TACKLING THE GROWTH IMPERATIVE AS A SENIOR GOLD PRODUCER

by

Gregory John McCunn
Bachelor of Applied Science, University of British Columbia, 1994

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Name: **Gregory McCunn**

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Supervisory Committee:

_____

Senior Supervisor
Ed Bukszar, Associate Professor

_____

Second Reader
Richard Schwindt, Associate Professor

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SIMON FRASER UNIVERSITY

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ABSTRACT

Placer Dome is the world's fifth largest gold producer with seventeen mines operating in seven different countries. This paper provides an analysis of the gold mining industry as well as Placer Dome as a company in order to determine the most appropriate strategy for growth.

An internal analysis is conducted, including a strategic fit analysis, a value chain analysis and a financial analysis. This paper identifies key issues facing the company regarding its future growth. First, grassroots exploration has had a low instance of success due to under spending during a period of weak gold prices. In addition, developing major projects will stretch the company's financial and personnel resources due to a poor share price performance and a business restructuring project. As well, the market continues to punish gold companies which diversify from pure gold.

It is recommended that Placer Dome pursue a combination of organic growth, geographic diversification and increased M&A efforts.

ACKNOWLEDGEMENTS

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1 OVERVIEW OF PLACER DOME

Placer Dome is the world's fifth largest gold producer with seventeen mines operating in seven different countries. Its gold business is complemented by its copper and silver assets. Placer Dome's focus and strength for over 100 years has been finding, building and operating gold mines throughout the world.

In 2004, Placer Dome produced 3.6 million ounces of gold (approximately 5% of the world's supply from mining) and 413 million pounds of copper (approximately 1% of the world's supply from mining). Of the two revenue streams, the company considers copper to be of secondary importance and focuses on gold production. However, with the rise in commodity prices in 2004, a significant portion of the company's revenue was generated from copper sales. In 2004, the company produced gold at a total cost of US$298/oz and received an average price of US$391/oz for its product, yielding a margin of US$93/oz or US$335 million for the year. The company produced copper for a total cost of US$0.70/lb and received an average price of US$1.16/lb for a margin of US$0.46/lb or US$190 million. Therefore, 36% of the company's earnings were obtained from copper.[1]

Placer Dome, and other gold producing companies, trade in the stock market at a share price which is a premium to the company's net asset value (NAV). The premium or "multiple" is paid by investors who are seeking leveraged exposure to changes in the gold price, typically as a hedge against changes in the US dollar. As such, the multiple paid is higher for those companies that focus predominantly on gold and are not diversified into other metals or products. In this

[1] Placer Dome Incorporated, "Annual Report 2004", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005).

manner, investors place pressure on gold mining companies such as Placer Dome to remain focused on gold. However, investors also expect the company to achieve a reasonable rate of growth. Growth can be obtained through:

1. discovery of new gold resources ("organic" growth);
2. mergers and acquisitions, or
3. diversification into other metals such as copper.

Due to the pressure from investors to remain focused on gold, diversification into other metals has not been a desirable growth strategy for most companies, including Placer Dome. Placer Dome's current growth strategy and the preferred strategy for most of the major companies is organic growth. However, over the past 15 years, the number of significant new gold deposit discoveries has dwindled. Since 1998, the average annual discovery rate for significant gold deposits has only been 25 million ounces per year.[2] Currently, the top ten gold producing companies are producing about 35 million ounces per year,[3] creating an overall decrease in gold reserves which indicates that organic growth is a difficult proposition.

The industry has responded to the organic growth difficulty by consolidation through mergers and acquisitions. Placer Dome has kept pace, making several key acquisitions during this period including a key acquisition of Aurion gold in 2002 and obtaining the North Mara mine in Tanzania in 2003.

This paper analyzes the most appropriate growth strategy for Placer Dome with the goal of maximizing its shareholder value through profitable growth. The following section outlines the market for gold, Placer Dome's primary product. Following in Section 2, an industry analysis

[2] Barry Cooper, "Issues Facing Gold Companies", CIBC World Markets Equity Research Industry Update 05 (January 23, 2005): 10.
[3] World Gold, "Mine Supply: Feature", World Gold Forum April (2005): 4-5.

is presented which provides an overview of the gold mining industry and examines competitive forces which shape Placer Dome's strategy. In Section 3, an internal analysis of Placer Dome is conducted, including a strategic fit analysis. The gold industry value chain is described and Placer Dome's firm level value chain is presented. Also in Section 3, a description of Placer Dome's culture is given, followed by a financial analysis of the company. In Section 4, the main issues facing Placer Dome regarding its growth strategy are discussed. Finally, in Section 5 a recommendation of the strategy is devised to enable Placer Dome to meet its strategic growth goal of a sustainable gold production rate of 5 million ounces per year within four years.

1.1 The Market for Gold

Placer Dome's primary product, gold, is a commodity and cannot be differentiated from the product of its competitors. The primary uses for gold are in jewellery, industrial applications and biomedical applications (such as dentistry). However, gold is an unusual commodity in that it is also treated as a monetary asset.

1.1.1 Market Overview

The gold market is driven by jewellery consumption, with over 75% of the demand coming from this segment in 2004 (Table 1.1). The investment market is also an important segment even though only it represented only 11% of the total market in 2004.

Table 1.1 Gold demand in 2004.

Market	Demand (tonnes)	(%)
Investment	396	11%
Industrial and Dental	415	12%
Jewellery	2,673	77%
Total	**3,484**	**100%**

Source - . GFMS World Gold Council

Gold trading takes place predominantly in over-the-counter (OTC) transactions such as forwards, derivatives, options and spot sales. This is a different market than most commodities which trade through commodity exchanges. OTC transactions take place 24 hours per day, 7 days per week through dealers primarily found in London, Zurich and New York. Most dealers are associated with the London Bullion Market Association.

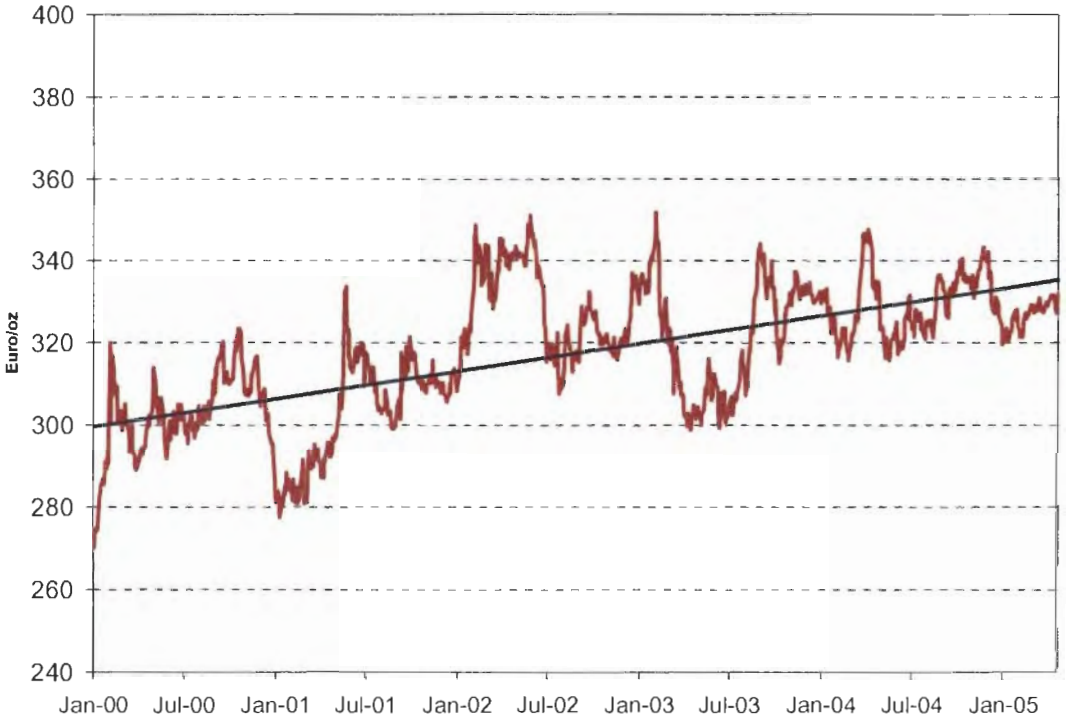
A gold price benchmark is set twice daily during London trading hours and is referred to as the "London Fix" (a.m. or p.m.). The London Fix acts as a reference point for most of the OTC transactions and is quoted in US dollars per ounce of gold (Figure 1.1).

Figure 1.1 London Fix (p.m.) daily gold price in US dollars.

Source – Data from Bloomberg Financial Services, graph by author.

The rising trend in the London Fix price since early 2000 illustrates how the price of gold is influenced by macro-economic shocks which impact the relative strength of the dollar. The investment in gold is seen as a hedge against a decrease in value of the US dollar. Since 2000, the US dollar has been devaluing, relative to the Euro. Figure 1.2 illustrates that the London Fix p.m. price of gold is rising less significantly in Euros per ounce (about a 10% increase compared to a 50% in US/oz).

Figure 1.2 London Fix (p.m.) daily gold price in Euros.



Source – Data from Bloomberg Financial Services, graph by author.

1.1.2 Investment Market

Gold has a history of being a safe-haven and store of value for investors. As it is not tied to any one government or corporation, there is no risk of default. Recently, gold has gained prominence as a hedge against US dollar currency fluctuations and inflation.

Investment in gold is normally through the purchase of bars and coins. Investors are either categorized as retail (individuals) or institutional (funds or investment managers). The investment market is currently evolving in two areas. First, China has recently relaxed regulations against individuals being allowed to own gold. For the first time, Chinese citizens can purchase bars and coins with relative ease through dealers that are predominantly centred in Shanghai. With a large emerging middle class, the investment market in China is expected to grow substantially over the next 5 years. Second, several exchange traded funds (ETF's) have

emerged in North America which allow individual investors to purchase gold in a similar manner to the purchase of stock. For example, the fund streetTRACKS™ trades on the New York Stock Exchange (NYSE) under the ticker symbol "GLD". Each GLD "share" reflects one-tenth of an ounce of gold and is priced according to the gold spot price in US dollars per ounce. ETF's allow individual investors the ability to purchase gold through their regular trading accounts without any of the difficulty associated with the physical storage or transfer of gold.

In 2004, investment accounted for 11% of the demand for new gold and this demand is expected to increase with macro-economic conditions indicating a weakening US dollar and the market evolving in China and North America.

Further investment demand for gold has typically come from central banks and organizations such as the International Monetary Fund (IMF) which historically has held gold as a reserve asset. Although it varies from country to country, in the past, central banks have typically held 10% of their reserves as gold. Recently, a number of central banks have moved to reduce their gold reserves, creating a net increase in supply. Central banks have been limiting sales under the Central Bank Agreement to approximately 500 tonnes per year. These sales have somewhat stabilized the price of gold and without the restrictions limiting the amount sold, the oversupply could depress gold prices and reduce the value of reserve holdings. Recently, Britain proposed that the IMF should sell its gold reserves and use the proceeds to relieve third-world debt. The US and other gold producing nations have opposed the sale based on their belief that such sales would drive down the price of gold, effectively reducing the value of their reserves.

1.1.3 Industrial Market

Industrial uses for gold include its use in electronics, biomedical applications and other industrial uses.

Gold is useful in electronic components as it displays high thermal and electrical conductivity. As well, it is extremely resistant to corrosion (oxidation) making it durable, even when formed into extremely fine wires.

In biomedical applications, gold's resistance to bacteria makes it suitable for use in the human body. Recently, gold has been used as lining for stents and as thin wires in heart transplant surgeries. Its most common biomedical application has been in dentistry for fillings and other structural work.

Other industrial uses of gold include decorative finishes. As well, a small market is emerging for use of gold in nanotechnology applications. Overall, industrial uses of gold accounted for 12% of demand in 2004.

1.1.4 Jewellery Market

By far the biggest demand for gold comes from the jewellery market (77% of the demand in 2004). Adornment jewellery is purchased at a relatively high mark-up to the actual value of the gold content to cover the cost of design of the jewellery and distribution of the product. Jewellers typically dilute the gold content in the jewellery with silver to enhance is durability. The gold content of the jewellery is given by its "carat" rating, with 24 carat gold being 100% gold (8 carat is therefore 33.3% and 18 carat is 75%).

