no publicly available data on demand in other regions and countries, including the US and Europe.

CPM Group has written for years that US platinum and palladium demand appeared to be consistently under-counted by the two major sources of estimates of demand – CPM Group and Johnson Matthey. A fresh review of the market has indicated that much of the undercounting related to auto use of these metals on a consistent basis over many years. Accordingly, we have increased our estimates of fabrication

Figure 4. US Palladium Market



demand for both of these metals in the US.

Chinese Platinum Demand: Too Good to be True?

In the late 1990s South African platinum producers and their marketing agents launched a programme to promote the use of platinum jewellery in China. According to their data, this market has gone from virtually nothing – perhaps 200,000 ounces per year – in 1996 to around 1.5 million ounces in 2002.

Taken at face value, this suggests that nearly one quarter (23%) of world platinum demand now goes into a market that did not exist six years ago. At the least, perhaps the platinum industry should be concerned about its exposure to this sector, since an entire market that can spring up so quickly can probably disappear equally fast. This is especially true of a market as quixotic and vulnerable to fashion trends as jewellery.

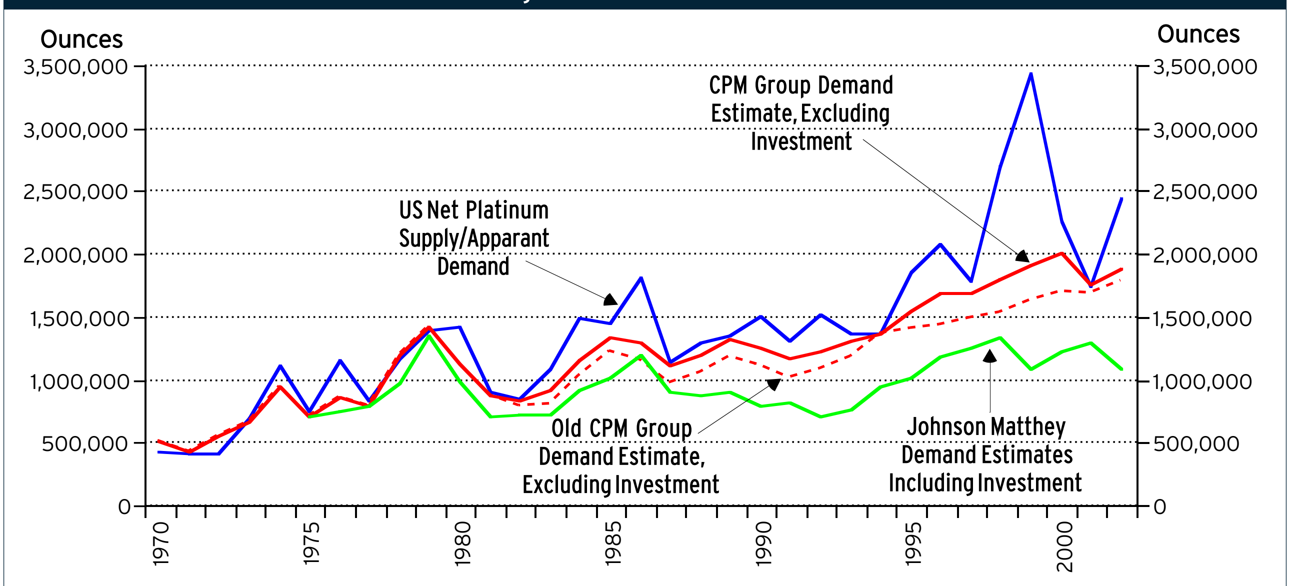
> **"... you now have a gold market that is alone ... in listing hedging as a source of supply"**

However, the situation may not be quite that straight forward. There are signs that a lot of this metal may be flowing through China and being re-exported, for sale in Japan, Hong Kong, and the US. How much is not clear. Some market participants suggest that half to two thirds of the metal assumed to be going into Chinese jewellery in fact is being re-exported in bullion form for sale elsewhere. This could lead to double counting of this metal in demand estimates, with the same metal being counted as being used in both Chinese jewellery and in other applications elsewhere. Or, it can show up in other statistical errors, with the metal being misidentified as secret Russian sales in Tokyo or Hong Kong, or melted down US Platinum Eagle coins in Los Angeles.

Waiting for Fuel Cells

Another area that is open to misunderstanding relates to the potential demand for platinum in fuel cells. Fuel cells have been projected to be using massive amounts of platinum within a decade, since at least the 1960s. There con-

Figure 5. US Platinum Market



Note: Net platinum supply equals total US supply less exports tinues to be a great deal of marketing hype by fuel cell companies and others, leading to over expectations of platinum demand from fuel cells.