Fashion and marketing are the main drivers for jewellery demand. Recently, gold has begun to fall out of favour in Europe and North America where silver and/or platinum has become more fashionable. The gold industry has not typically engaged in combined marketing efforts, but has recently formed a marketing consortium which plans to generate a gold advertising campaign similar to the "Diamonds are Forever" campaign by DeBeers.

Demand for gold jewellery is highly seasonal with Christmas being the peak demand period in North America and Europe. In India, the "wedding season" during April and May is also a period of high demand.

2 INDUSTRY ANALYSIS

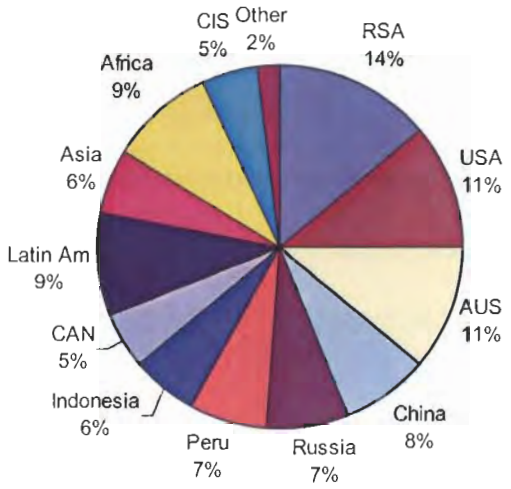
2.1 The Gold Mining Industry

Gold is produced on every continent (except Antarctica where mining is prohibited) in operations ranging from one-person "artisinal" miners to the enormous Grasberg mine in Indonesia (3.2 million ounces of gold produced in 2003).[4]

The dominant producing country for the 20th century was South Africa (RSA) where approximately 70% of the world's annual gold supply originated in the 1970's. [5] The dominance has diminished with South Africa's mines aging and other countries increasing mine development. As of 2004, South Africa was still the world's leading gold producer (Figure 2.1) with 14% of the overall supply.

[4] Freeport McMoran Limited, "Annual Report 2004", Freeport McMoran Limited, http://www.fcx.com/inrl/ar.htm (accessed May 7, 2005).
[5] World Gold Council, "Research and Statistics", World Gold Council, http://www.gold.org/value/stats/statistics/gold_demand/index.html (accessed May 7, 2005).

Figure 2.1 Distribution of World Gold Production by Country for 2004.



Source –Data from World Gold Council,[6] graph by author. Africa, Asia, CSI and Latin America indicate total for countries other than those already listed.

The total supply of gold in 2004 was approximately 3,360 tonnes, with 2,034 tonnes supplied from mining (Table 2.1). Recycling and sales from institutional gold holdings made up the balance of the supply.

Table 2.1 World Gold Supply in 2004.

Source	Supply (tonnes)	(%)
Total Mine Supply	2,034	61%
Official Sales	497	15%
Recycling	829	25%
Total	**3,360**	**100%**

Source – Data from World Gold Council,[6] table by author.

Production costs for gold vary widely depending on the nature of the mining method (open pit vs. underground), the grade of the ore, the metallurgy (which defines the extraction

[6] World Gold Council, "Research and Statistics", World Gold Council, http://www.gold.org/value/stats/statistics/gold_demand/index.html (accessed February 10, 2005).

process required) and the distribution of the ore. Average cash costs for the industry in 2003 were US$222/oz with total costs (including depreciation, amortization, reclamation and mine closure) averaging US$278/oz. This figure does not include the cost of "greenfield" exploration (finding new gold mines) which adds an additional US$30-40/oz. The average gold price for the same year was US$363/oz.[7]

World gold producers are generally divided into three categories: seniors, intermediates and juniors. The senior producers consist of multinational companies with annual production rates in excess of 3 million ounces per year each (Table 2.2).

[7] World Gold Council, "Research and Statistics", World Gold Council, http://www.gold.org/value/stats/statistics/gold_demand/index.html (accessed February 10, 2005).

Table 2.2 Senior Gold Producers.

	Home Country	Production 2004 (000 oz Gold)	Cash Cost 2004 (US$/oz)
Newmont Gold Corp	USA	7,000	$231
AngloGold Ashanti	RSA	6,050	$268
Barrick Gold Corp	Canada	4,960	$212
Goldfields	RSA	4,200	$302
Placer Dome	Canada	3,652	$240
Harmony	RSA	3,600	$390

Source: Data from Company Annual Reports,[8] table by author.

The intermediate producers are companies with mining capacity varying in scale from 50,000 to 2 million ounces per year. There are 20-25 companies in this category world-wide. Junior mining companies refer to companies with either small joint venture operations or companies which are actively exploring for or trying to develop gold mines. The goal of junior mining companies is to sell their development projects to senior or intermediate producers. World-wide there are hundreds of junior mining companies.

2.2 Industry Analysis

This section investigates the gold mining industry from the perspective of Placer Dome. The five forces from Porter[9] will be analyzed and rated from low to high. Further, the attractiveness of the overall industry will be assessed based on the analysis and key success factors will be identified.

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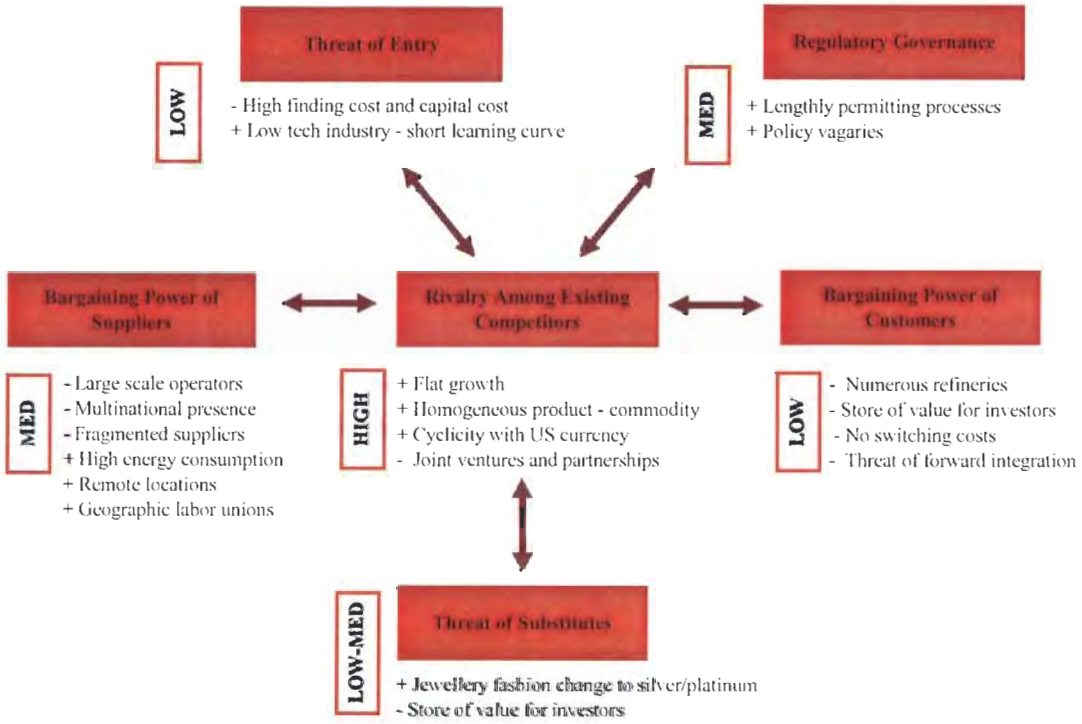
[8] Barrick Gold Corporation, "Annual Report 2004", Barrick Gold Corporation, http://www.barrick.com/index.aspx?usesid=-1&sid=92 (accessed May 7, 2005).
Goldfields Limited, "Annual Report 2004", Goldfields Limited, http://www.goldfields.co.za/Investor/Annual_Reports/FY_2004/gf_ar04/ar_04/default.htm (accessed May 7, 2005).
AngloGold Ashanti Limited, "Annual Report 2004", AngloGold Ashanti Limited, http://www.anglogold.com/subwebs/InformationForInvestors/AnnualReport04/report/default.htm (accessed May 7, 2005).
Harmony Gold Mining Company Limited, "Annual Report 2004", Harmony Gold Mining Company Limited, http://www.harmony.co.za/annualreports.cfm (accessed May 7, 2005).
Newmont Mining Corporation, "Annual Report 2004", Newmont Mining Corporation, http://www.newmont.com/en/investor/financial/index.asp (accessed May 7, 2005).
Placer Dome Incorporated, "Annual Report 2004", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005).
[9] Michael E. Porter, Competitive Strategy (New York: Free Press, 1980).

The competitive forces which shape Placer Dome's strategy are shown in Figure 2.2 and described in detail in the following sections.

Figure 2.2 Competitive Forces in the Gold Mining Industry.



Adapted from EMBA Strategy Seminar *[EMBA 607 class notes]. Bukszar, Ed Spring 2005.*

2.2.1 Threat of Entry

The threat of entry into the gold mining industry is primarily restricted by high costs for finding an ore body and developing an operating mine. Typically, junior mining companies are able to raise financing to fund exploration activities, particularly if they have had some initial success at a site and are looking for further funding to define the ore body. At some stage, the junior companies look for an intermediate or senior producer to either partner in the actual mine development or buy the property outright as the small companies do not have the ability to raise sufficient financing to develop the mine. Nor do they have the skills to build or operate mines.

These are significant barriers to entry for junior and intermediate firms and this works to strengthen the position of the senior players.

Even for companies with sufficient financial backing, high capital and finding costs act as a barrier to entry. For example, preliminary exploration in sufficient detail to conduct a feasibility study for a reasonable size deposit typically would take 3-4 years and cost US$30-40 million. Construction of the mine and the processing facilities would likely take another 1-2 years depending on the scale of the operation. Capital costs for gold mining vary greatly depending on factors such as location, mine type and processing type, but a typical cost would be about US$800 per annual ounce of gold production. A recent example in the industry is the Pogo Gold Mine being built by Teck Cominco in Alaska for a capital cost of US$333 million, designed to produce 400,000 oz/yr gold for 10 years.

Mining companies from other industries, for example base-metals, should be able to enter the gold mining industry relatively easily as it is a low-tech industry with a short learning curve. However, the industry value chain, which will be discussed further in Section 3, effectively acts as a barrier to entry. In the value chain, exploration for mines is predominantly carried out by junior mining companies, who then seek to sell the major discoveries to senior companies. Senior gold mining companies utilize equity financing to fund these arrangements with junior mining companies because of the "multiple" which gold mining companies receive in their stock price (as described in Section 1). This effectively drives up the price of assets as gold mining companies' shares are more valuable than base metal mining companies.

Only a few diversified mining companies, such as Teck Cominco, have gold assets. Typically these diversified companies have found the gold property through grassroots exploration while exploring for base metals and therefore have not had to compete with senior gold companies to purchase the assets.

High capital and finding costs for a gold mine act to reduce the threat of large scale entry into the industry. The effect of the multiple paid by the market to gold-focused companies acts as a barrier to other mining companies entering the industry.

2.2.2 Regulatory Governance (Affecting Entry and Rivalry)

The process for obtaining a permit or license to construct and operate a gold mine is lengthy, particularly in first-world nations such as the United States, Canada and Australia. Typically these permits require a careful definition of the impact mining operations will have on the environment and the region in which the mine is being built. Base line studies of the local ecology often take between 1 to 3 years to complete, depending on the nature of the region. For example, Teck Cominco's Pogo mine started operations after a permitting process which took 38 months.

In addition to government regulations and permitting, mining companies also seek "social" licenses to operate their mines. This license is not an official requirement, but a practical one. Without the support of local communities, mining companies will ultimately not be able to operate efficiently. Newmont was recently forced to curtail development in one of the regions near its Yanacocha mine in Peru after local residents protested vigorously. Obtaining a social license usually means educating the communities as to the long-term (post mining operations) benefits of mining operations in the region and the environmental impact the mine will have on the communities nearby.

The gold industry is also subject to policy vagaries which may impact upon profitability. One such policy is the sale of reserve gold holdings by central banks. As discussed in Section 1.1.2 above, the decision by central banks and other organizations to sell portions of their reserves has resulted in an increase in gold supply and acted to stabilize the price of gold, impacting gold mining revenues.

Senior gold mining companies operate mines in many different sovereign nations. Some of these countries have unstable policies toward mining taxation and royalties on mining revenues. As such, gold companies are subject to government policy changes. For example, the Chilean government recently increased its effective tax rate for mining companies from 30% to 35%. Such changes can have a significant effect on the profitability of mining operations.

2.2.3 Bargaining Power of Suppliers

The suppliers in the mining industry include suppliers of consumable inputs (reagents, spare parts, truck tires and equipment), labour suppliers, engineering suppliers and energy suppliers (power and fuel).

The senior gold mining companies are multinational companies with large scale operations. This tends to reduce the power of suppliers of consumable inputs to these companies. Newmont, Placer Dome and Barrick all have centralized purchasing departments at their head offices which source supplies such as truck tires and valves from all over the world to supply their operations. In addition, the suppliers of consumable inputs are fragmented, allowing mining companies to select the best pricing and service options. The bargaining power of suppliers of consumable inputs in the mining industry can be considered low, even for specialty items like large truck tires.

Gold mining and refining is an energy intensive operation. In some instances of remote geographic location, power suppliers can have a strong bargaining position with mining companies. However, in most countries, the source of power is controlled by the national or regional governments who typically seek mining investment in their regions. It is common for governments to offer concessions on power costs to mining companies to encourage investment. Overall, the bargaining power of energy suppliers to gold mining companies can be considered medium.

The power of labour tends to depend on geographic location. In some areas such as South Africa, Canada, the United States and Australia, organized labour unions have substantial bargaining power. In other areas, such as China, where the labour pool is large and not organized for collective bargaining, labour has very little bargaining power with gold mining companies. Approximately 40% of the world's mined gold supply is produced in countries where unions are prevalent.

Engineering services, which are required for mining companies to develop new mine sites or to expand existing operations, are sourced from various engineering firms. Competition amongst the engineering firms is vigorous and senior gold mining companies are able to exert significant power over these service providers. However, in times of strong commodity prices such as 2004 and early 2005, there can be a shortage of engineers as the mining companies rush to bring on new capacity to feed rapidly increasing demand. From the perspective of senior gold producers, the engineering firms aim to provide them with the best service ahead of intermediate or junior companies. Engineering firms realize that the business is highly-cyclic and attempt to maintain good relationships with the senior producers who provide more work during the weak periods in the metal cycle. In general, engineering firms exert medium bargaining power over senior gold producers such as Placer Dome.

Junior mining firms also act as suppliers to senior gold mining firms by supplying undeveloped mines. Junior companies typically explore for gold deposits and once a promising deposit is located, attempt to partner with or sell the deposit to senior firms with the required access to capital to develop the resources into working mines. The bargaining power of the junior companies depends on the nature of the project. For large, high-grade deposits, there will be significant competition between the senior players and the juniors will be able to exhibit significant negotiating power. However, the discovery of these type of deposits is extremely rare.

Typically, junior mining companies seek to establish long-term relationships with specific senior producers. The senior partner will often fund the junior company by participating in "earn-in" deals. Under these types of agreements, the senior company will earn the right to a controlling equity stake in the project by partially funding the exploration and related engineering studies. By establishing this relationship, the bargaining power of the junior is somewhat diminished. Except for a few rare cases, junior mining companies have medium bargaining power.

Overall, the suppliers of consumable inputs, energy, engineering, new mines and labour have medium bargaining power in the world gold mining industry.

2.2.4 Rivalry

Flat growth in gold production has led to increased competition for new mine discoveries as well as increased competition to acquire low-cost mines via company acquisitions.

In addition, gold is an homogeneous product and is sold freely on the open market, which increases rivalry amongst competitors in the industry as firms compete to lower total operating costs.

Rivalry is also increased in the world gold industry due to its cyclic nature. Senior gold mining companies follow similar growth strategies, with similar responses to the gold price cycle. For example, senior gold mining companies tend to focus on organic growth through grassroots exploration during high gold prices. Conversely, the same companies focus on growth by mergers and acquisitions during periods of low gold prices. By following similar strategies, the competition is intensified for new assets during periods of high gold prices, effectively driving up the cost of assets. As well, the competition for quality acquisitions is intensified during periods of low gold prices.

The price cycling tends to be smoothed by a lack of supply-side discipline by the gold mining companies. For example, currently the US dollar is in a period of devaluation and the price of gold is at 16-year highs, marginal mine projects are being developed, adding high-cost supply to the market. The increase in supply tends to then drive the price of gold down. At some point, the marginal mines are forced to close, reducing supply and causing the price to increase again.

There are numerous joint ventures and partnerships in gold production, which act to marginally decrease rivalry. Placer Dome has a joint venture in Nevada, Turquoise Ridge, with Newmont.

Overall in the world gold mining industry, rivalry among competitors can be characterised as high.

2.2.5 Bargaining Power of Customers

Placer Dome's customers for doré (gold and silver) metal are precious metal refining companies. Refiners have limited bargaining power due to the large number of competitors in this industry. There are over 50 precious metal refineries world-wide that refine doré metal into gold and silver bars and ingots.

In addition, the bargaining power of the precious metal refineries is limited by the relative ease with which gold mining companies could integrate forward into this function. For example, one of the senior gold mining companies, AnlgoGold Ashanti, operates a refinery in South Africa.

The precious metal refining companies sell bar and ingot product into a highly fragmented market of comprised of industrial users, investors, mints and bullion dealers. Bullion dealers typically act as the intermediary for the jewellery sector which accounted for 77% of the

demand in 2004. The jewellery sector is global and atomistic in structure and as a result has little bargaining power.

The bar and coin investment sector accounted for 11% of the demand in 2004. The bargaining power of this sector is relatively low due to a lack of buyer concentration. As well, investors desire to invest in gold is driven by macro-economic conditions. Gold's use as a store of investment value stems from its historical use as a "standard" currency. Essentially, there is no substitute for gold for this purpose.

Overall, the bargaining power of Placer Dome's immediate customers (i.e., refiners) and ultimately gold consumers is low.

2.2.6 Threat of Substitutes

As discussed in the previous section, the bar and coin investor utilizes gold as a store of value to hedge investment in the US dollar. Essentially there is little or no threat of a substitute emerging for this purpose.

However, for the use of gold in jewellery there is a significant threat of substitution from other precious metals such as silver and platinum. Recently, North American and European fashion has shifted away from gold and more towards the use of silver or platinum. Platinum is a superior product to "white gold" and is commonly used in jewellery items. The threat is somewhat restricted by the high price of platinum – currently US$850 per ounce compared to gold at US$420 per ounce. Platinum price is driven by its industrial use in motor vehicle emissions control systems (catalytic converters).

In the industrial sector, there is virtually no known material which can substitute for gold due to its unique physical properties. However, modern high-tech materials have been successful at displacing gold in dental and other uses in the human body.

Overall the threat of substitution for gold in the jewellery, investment and industrial sectors is low to medium.

2.2.7 Industry Attractiveness

Overall, the gold industry is characterized by high rivalry amongst existing competitors. Existing players with effective strategies for competing for scarce resources can run highly profitable operations and provide shareholders with above average returns. The low threat of entry in the industry should also lead to reduced rivalry for senior players in the future as the industry consolidates.

One factor reducing the attractiveness of the industry is the increasing licensing requirements facing gold mining companies when developing new projects. Mining, being an extractive industry, is inherently "unsustainable". With sustainability being one of the key governance issues facing companies this decade, the regulatory burden is sure to continue to increase. In particular, the emergence of the need for a "social" license is likely to make the mining industry more unattractive in the near future.

2.3 Key Issues and Success Factors

Effective business strategy in the gold mining industry must address the requirement for growth, the requirement to minimize operating costs and the requirement to work with various stakeholders to overcome hurdles in developing new mines.

In order to develop an effective growth strategy, gold mining companies need to optimize existing assets (organic growth) and generate new production either through new mine development or mergers and acquisitions. In order to be successful in optimizing existing assets, companies must plan to invest in mine site exploration (Minex) and have skilled geologists capable of turning exploration spending into a mine-able resource.

For new mine development, the gold mining companies must invest in greenfield exploration and/or have good relationships with junior mining companies who are looking for partners in mine development. A good reputation in making deals with junior mining companies is a key for success. Once new properties have been found and the rights to mine them have been secured, companies must have project teams which are highly skilled to develop the projects from discoveries to working mines.

Also, mining companies must meet the increasing challenge of overcoming regulatory hurdles in new mine development. Companies that develop core competencies in this area may obtain a sustainable competitive advantage over their competitors. In addition, companies that maintain a good reputation for following best practises in the industry will become preferred by industry regulators and add to this sustainable competitive advantage.

In order to achieve growth through mergers and acquisition, it is essential that companies maintain a strong stock price (essentially the currency used for acquisitions). In order to achieve this, the operating costs for existing operations must be in the top quartile of producing gold companies and the guidance given to the market must be consistently met.

3 INTERNAL ANALYSIS

3.1 Strategy

Placer Dome follows a cost based strategy. Placer Dome's strategy stated in general terms is to:

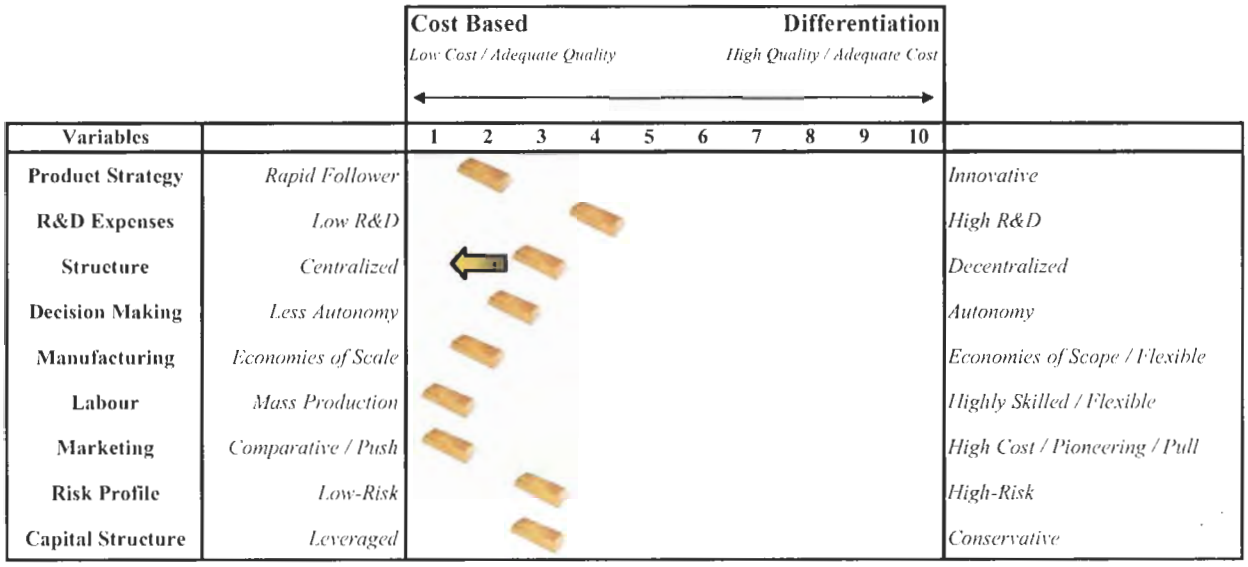
1. Pursue profitable growth through optimization of existing assets. Emphasis is on improving productivity, cutting costs and investing in exploration to expand and extend the lives of properties which are already owned and operated by the company.

2. Invest in new, high-quality assets (low cost, long life) through grass-roots exploration, project development and acquisition.

3. Develop innovative ways to improve the business and provide a competitive advantage – technically, environmentally and socially – through research and technology.

In order to examine whether the company's organizational capabilities and core competencies are in line with this strategy, nine variables were considered and analyzed (Figure 3.1). The variables shown in the figure were assessed and rated on a scale of 1 to 10, with 1 being the most strongly correlated to a cost based strategy and 10 being the most strongly aligned with differentiation. Each of the variables analyzed and ranked will be discussed in more detail in the following sections. As well, conclusions will be made as to the degree of overall fit in the organization and consideration will be given to areas that the company could improve its strategic fit.

Figure 3.1 Strategic Fit Analysis



Adapted from EMBA Strategy Seminar [EMBA 607 class notes]. Bukszar, Ed Spring 2005.