At present, there is talk that fuel cells could become commercially available for vehicles within a decade, and that these fuel cells might use half a million ounces of platinum per year or more. That is highly unlikely to happen. Experts on fuel cells suggest that fuel cells for vehicles probably are at least two decades away from commercial viability, and that even that projection may be overly optimistic. Fuel cell manufacturing, capital, and operating costs have been slashed more than 90% over the past two decades. Estimates are that they need to be cut another 90% in order to be cost competitive with other fuel sources. By the time such efficiencies might be achieved (if they can be achieved at all) another alternative fuel technology may have succeeded already. In other words, fuel cells are only a hypothetical form of motive power for the future, and are not a solid reason to be investing in platinum today.

“... fuel cells are only a hypothetical form of motive power for the future”

Let’s be Fair

Of course, ignorance is not limited to the precious metals markets. A few years ago the International Energy Agency calculated that there was a 67% spread among mainstream estimates of OPEC quota compliance. Beyond the narrow confines of commodities, unions still rail against losing jobs to developing countries, even though most job losses are due to computerisation and mechanisation in manufacturing. US textile mills complain about cheap Chinese imports, even though China accounts for very little of US textile imports, at least up until now.

We sometimes beat ourselves up in the precious metals markets over the lack of self awareness in our industry. There are real problems here, but in reality, producers, fund managers, promotional agency executives and others are probably not much worse off here than others elsewhere. Besides, this inefficiency opens up tremendous profit opportunities for those aware of how these markets operate. In itself, this is very valuable and always has been •

JEFFREY CHRISTIAN is Managing Director of CPM Group which provides a wide range of consulting services, merchant banking services, and basic research on gold, silver, and PGMs.

The company publishes a monthly Precious Metals Advisory; annual PGM, Gold and Silver Surveys, and annual Ten Year Outlooks on PGMs, Gold and Silver. CPM Group has just released its annual Platinum Group Metals Survey 2003.

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Subsequent Commentary On This Article

*In October 2003 **Commodities Now** magazine published the preceding article by Jeffrey M. Christian of CPM Group. One of the people involved in gold research at the time took umbrage at the narrative of how only those forwards involved in producer hedging came to be included as a form of spot physical demand, and submitted the following rebuttal. The refutation and Christian's response to it were duly published in a subsequent edition of **Commodities Now**.*

What follows are the rebuttal and Christian's response.

Rebuttal

Jeffrey Christian is entitled to his own opinion on how the gold borrowing market works, but he is not entitled to make factual errors.

The 1988 and 1989 Gold Surveys published by Consolidated Gold Fields, the two surveys to which Jeffrey Christian refers in his article, were distributed free of charge to anyone who asked to be put on the mailing list, or who contacted Consolidated Gold Fields to ask for a copy. In this respect these two surveys were distributed in exactly the same manner as all the earlier surveys since Consolidated Gold Fields first began to commission them in the late 1960s. It is therefore inaccurate to claim that the World Gold Council "purchased the right to distribute the report free of charge to readers". It is also inaccurate to state that: "A significant part of the cost of the Consgold report was covered each year at that time by the WGC": I was Chief Precious Metals Analyst for Consolidated Gold Fields during the period in question, with responsibility for the annual Gold Surveys, and I know of no financial contribution from the WGC to Consolidated Gold Fields toward the costs of the report.

The significant inaccuracies in these two claims by Mr. Christian clearly render invalid the inferences he draws from them in the remainder of this paragraph in his article.

Response

19 Nov. 2003

Author's Response

My understanding of the financial relationship between Consolidated Gold Fields and the World Gold Council in the late 1980s stems from discussions between various Consolidated Gold Fields executives and myself over several years. At the time, I was the Vice President in charge of commodities research at J. Aron and Goldman Sachs & Company. My research group and CGF had cooperated closely on our gold research since the early 1970s, sharing consultants around the world, and comparing notes on market trends. Louise du Boulay was one of a half dozen of extremely knowledgeable and intelligent people involved in precious metals research, and we developed a close, cooperative relationship that lasted until 1988. We also provided CGF with research and consulting services related to gold, silver, and platinum group metals, both while we were at J. Aron/Goldman Sachs, and for two years after we left to form CPM Group in 1986.

Consolidated Gold Fields was seeking a replacement for Ms. du Boulay, who had been the chief author of the CGF Gold reports for a few years in the early to middle 1980s. Ms. du Boulay had been promoted. CGF ran into difficulty finding anyone willing to take the position, and the search extended several years. Some of the top CGF executives at the time discussed the possibility of my accepting the position at a series of meetings in the middle of the 1980s. I declined the opportunity.

When CGF made its overtures to me in the middle of the 1980s, we discussed a broad range of details about the position and the work undertaken in that operation. Part of these discussions included CGF executives explaining to me the budget for the report and the research operation, including the size of the total budget. Part of the information was detailed information about the size of payments received from Intergold, the South African precursor to the World Gold Council, and the extent to which these payments covered a substantial portion of the report's budget. When the WGC replaced Intergold, in 1987, the arrangement was transferred to WGC. Perhaps the top executives at CGF were lying to me. I took their information, which was extremely specific, as being an honest representation of the job.

It was based on this personal history with the CGF operations that I made the statements I made.

Sincerely,

Jeffrey M. Christian