3.1.1 Product Strategy

Placer Dome's product is refined gold metal and to a much lesser extent, refined silver and copper. These metals are all traded as commodities and therefore Placer Dome has no power to price its products and essentially no opportunity to differentiate them from competitors. Typically the price of commodities is set by supply and demand in the market. However, gold is a special case as it is viewed by investors as a currency, rather than a true commodity. Gold is traded as a hedge by investors against currency decline. In particular, the price of gold responds to economic shocks in an inverse relationship to the US dollar. For example, with the recent decline in the relative strength of the US dollar, gold has enjoyed a significant increase in price. Similarly, Placer Dome's shareholders invest in the company to hedge against currency decline. As such, Placer Dome's product strategy is to focus on producing gold and minimizing the amount of by-product production, such as copper. In this manner, Placer Dome's shareholders receive the maximum exposure to gold price fluctuations, providing them with the desired hedge position. By having a product strategy that focuses solely on gold, Placer Dome is rewarded with a share price that typically trades at a multiple of about 2.5 times Placer's net asset value per

share. This is substantially higher than for producers of base-metals, such as copper. For example, Phelps Dodge, one of the world's largest copper producers, trades at a price per share equal to its net asset value (a multiple of 1.0).

This product strategy is not innovative and is followed by most of the major gold producers. Therefore, Placer Dome's product strategy fits well with its generic cost based strategy, that of a follower, rather than an innovator. The rating of 2 on the scale is because Placer Dome operates one copper mine in Chile, leaving some marginal room for improved fit in this area.

3.1.2 Research and Development

Placer Dome's strategy includes developing innovative ways to improve the business and provide a competitive advantage – technically, environmentally and socially – through research and technology. Typically the expenditures made on R&D are focused on improvements to mining and refining processes which will help reduce cost or improve operational efficiency. For example, the research and technology department recently developed a fuel cell powered underground mining vehicle. The vehicle has the potential to significantly reduce mining costs by reducing fuel consumption. This is particularly important with the current trend of rising fuel prices.

In 2003, the company spent approximately US $23 million on research and technology compared to overall operating costs of approximately US $1.3 billion. While $23 million seems insignificant in terms of total operating costs, it is more significant when one considers that net earnings for the company in 2003 were only US $200 million; i.e. in the short-term, net earnings could have improved by 10% by eliminating all R&D expenses. Clearly it is part of the company's strategy to look for competitive advantage through continuous process improvement. The company's organizational capabilities fit this strategy. Placer is known for having a small,

but very competent research and technology department which focuses on innovative ways to reduce cost and improve processes. The company has scored a 4 on the strategic fit grid - R&D costs are not high, but they are certainly more than insignificant. The amount of R&D expenditures alone seems to imply a misalignment of organizational capability with its cost based strategy. However, when one considers the focus of the R&D – reduce costs and improve efficiency – the strategic fit should be considered to be quite strong.

3.1.3 Organizational Structure

In terms of corporate structure, Placer Dome is currently in a transition period. Prior to 2002, the company had Executive Vice Presidents (EVP) in each of its distinct operating regions in the world (Asia Pacific, North America, South America and Africa). Each of the EVP's had responsibility for strategic development, operations and exploration within their regions. Corporate head office in Vancouver provided oversight and support for the regional offices.

Recently, the company has initiated a major business process overhaul. As part of the program, the company has centralized all executive management functions in the Vancouver head office with the formation of a Leadership Team (LT). The members of the LT have world-wide responsibility for their respective functions such as operations, strategic development, safety and sustainability. The position of regional EVP has been eliminated and control has been centralized in Vancouver.

An example of this centralization is in the control of exploration spending. In exploration, the company can choose to pursue mine site exploration (looking for gold adjacent to existing mines) or grassroots exploration (finding new mine sites). Historically, each of Placer Dome's mine sites has had autonomy in deciding how much they would spend on mine site exploration and grass-roots exploration was centrally controlled. Now with more centralized control, all exploration decisions are made with corporate direction to ensure that exploration

spending is directed to the areas with the most potential to add value to the company's resource base.

In addition to the restructuring, the company is rolling out an enterprise resource planning system running on the SAP platform. Systems such as centralized purchasing for all world-wide sites are being initiated to provide more bargaining power for the company with suppliers of reagents, consumables and other common items required for operation.

Considering the restructuring process the company is undertaking, it is positioned as a 3 on the strategic fit grid, with an arrow indicating it is moving towards the 1 position. This implies a solid strategic fit with its cost-based strategy, although it will take some time to align the organizational culture and capabilities with this strategy. For instance, the individual mine sites still have personnel capable of making purchasing decisions, even though they are no longer required to do so. As well, the company is recruiting to staff the ERP program in the Vancouver corporate office.

3.1.4 Decision Making

As described in the previous section, Placer Dome is in the process of centralizing most of its decision making in the Vancouver corporate office. Therefore, the individual mine sites have very little autonomy in regulating their own activities. Each year, planning for the following year's operations begins in February. The centrally located Leadership Team (LT), including the Executive Vice President (EVP) of Operations, lays out goals and targets which are presented in conjunction with the company's overall business strategy to the Board of Directors. Once approved, the EVP Operations then communicates the goals and targets to the individual mine sites for their consideration. Each mine site then prepares and presents a Strategic Business Plan (SBP) which describes how the mine will be operated and maintained in order to meet the corporate goals and objectives in the following year. The individual mine sites submit SBP's in

June each year to the Vancouver corporate office. The results from each of the operations are compiled and compared to the corporate goals originally set out at the start of the year. The Leadership Team in Vancouver asks for revisions as required and eventually approves the plans. The combined SBP's are then developed into a business and financial operating model for the company. Typically this planning process is completely documented and approved by mid-October for the following financial year. Throughout the next year, the mine sites are monitored for progress against the approved plan and have no autonomy to deviate.

In addition, decisions such as purchasing are now made by a central purchasing group based in the corporate head office. This allows Placer Dome to exert more buying power over its suppliers, but removes purchasing decision autonomy from the individual mine sites.

Placer Dome's centralized decision making shows a strong strategic fit with its cost based strategy (a 2 on the grid).

3.1.5 Manufacturing

Placer Dome's strategy is to invest in "high quality" assets. More specifically, new mines must meet size criteria to be considered for acquisition or project status. Mines which are capable of producing more than 400,000 oz/year for more than 10 years are worthy of consideration if the mine is in a country where Placer Dome does not currently operate, or more than 300,000 oz/year if the mine is in a country which Placer Dome has already entered.

By restricting investment to larger operations, Placer Dome is able to take advantage of economies of scale when building a mine. The capital cost of the mine development typically has a large fixed cost component. For example, the required infrastructure such as roads, office facilities, power lines, security, warehouse operations and port facilities are fixed costs. When the costs are incurred for building a larger mine, the capital cost per unit of production is lower,

creating greater economies of scale. In addition, there are economies of scale which are achieved from the engineering cost component (indirect costs). For example, the number of engineering hours and engineering drawings required to design and procure any of the process equipment is independent of the capacity of the equipment. Therefore, economy of scale is achieved for larger processing plants as the engineering component will form a smaller percentage of the overall capital cost.

Following completion of the construction of the mine, ongoing economies of scale are captured from the fixed cost component of the operating costs. The most substantial fixed cost components in a processing plant and mine are labour and G&A. For example, the number of personnel required to operate a gold milling plant is independent of scale. Therefore, larger capacity plants will achieve lower cash costs due to economies of scale in labour. Similarly in G&A, it will take one security guard to man the front gate, regardless of the mine capacity.

In addition to fixed costs, economies of scale are also achieved by energy efficiency in process operations. The equipment used in the processing of gold (tanks and pumps in particular) use less power per unit of throughput at larger scales.

Placer Dome pursues economies of scope on a minor scale by recovering by-product silver from some of its gold operations. These economies are achieved as a consequence of the chemical process – silver is usually recovered along with the gold without having to perform any extra processing stages. However, the primary strategy of the organization - to focus on economies of scale - indicates a strong strategic fit with its cost based strategy (a 2 on the strategic fit grid).

3.1.6 Labour

In the process of mining and producing gold, Placer Dome utilizes mass production techniques whenever possible. As discussed in the above section, the scale of the operations is sufficiently large to attempt to minimize operating and in particular, labour costs. Although the workforce in mining has special skills, comparatively, most of the labour would be considered low-skill such as heavy equipment operating, plant operating, general trades and manual labour forces.

In countries which have a very high labour cost, such as the US and Canada, the company makes capital investment to introduce more automation to the processes. In lower wage countries such as Papua New Guinea and South Africa, the labour forces are larger and less automation is utilized. For example, in the gold processing plant, quality control samples are required from various streams within the plant every 2 to 4 hours. In a process plant in Nevada, the company installs automated sampling systems which process the samples, analyse the required components and feed the results to the plant's distributed computer control system. In Papua New Guinea, the company employs a larger analytical labour force to manually sample streams, process the samples, analyze the results and manually enter the data into the plant's computer control system.

In general, most of the labour force at the mining sites is inflexible. For example, a plant operator is unlikely to be capable of fixing or repairing a worn part on a piece of equipment. Designated maintenance personnel would be called to make the repair.

The use of mass production, low-skilled labour and highly inflexible labour all indicate a strong organizational fit with Placer Dome's cost based strategy. The company is positioned at 1 on the grid.

3.1.7 Marketing

The products produced from Placer Dome's operations – gold, copper, and silver – are almost impossible to differentiate from its competitor's products. As such, Placer Dome and the gold mining industry in general, engage in minimal marketing efforts. Marketing functions within the corporate structure are focused on ensuring the product is delivered on-time and that the products meet the industry purity standards. The organization has no true marketing capabilities and relies on a purely comparative strategy.

However, recently there has been some interest by some of the major gold mining companies on engaging in advertising directly to the consumer. Gold has somewhat fallen out of fashion over the last 5-10 years, with silver and platinum taking its place in jewellery and accessories. As a significant portion of the demand for gold is in jewellery, the company has committed a small amount of funding to a marketing consortium being organized by several of the world's major gold producers. The marketing effort will be similar to that of the diamond mining industry (led by DeBeers) which has successfully driven demand by effective marketing techniques.

Although the company is beginning to engage in some marketing, the marketing effort is actually being shared with its gold-producing competitors. Essentially this marketing is directed at protecting the market from substitutes, not at all towards differentiating product. The effort is also minimal cost. As such, the company's organizational capabilities and strategy is strongly correlated with its cost based strategy as indicated by a 1 on the grid.

3.1.8 Risk Profile

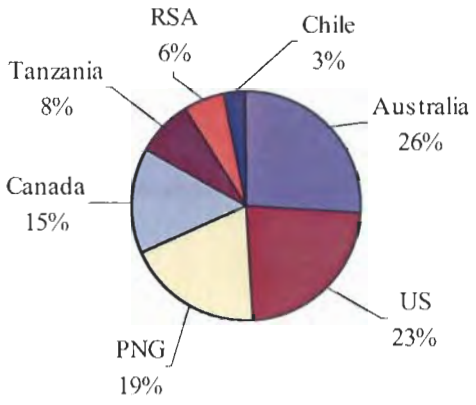
In gold mining, the risk profile of the company is predominantly defined by geographic and political risk which arise from the countries in which the company operates. Placer Dome is active in exploring for gold in just about every country or region in the world, regardless of the

risk. However, the company continuously monitors political situations and maintains a rating on every country, with particularly high risk countries receiving a "no-go" rating. For example, Russia is currently rated a no-go because of its poor investment climate. Also, the Democratic Republic of Congo is a no-go because of its political climate. Although both countries are known to contain valuable mineral deposits, the company chooses not to operate in those regions.

However, in order to be a low-cost producer, the company is forced to go into some regions which are somewhat risky. For example, about 30% of the company's production of gold is mined in Papua New Guinea, South Africa, and Tanzania. All of these countries have elevated risk levels, which the company balances with operations in extremely low political risk areas such as Ontario and Nevada. Papua New Guinea is a relatively unstable country politically, and the risks associated with operating a mine include risk of expropriation, risk of a local uprising (security of assets) and risk to personnel safety due to high levels of violence and crime. In Tanzania and South Africa, the governments are more stable, but the laws governing foreign direct investment in the country are still evolving. For example, South Africa has recently changed its mining laws to include a Black Equity Empowerment (BEE) law. Effectively, the law mandates that all mining operations must have a BEE company as a 30% minimum equity shareholder. BEE companies are defined as those that are owned by historically disadvantaged South Africans. Placer Dome has 2 years to comply with this law for its South Deep mine, meaning the company must sell a 30% equity stake in its operations, likely at below market rates.

The company reduces risk such as these by geographically balancing its portfolio of gold assets (Figure 3.2).

Figure 3.2 Placer Dome's Geographic Gold Production Portfolio.

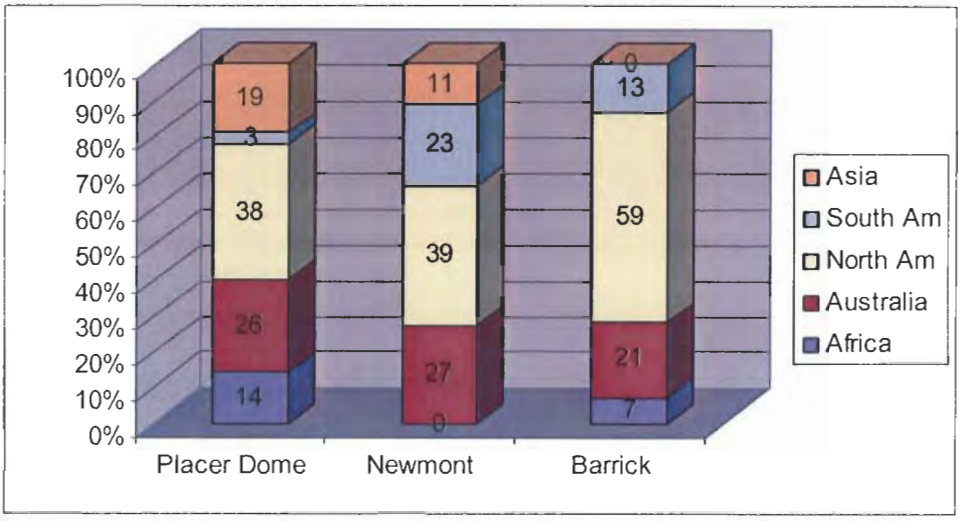


Source – Data from Placer Dome Annual Report 2004,[10] graph by author.

It is useful to compare the geographic production profile of Placer Dome to some of its peers (Table 3.1). Essentially, each of these major North American senior gold mining companies uses geographic diversification to balance country risk.

[10] Placer Dome Incorporated, "Annual Report 2004", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005).

Table 3.1 Geographic Distribution of Gold Production Compared to Peers



Source – Data from company Annual Reports 2004, graph by author.

One of the company's core competencies is its ability to execute projects and operate mines in remote and politically higher risk regions of the world. The management of security and political risk is necessary to maintain an overall cost based strategy and therefore, despite a rating of 3 on the grid, the company's strategy is well matched to its cost based strategy.

3.1.9 Capital Structure

The capital structure of most companies in the gold mining industry would be considered to be conservative when compared to other mining firms. Although the projects and acquisitions undertaken require enormous capital, the gold mining industry enjoys a relatively low Weighted Average Cost of Capital (WACC) of only 5% due to its ability to raise equity easily and cheaply. As discussed above, the high trading multiple of share price to net asset value allows the company to finance projects inexpensively through the issuance of shares.

Placer Dome, as a major producer, does utilize more debt than most of the smaller gold producers (current debt:equity ratio is 0.40). As most of the mid-tier producers operate with zero debt, this structure can be considered to be somewhat leveraged and Placer Dome is about a 3 on

the strategic fit grid. The firm is able to carry more debt than smaller producers because it has a diversified portfolio of assets and low cost production which mitigates the risk associated with carrying more debt. This implies a good fit with its cost based strategy.

3.1.10 Conclusion

Placer Dome follows a cost based strategy. The company's organizational capabilities and its core competencies are a strong fit with this strategy in the areas of manufacturing, labour, marketing and capital structure.

The company spends a modest amount of money on research and technology and has a small group of competent personnel in this department, which typically is not a strong strategic fit with a cost based strategy. However, when one considers that the focus of the research and technology work is on improving process efficiency and reducing cost, the R&D expenditure is in-line with a cost based strategy.

The company is currently restructuring its business processes to centralize decision making and control, which will provide a strong strategic fit. The organizational competencies and culture will take some time to adapt to this strategy and the organization needs to focus on managing this change process effectively to avoid business interruption.

The company's risk profile may be seen as higher than a typical North American manufacturing company due to operating in countries such as Papua New Guinea, South Africa and Tanzania. However, compared to its industry peers, Placer Dome pursues a relatively low-risk strategy, which is in line with its cost based focus.

Finally, in its product strategy, Placer Dome focuses on being a pure gold producer, which again is a strong fit with its cost based strategy. However, gold mining companies are under continuous pressure to grow, and premium, low-cost gold properties are becoming rare. As

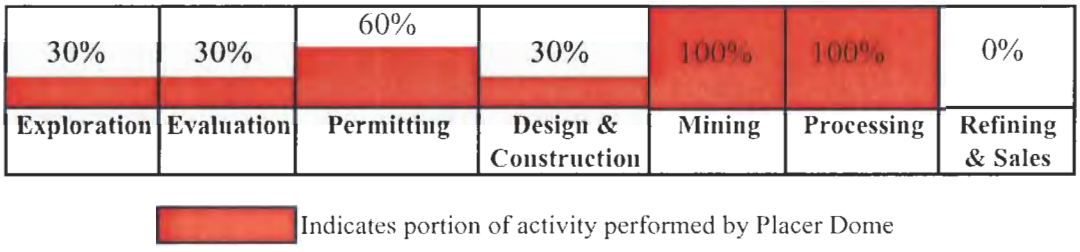
such, there is pressure in the company to examine its growth strategy and determine if growth without diversification is possible.

3.2 Value Chain

3.2.1 Industry-Level Value Chain

The industry value chain for the production of gold is shown in Figure 3.3. In all, eight separate activities are highlighted. The colour scheme indicates the footprint of Placer Dome within the industry. The portion of each activity bar which is coloured red indicates the percentage of that activity performed by Placer Dome with the remaining portion being outsourced. For example, in the exploration activity, approximately 30% is completed by Placer Dome and 70% is outsourced.

Figure 3.3 Industry Value Chain for the Production of Gold.



Adapted from EMBA Strategy Seminar *[EMBA 607 class notes]. Bukszar, Ed Spring 2005.*

Exploration is the locating of viable mineral deposits. The activity involves several stages. First, a high-level evaluation of areas of interest is completed using techniques such as helicopter magnetic resonance imaging, soil sediment sampling and/or soil trenching. From the high-level evaluation, areas with mineral abnormalities become targets for further investigation. In the next stage, drilling is used to examine the mineral characteristics of the target area. In this stage, a large drill is used to bore a hole several hundred meters deep and a few centimetres in diameter. The material which is displaced by the drill (drill core) is collected and carefully laid

out in the same orientation which it came out of the hole. Geologists then examine the drill core and take note of the mineral types present at various depths along the drill hole. Some of the drill core is analyzed for gold content, and by combining the results from several drill holes, geologists can develop a map of the orebody. In the final stage of exploration, resource estimators (specially trained geologists) use sophisticated computer modelling techniques to determine the amount of gold which can be economically mined from the orebody.

Placer Dome performs about a third of its exploration activity. A relatively small team of exploration geologists monitor activity being carried out by junior mining companies and try to secure deals with these companies to acquire rights to orebodies of interest. In some cases, Placer Dome "earns-in" to properties by funding the exploration activity being carried out by the junior mining companies and in others, the property is acquired following the drilling stage. Placer Dome performs almost all of the resource estimation function within this activity.

Following the discovery of an economic orebody, the evaluation activity begins. In this stage, engineering teams conduct preliminary designs for the mining, transport and production activities in sufficient detail to estimate the capital and operating costs to produce gold from the orebody. The result of the activity is a "bankable" feasibility study which indicates capital and operating cost in sufficient detail for project financing to be approved.

Placer Dome contracts the engineering study work out to firms such as Fluor, Minproc or AMEC and maintains a group of engineers capable of acting as owner's representatives and project managers. As well, this group of engineers ensures that the engineering contractors are conducting design work to Placer Dome standards. Approximately 30% of the activity is conducted in-house and 70% contracted out.

Once a project has been approved on the basis of the evaluation, permits to operate must be obtained. These permits include environmental, local business and social licenses.

Environment and business licenses are obtained by following location-specific procedures and often involve conducting base-line studies of the existing habitat at the future mine site. A social license is obtained by consulting with the local community where the mine will be located and developing support for the mining project.

Placer Dome carries out most of this work in-house, but contracts much of the legal work required. In addition, local consultants are often engaged to gain local knowledge and assistance for obtaining a social license.

Following the permitting activity, the design and construction of the mine begins. This stage involves completing a detailed design for the mine, processing plant and associated infrastructure. Then equipment is procured and constructed on the mine site. Placer Dome typically contracts the majority of this work to an EPCM (Engineering, Procurement and Construction Management) firm such as Fluor, Minproc or AMEC. It is usually advantageous to contract the same firm that conducted the feasibility study in the evaluation stage to shorten the learning curve and minimize costs.

Following the construction and commissioning of the mine, processing plant and infrastructure, the mining and processing activities begin. In this stage, ore is extracted from the ground by mechanized equipment. Mines can be either open-pit or underground and the type of equipment varies depending on the type of mine. Ore is then transported, typically by large trucks, to a processing plant. The type of processing plant varies depending on the type of mineral which contains the gold. Typically the ore is finely ground in mills to liberate the gold from the host material. Small amounts of cyanide are then used to leach (dissolve) the gold into solution. The gold is then recovered from solution in the form of a doré metal. The doré also contains any silver which was present in the ore and small amounts of impurities. The doré metal

is melted and cast into bars weighing approximately 30-kg and containing 65-95% gold (depending on the amount of silver present in the orebody).

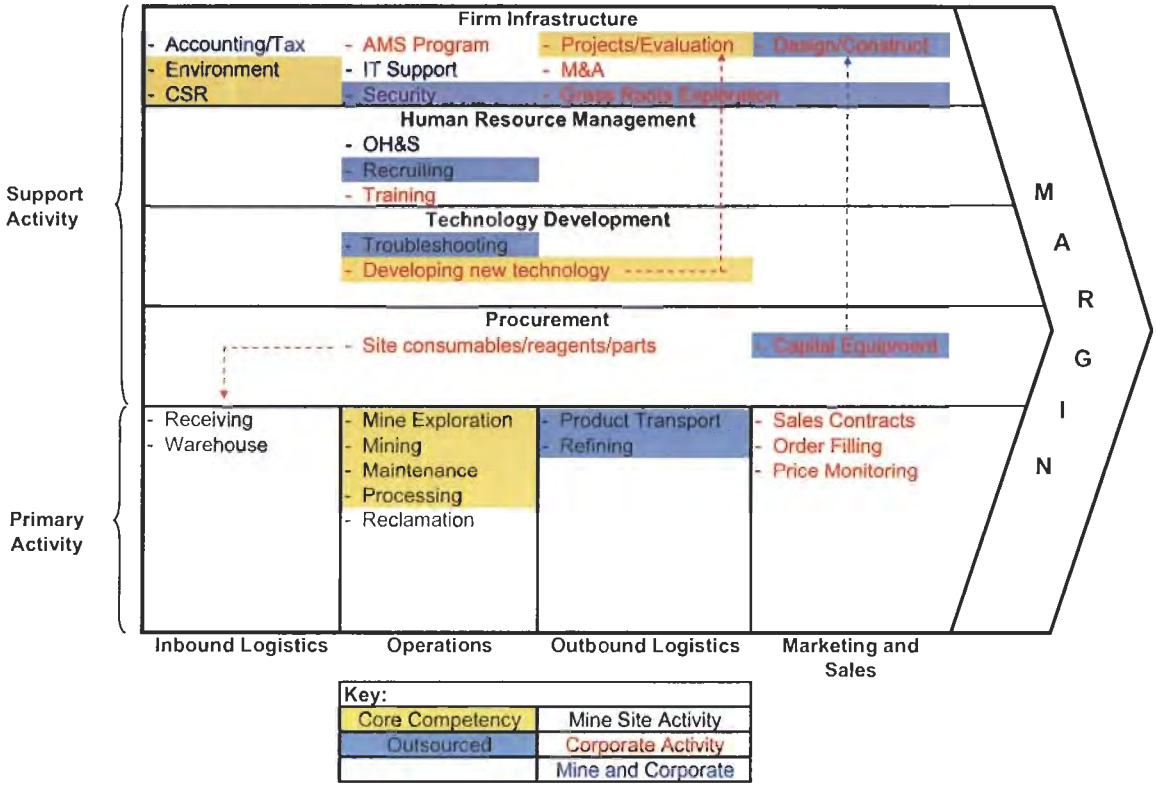
Eventually, the ore at the mine site is depleted and the processing function begins to wind down. The final function of the mining and processing activity is to reclaim the disturbed land. Placer Dome conducts all mining, processing, and reclamation activities necessary to produce doré product, including support activities such as maintenance. In some locations, minor support functions such as janitorial, security and office services are contracted out, but nearly 100% of the actual mining and processing activities are conducted by Placer Dome.

Doré metal is subsequently refined to produce pure gold and silver. This function is outsourced to a precious metal refining company such as Johnson Matthey. The refinery produces gold "bullion" in the form of ingots and bars and subsequently sells the bullion. Customers can be investment brokers, mints, banks, jewellers or industrial users.

3.2.2 Firm-Level Value Chain

The firm-level value chain for Placer Dome is shown in Figure 3.4.

Figure 3.4 Firm-level value chain for Placer Dome.



Adapted from EMBA Strategy Seminar *[EMBA 607 class notes]. Bukszar, Ed Spring 2005.*

3.2.2.1 Primary Activities

Inbound Logistics

Placer Dome's primary activity is the production of gold metal doré from a mineral resource. In order to achieve this, inbound logistics are required which includes receiving (of consumables and reagents) and warehousing. Each mining unit operation is set up with a central warehouse system which is responsible for the receipt of all materials on site. Goods shipped to site generally fall into one of two categories: reagents or consumables. Many of the reagents are shipped by bulk transport truck and it is the responsibility of the receiving department to ensure the delivery quantity is accurate. At most operations, there is a truck scale located on the outside of the mine gate. Trucks must weigh in and out of the plant and the receiving department reconciles differences between the weigh-bill and the invoice from the customer. This is not only

important to ensure that the mine is not being overcharged, but to provide accurate data for metallurgical accounting. The reagent consumption is typically measured based on a mass balance which uses the delivery weight of the trucks as its input. Accurate readings are therefore essential as the operations staff continually attempt to optimize reagent consumption to minimize operating costs.

In addition to reagents, the receiving department receives shipments of consumable items such as truck tires, equipment spare parts and grinding mill steel charge. The receiver books the items received into the warehouse inventory and stocks the items in the appropriate location. The warehouse is then responsible for filling orders from internal mine customers for consumable items. The warehouse customers include the mining department (e.g. truck tires and explosives) the processing plant (e.g. steel grinding mill charge and safety supplies) and the maintenance department (e.g. spare equipment parts and tools). In order to request an item from the warehouse, the customer completes an electronic "pick-list" which is filled and made ready for pick-up by warehouse personnel. The most important warehouse customer is the maintenance department. Placer Dome utilizes a preventative maintenance program which schedules routine maintenance on plant equipment such as pumps, motors and valves. The maintenance planner schedules work tasks weeks or even months in advance. Each of the tasks has a standard procedure which includes a list of all of the parts required to complete the job. The warehouse is automatically informed of the upcoming maintenance tasks and provides the maintenance department with packages of spare parts to match the work order. In this manner, the tradesperson carrying out the maintenance task can efficiently pick the parts he or she needs to perform the job without wasting time completing paperwork or orders.

These types of systems, while critical to an efficient operation, are not considered core competencies by Placer Dome and virtually all of its competitors would use similar methods and

systems for inbound logistics. However, Placer Dome does not outsource these services as they have a direct impact upon the success of core competencies in operations.

Operations

The main operating functions at a gold mine are mining, ore transport, processing, maintenance and mine-site exploration.

Mine-site exploration (Minex) is different from grass-roots exploration in that mine-site exploration only seeks to find gold ore that can be treated at the existing processing facility. The goal of the department is to find resources at a rate greater than the rate of depletion of the resource by the mining operation. In this manner, the company can extract maximum value from the capital investment in processing equipment and infrastructure. Obviously this is not sustainable indefinitely, but frequently mines with initial planned lives of 10-12 years operate for 30 years or more through effective Minex. The core competency in this area for Placer Dome is in the interpretation of the results. The front-line exploration activities such as drilling and sampling are often outsourced, but the compilation of the results is never contracted out.

In addition to Minex, the mining operation is considered a core competency by Placer Dome. In the mining operation, there are several functions. First, mine geologists work with mining engineers to create a mine plan. The mine plan is driven by production targets and by the current price of gold. During periods of lower gold prices, the mine plan will attempt to mine higher grade material and vice versa. In this manner, the mine is able to somewhat maintain a consistent profit margin despite fluctuating gold prices. By mining the lower grade material during periods of high gold price, the company is able to maximize the life of the mine and therefore receive the maximum benefit from its capital investment in processing equipment and infrastructure. The mining activity itself varies depending on whether the mine is open-pit or underground. In both cases, the ore is initially broken up by explosives and then dug out using mechanical digging equipment. The ore is then transported to the mill by large trucks (open-pit)

or by smaller high-speed trams (underground). In open-pit mining, several tonnes of waste material must be removed for every tonne of ore. In underground operations, the ore is mined selectively and the waste is left in the ground.

Many of Placer Dome's competitors choose to outsource mining work on a unit-of-production-based contract with local mining companies. This is especially prevalent in built-up mining areas such as Nevada's Carlin Trend or Kalgoorlie, Western Australia. For example, at the Kalgoorlie Super-Pit operation (Newmont and Barrick) mining contractors perform the blasting, digging, waste hauling and ore transport functions. The contractor is paid on a per-tonne basis for delivery of ore to the mill and removal of waste to the waste dump.

However, Placer Dome has established particular expertise in both underground and open-pit mining techniques and chooses to operate its own mining operations, even in Nevada and Western Australia. Placer Dome utilizes common procedures across its operations and rotates experienced personnel to various locations throughout the world to ensure consistently efficient mining operations. It also utilizes state-of-the-art mining equipment to ensure maximum efficiencies are achieved from the mining operation and ore transport. By controlling all of the mining functions, the company is able to ensure the operation is run optimally, and by optimizing its existing assets Placer Dome creates value for its shareholders.

The company also considers mineral processing to be one of its core competencies and operates all of the functions related to the recovery of doré metal from the ore delivered to the mill. The milling processes vary, depending on the nature of the ore. For some ores, geological processes have oxidized the host rock and liberated the gold. In such instances, the gold is able to be leached directly from the ore using weak solutions of cyanide. In other less-weathered rock formations, the host rock is a refractory sulphide mineral which must be first oxidized prior to leaching. In both instances, Placer Dome has particular operating and maintenance expertise.

In the mill processing function, there are three main functional groups: operations, maintenance and metallurgical support. All three of these functions interact to optimize the production function. Production from the plant is delivered by controlling four variables:

1. Ore grade – the amount of gold contained per tonne of ore.

2. Availability of Equipment – the percentage of time that each piece of equipment is available to run, i.e. not shut down for maintenance repairs.

3. Utilization of Equipment – the percentage of maximum ore throughput rate that the plant is able to sustain.

4. Recovery – the percentage of gold entering in the ore that is actually recovered as doré metal product.

The first variable, ore grade, is primarily controlled by the mining department as previously discussed. As it is a critical factor in determining production rates, it is imperative that the mining and processing groups work together to develop a mine plan. The second variable, availability, is largely controlled by the maintenance group. By implementing a preventative maintenance program and highly sophisticated maintenance planning, the equipment will require less unscheduled maintenance and the probability of production being interrupted by breakdowns is reduced. Also, equipment availability is enhanced by utilizing competent maintenance personnel and by following standard repair procedures. For the third variable, utilization, the plant operators must utilize their skills in operating the equipment at optimum conditions to obtain maximum throughput rates for the plant. And finally, for recovery to be optimized, the plant metallurgists must work with operations personnel to ensure that optimum reagent additions are being made and that the throughput rate is not overly high at the expense of recovery. The

metallurgists must also work to ensure that reagents are not over-dosed to improve recovery without regard for operating costs.

The fine balance of optimizing these four variables is one of Placer Dome's core competencies and by optimizing the utilization of its assets, Placer Dome is able to create value for its shareholders.

The final stage of the operations is the reclamation of the mine site. Placer Dome plans for several years for a mine to gradually wind down its production and eventually close. Reclamation work typically begins well before mining activities completely stop. Initially, land disturbed for mining activity is re-vegetated. When processing activity is ceased, land used for storing tailings is subsequently capped with impermeable membranes and re-vegetated. Depending on the nature of the ore body, the tailings and any water run-off are monitored by Placer Dome for at least twenty years following mining activity. Lastly, the processing facilities are dismantled and removed. The processing site is then re-vegetated. Reclamation and tailings storage monitoring is an ongoing activity for many years following the closure of an operating mine. Placer Dome carries out virtually all of the reclamation activities at its inactive mines throughout the world.

In general, the operations function is where Placer Dome creates value and strives for an advantage over its competitors. Operating excellence is the heart of the organization. In fact, when entering into Joint Ventures with other companies, Placer Dome insists on having a controlling interest in the Joint Venture operation and insists that the mine be run as a Placer Dome operation. The company does not take ownership in mines or operations as passive investments, but rather seeks to create value by operating the assets better than any of its competitors.

Outbound Logistics

At most of Placer Dome's operations the gold doré bars are regularly removed from the property by helicopter or small plane for security reasons. This function is outsourced to fully insured security companies such as Brinks.

The doré metal is sold and shipped by air to one of several gold refineries operated in the world by companies such as Johnson Matthey. In the refining process, the gold is separated from the silver and other impurities, and pure gold (99.99%) and pure silver (99.999%) bars and ingots are produced. Outbound logistics does not represent a significant portion of the value chain for gold mining and there is little value added by the refining process. Placer Dome is no different than its competitors in outsourcing this function.

Marketing and Sales

The refined gold and silver is marketed and sold by a very small team people at Placer Dome. Essentially the product cannot be differentiated at all from its competitors and the marketing function is therefore non-existent. However, sales play an important role in extracting the last bit of value from the value chain. The sales personnel at Placer Dome carefully monitor the spot gold price and the company's cashflow requirements. By timing market sales of refined gold the company can extract small gains in revenue. Although the value-added at this stage is relatively small, a good sales operation can more than pay for itself by the small gains in large volumes of sales. Sales is not one of Placer Dome's core competencies, but this operation is difficult to outsource as it requires an intimate knowledge of the company's cash flow management.

3.2.2.2 Support Activities

Procurement

Procurement of reagents, consumables and spare parts is carried out centrally by Placer Dome for all of its operations. In this manner, Placer Dome can exert more buying power over its

suppliers and obtain lower pricing. The supply chain management is carried out via an enterprise resource planning system operating on the SAP platform. The procurement function is not a core competency of Placer Dome, and the centralized purchasing system and ERP are common amongst Placer Dome's competitors.

During the construction of new mines and processing facilities, Placer Dome outsources the procurement of capital equipment to the EPCM contractor. Placer Dome oversees the bidding process for capital equipment and its project engineers provide direction to the EPCM contractor on favoured brands of equipment. By selecting equipment that is already in use at other mine operations, the procurement of spare parts becomes more efficient during the operations phase of the mine.

Technology Development

Placer Dome operates a corporate Research and Technology department which seeks to develop new and novel methods for mining, mineral processing and other areas which will lead to improved efficiency of its current operations or sustained competitive advantages through the application of intellectual property. Placer Dome considers this to be one of its core competencies and strives to maintain innovative and creative thinking in the department. This type of technology development is not common among major gold producers. Research and technology at Placer Dome's competitors is typically utilized to assist in troubleshooting at existing mining operations or assisting with test work for new projects during the design phase. Placer Dome chooses to outsource the troubleshooting and project testwork functions to commercial laboratories and technical consultants. In this manner, the Research and Technology group can focus solely on innovation without getting distracted by day-to-day operating matters.

Human Resource Management

Part of Placer Dome's strategy for achieving excellence in operations is to recruit the best people. Therefore, the Human Resource (HR) group plays a vital role in finding, evaluating,

hiring and retaining the best personnel. Placer Dome chooses to outsource the finding and initial evaluating portion of the recruiting phase to personnel search firms. The search firms typically will present Placer Dome HR with a 3-5 person shortlist for each position. During the secondary evaluation, Placer Dome personnel seek to determine if the person will be a good fit with the existing team. Typically a candidate will have several rounds of interviews and meet most of the people he or she will be working with. In this manner, prospective employees also have a chance to see if the job will be a good fit for them. Placer Dome's recruitment strategy is to spend a significant amount of effort making sure the correct people are hired. Once hired, the HR management team is dedicated to retaining employees through training, internal promotion opportunities and performance management programs. The finding, evaluating and hiring portion of the HR function is conducted at each of the individual mine sites. Employee retainment programs are initiated and managed through the corporate HR management group. Frequently, Placer Dome rotates its HR personnel through various operations and its corporate offices to ensure business processes are consistent throughout the organization.

Occupational Health and Safety (OH&S) and employee training are also vital HR functions at each of Placer Dome's operating mines. Placer Dome has a corporate OH&S agenda which instils a high-level of safety awareness throughout its various operations. The goal is to provide a workplace which allows employees to return home from work in the same physical condition as they arrived. Instilling a culture of working safely is a difficult challenge in some foreign operations and requires significant attention from HR management. While the OH&S function is not a core competency of the organization, its culture-driven base necessitates that it not be outsourced. However, most of the safety training functions such as first aid courses and machine operating courses are outsourced in locations where professional training is available.

Firm Infrastructure

The firm's infrastructure, headquartered in Vancouver, plays a key role in creating value through the finding and development of new mine projects. This function includes:

- Grassroots exploration – working with junior mining companies and making deals to acquire the rights to prospective mine properties.
- Environmental and Corporate Social Responsibility (CSR) groups to seek and obtain licenses to operate new mines.
- Design and Construction group to see a project through the various stages of feasibility studies to implementation.
- AMS Program to reorganize the company's business processes and to implement an enterprise resource planning system.
- Mergers and Acquisitions group to evaluate and execute corporate acquisitions.
- Corporate Risk and Security group to oversee corporate risk management and insure the security of its assets and gold products.

In the grassroots exploration function, Placer Dome has a centralized management structure which oversees global exploration strategy implementation. In addition, there are exploration personnel in regional offices located in Johannesburg, Reno, Toronto, Santiago, Shanghai, Brisbane and Perth. The exploration personnel serve two specific functions. First, personnel develop and maintain relationships with local junior mining firms. This function is critical to the success of grassroots exploration, as Placer Dome carries out very little of the actual exploration activity. Instead, Placer Dome will enter into exploration agreements with promising

junior exploration firms. These agreements typically allow Placer Dome to "earn-in" to new mine discoveries by funding exploration activity through the junior and by funding engineering studies. The goal for Placer Dome is to earn a controlling equity stake in the future mine. In some instances, Placer Dome may also take-over (acquire) the junior company via a "friendly" take-over bid. Placer Dome rarely engages in hostile take-overs, particularly of junior firms as it strives to maintain a solid relationship as a good exploration partner.

Second, the exploration group carries out analysis of exploration data generated by the junior mining or contract exploration companies. By analyzing the raw data, the company is able to decide how much the ore body is actually worth and to direct future exploration spending appropriately on a company-wide basis.

The direction of exploration spending is a critical long-term management decision made by the company. Grassroots exploration can take several years to develop a promising ore body into a delineated resource. Therefore, there is a lag between the time exploration spending occurs and the actual "discovery" of a resource which can add value to the company. If exploration spending is reduced substantially to cut costs during periods of low gold prices, there will be a substantial lag of growth via grassroots exploration when the gold price eventually improves and exploration spending is increased. As such, proper long-term decision making must be made by management regarding exploration spending reductions during periods of low gold prices.

In addition to grassroots exploration, the environmental and CSR functions are becoming more and more important as a competitive advantage. When trying to build a mine in part of the world where mining is unfamiliar to the local people and government, it is considered an advantage if the company has a solid reputation for environmental and CSR behaviour. The competition for new ore sources is high amongst the major gold producing companies and Placer Dome seeks to have an edge by earning a reputation for working well with local communities and

governments. In addition, it is vital that the permitting function of a project be carried out in a timely manner and be well understood to avoid costly project delays.

The project Design and Construct group has historically been a key component of the firm infrastructure at Placer Dome. For years, the company focused on finding, building and operating mines throughout the world. The Design and Construct group historically consisted of experienced project design engineers, cost estimators and project managers. The primary role of the group is to see a project through the various stages of engineering studies to construction and eventually plant start-up. During the late 1990's and early 2000, the gold industry suffered through a prolonged period of low gold prices and therefore few projects were economic to develop or build. At Placer Dome, the Design and Construct team was substantially downsized and capabilities were reduced to project management only. During this period, the company pursued growth via corporate acquisitions instead of project development. Currently, the company relies on external consultants for all of the design engineering and cost estimation. A minimal staff is maintained to act as "owner's representatives" during engineering studies and development projects.

Grassroots exploration, corporate social responsibility and project design and construction are key corporate functions which are critical to the success of the company's growth strategy.

A further key contribution to the firm's infrastructure is internally referred to at Placer Dome as the AMS Program. AMS (A Mine Standard) evolved from a program set in motion in 2001 to reorganize all of Placer Dome's business practices to provide a better strategic fit with its cost-based strategy. The goal of the program has been to develop "A Mine Standard, not a Standard Mine". The program was initiated by a documenting and mapping all of the organization's business processes throughout the value chain. These processes were then

evaluated and reorganized with assistance from IBM consulting. The reorganization has included the centralization of many of the corporate functions including procurement. The final stages of the program are being completed over the next two years with world-wide implementation of an ERP system. Placer Dome is seeking to develop core competency in information systems which will allow it improved control over its operations and improved efficiency. Although this type of business process reorganization is unlikely to provide a sustainable competitive advantage (it is easily emulated), the orderly implementation of the program and rapid adoption by unit operations can provide a short-term advantage for the company over its competitors.

The AMS program group has been put together through a combination of external hiring and by secondment of key personnel from other areas of the company. Currently there are over 200 personnel working on the project. The personnel resource requirement is a substantial strain on the project management expertise within the company, both at the firm infrastructure level and at the individual mine sites. This situation is expected to continue for several years as the program is rolled out through the individual mine sites and regional offices.

Placer Dome's firm infrastructure also provides Merger and Acquisition (M&A) support for the company. A group of analysts continually monitor potential acquisition targets in order to determine if the acquisition would add value for shareholders. Key parameters such as net asset value, cash flow per share and earnings per share are used to measure the potential effect of any acquisition. Although this function is not a core competency of Placer Dome, it is critical to ensure that opportunities for growth through mergers and acquisitions are not overlooked. With the current high gold price market, Placer Dome is more focused on growth by developing projects (organic growth) rather than through relatively expensive acquisitions.

Upon completion of an M&A deal, the firm infrastructure at Placer Dome also supports the integration of the new entity into Placer Dome's system and business processes. The

company does not complete enough M&A deals to justify a dedicated team for this function, but a temporary integration team is formed as part of the integration process. The team will include Placer Dome staff from operations, maintenance, accounting, safety, security and IT systems to ensure that any potential synergies are realized and the new entity is integrated into the Placer Dome system.

Firm infrastructure also includes a corporate risk and security function. One particularly important function of the corporate risk team is evaluating risks associated with operating in different countries. The country risk is evaluated by a combination of intelligence reports obtained from sources such as the IMF, the World Bank and the Economist Intelligence Unit with the use of local risk management and security consultants. By combining the knowledge of consultants who are "on the ground" in the local country with those intelligence reports from independent observers, a solid picture of the political investment climate and the risk to asset security can be assessed. This decision making process played an important part in Placer Dome's decision to acquire the North Mara mine in Tanzania in 2003, entering into a country in which it had not previously operated.

3.3 Company Culture

Placer Dome is a bureaucratic organization. Standard business processes are used to reduce uncertainty and increase stability. The company has a long-term view of itself as an organization that is built to last.

As a bureaucratic organization, the company is structured in a hierarchical manner. Leaders strive to reduce uncertainty by making prudent decisions based on thorough research and fact gathering. Corporate values stress system maintenance, continuity and stability.

For personnel, loyalty to the company and perseverance are rewarded. Credentials and educational background are well respected and position and title are important. Being a multi-national firm, international experience is highly regarded and geographic personnel movement is common.

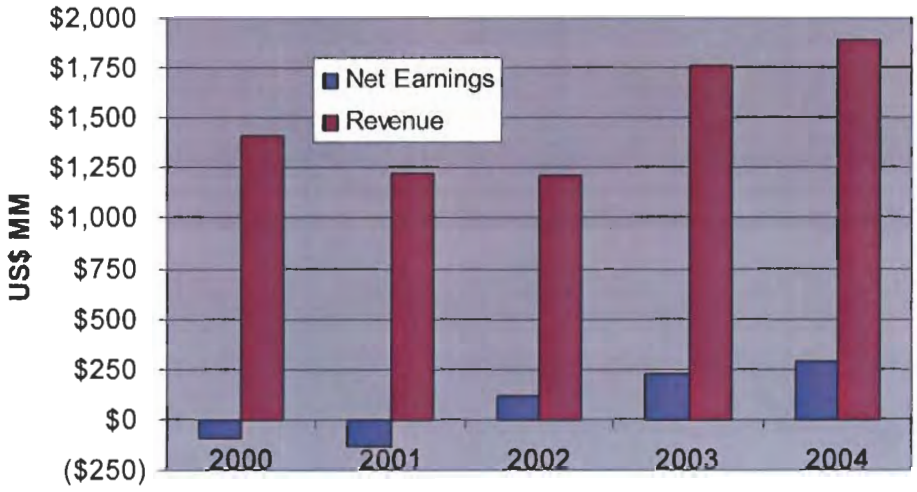
Change within this type of culture is undertaken very slowly and deliberately. Ideally changes are only made to the long-term business strategy on a systematic basis and short-term plans are followed carefully and orderly.

3.4 Financial Analysis

The financial analysis is composed of three parts: trends over the past five years, financial ratio analysis and share price performance relative to peers. A summary of the income statements and balance sheets for Placer Dome for the five years from 2000 to 2004 are given in Appendix I and II, respectively.

3.4.1 Five Year Trend Analysis

Figure 3.5 Five Year Earnings and Revenue Trend



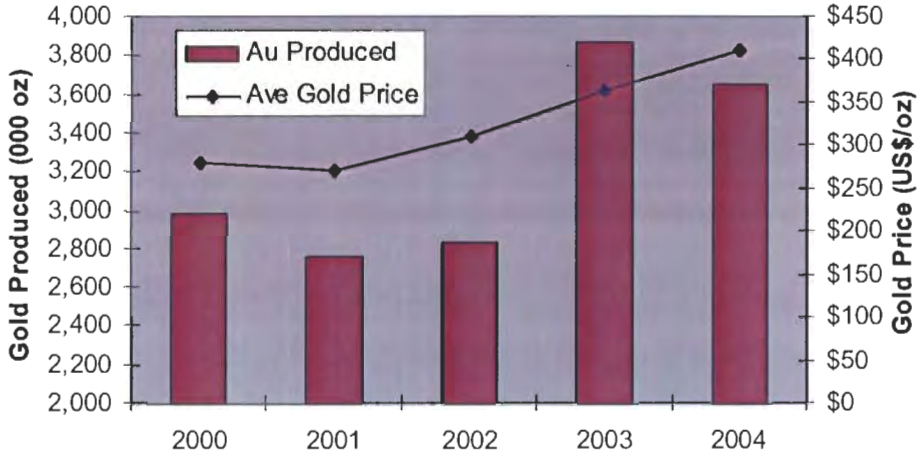
Source: Data from Placer Dome Annual Reports 2002-2004, graph by author.[11]

An examination of Placer Dome's income statements and balance sheets over the last five years reveals that the company had strong earnings growth over the period which was driven by an increase in revenue from US$1.4 billion in 2000 to US$1.8 billion in 2004 (Figure 3.5).

In 2003, the revenue increased by US$500 million through the acquisition of the Australian company, Aurion Gold. The acquisition resulted in an increase in production of gold of over one million ounces.

[11] Placer Dome Incorporated, "Annual Report 2004", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005). Placer Dome Incorporated, "Annual Report 2003", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005). Placer Dome Incorporated, "Annual Report 2002", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005).

Figure 3.6 Five Year Production Profile and Gold Price Trend

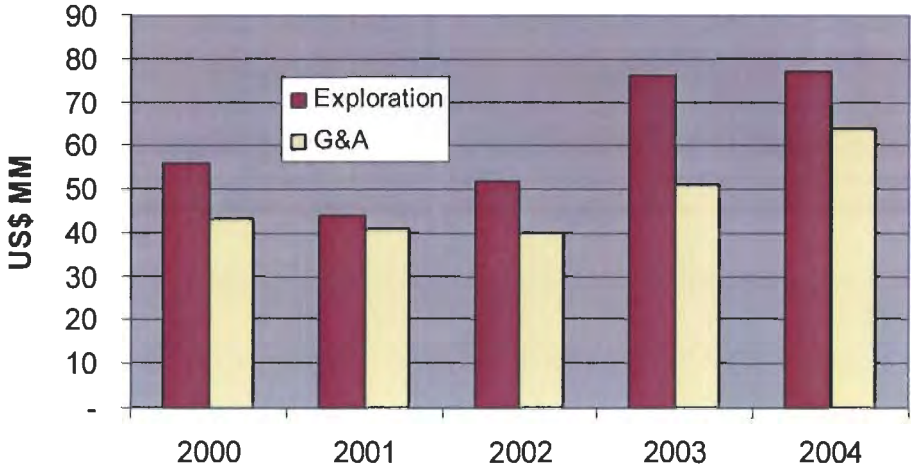


Source: Data from Placer Dome Annual Reports 2002-2004, graph by author.

In addition to growth through acquisition, the revenues were substantially impacted by a rising gold price trend through the five year period. Average gold prices increased from US$280/oz in 2000 to US$410/oz in 2004. Although the prices have been somewhat volatile in 2005, the company continues to enjoy an average gold price of $425/oz to the end of June 2005.

Figure 3.6 shows the company's rising production profile and the average gold price trend for the last five years.

Figure 3.7 Five Year Exploration and G&A Spending Trends

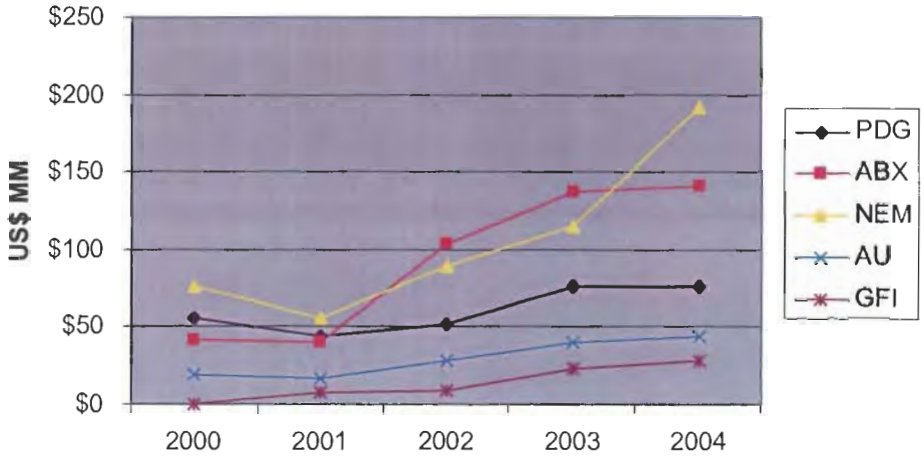


Source: Data from Placer Dome Annual Reports 2002-2004, graph by author.

During the low gold price period in 2000 and 2001, the company cut exploration spending to a low of US$44 million in 2001 and has since been increasing spending to match its current strategy of organic growth.

In addition to rising exploration costs, the company has seen a consistent increase in G&A costs since it embarked on a program to reshape its business processes (AMS program), including the implementation of an enterprise resource planning (ERP) package. The impact of this program implementation is not expected to be felt for at least 3 more years, with cost savings beginning in 2005 and increasing over the final three years of implementation. Figure 3.7 shows the five year trend of spending on exploration and G&A.

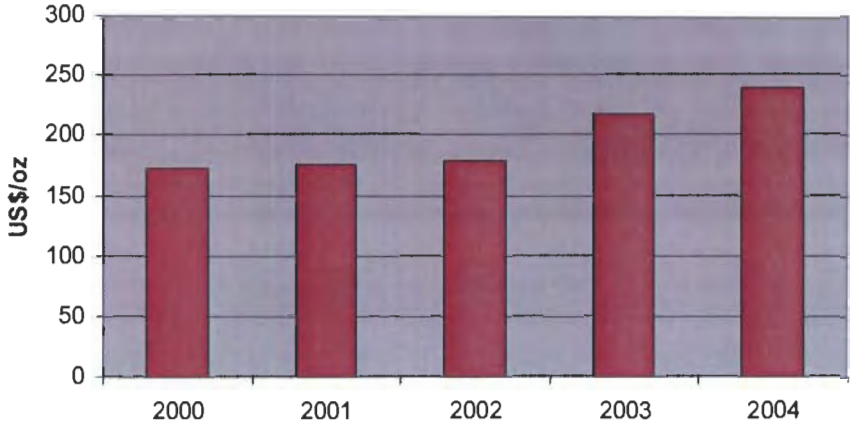
Figure 3.8 Exploration Spending Trends – Senior Gold Producers



Source: Data from Annual Reports 2002-2004, graph by author.

In order to compare growth strategies, it is useful to compare Placer Dome's spending on exploration to its industry peers (Figure 3.8). From the trends, clearly all of the senior gold producers began spending more money on exploration in 2002 as the gold price began to rise. Newmont (NEM) has substantially increased spending in 2004, while Placer Dome (PDG) and Barrick (ABX) have increased from 2002, but levelled off in 2004. Goldfields (GFI) and AngloGold Ashanti spend the least of the senior's on exploration. Both companies are predominantly positioned in South Africa and have actually faced a declining gold price (in Rand terms). These trends show that all of the senior gold mining companies follow similar growth strategies, as discussed in Section 2.2.3, which leads to increased rivalry amongst competitors. Placer Dome's spending has increased, but not as much as its nearest competitor, Barrick.

Figure 3.9 Five Year Cash Costs

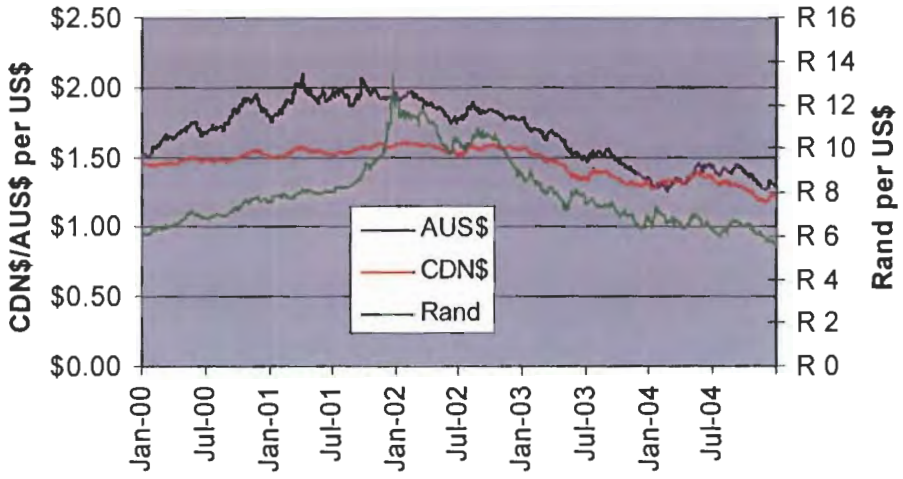


Source: Data from Placer Dome Annual Reports 2002-2004, graph by author.

Perhaps the most import trend to observe from the financial statements is the rising trend in cost of production. The rising operating costs are best observed by comparing the "cash cost" per ounce of gold produced (Figure 3.9). Cash cost is a non-FASB standard term which gold companies use to report the cost of production. Cash costs exclude depreciation, amortization, interest and taxes.

Aside from increases in exploration spending and G&A costs as discussed above, the rising trend in cash costs can be attributed to four sources: rising strength of foreign currencies against the US dollar, rising fuel prices, rising steel prices and changing mining plans.

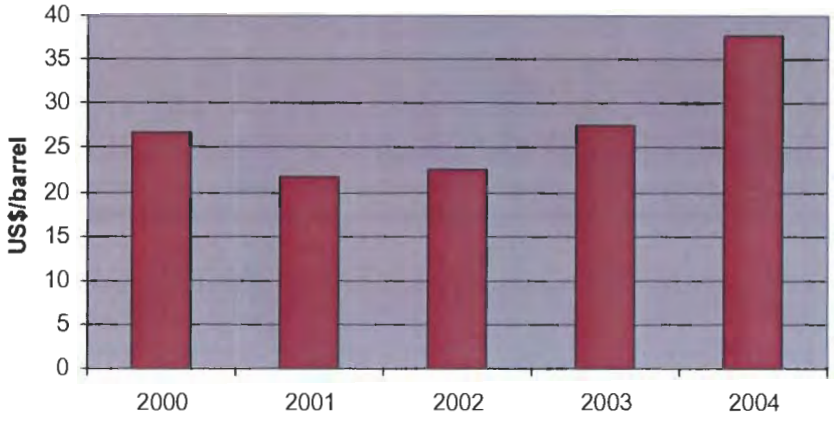
Figure 3.10 Foreign Currency Trends



Source: Data from Bloomberg Financial Services, graph by author.

First, since January 2002 there has been a steady decline in the strength of the US dollar in relation to the local currency in which Placer Dome runs its mining operations. In particular, Canada, Australia and South Africa have all experienced rising currencies against the US dollar (Figure 3.10). The rising currency effectively creates greater operating costs reported in US dollars, particularly with respect to labour. As discussed in Section 3.1.8, Placer Dome produces 15% of its gold in Canada, 26% in Australia and 6% in South Africa. In addition, costs for the 19% of production produced in Papua New Guinea are predominantly incurred in Australian Dollars.

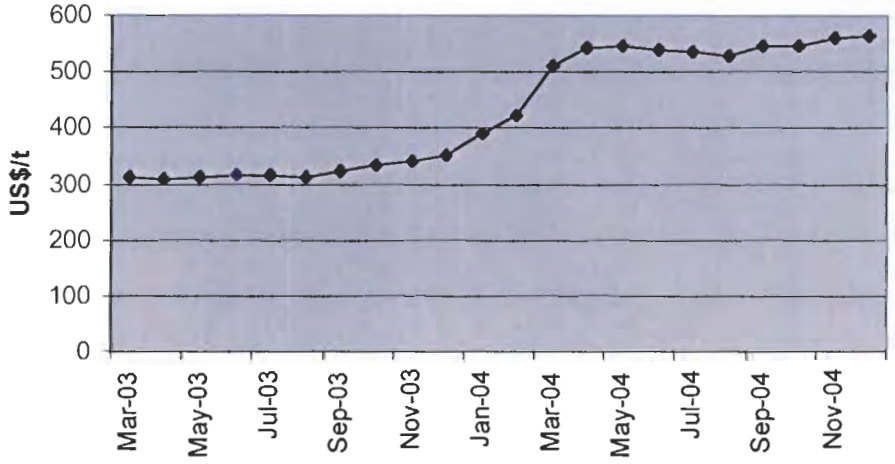
Figure 3.11 Oil Price Trend



Source: Data from Bloomberg Financial Services, graph by author.

Second, one of the main inputs into gold mining process is energy. Fuel prices have risen substantially in 2003 and 2004 and continue to be strong in early 2005 (Figure 3.11).

Figure 3.12 Steel Price Trend – Hot Rolled.



Source: Data from Bloomberg Financial Services, graph by author.

In addition to fuel, steel is also an important input into the gold process as it is used as media to crush and grind the ore. Steel prices have followed a similar trend to gold and other commodities by rising due to strong world demand, particularly from China (Figure 3.12).

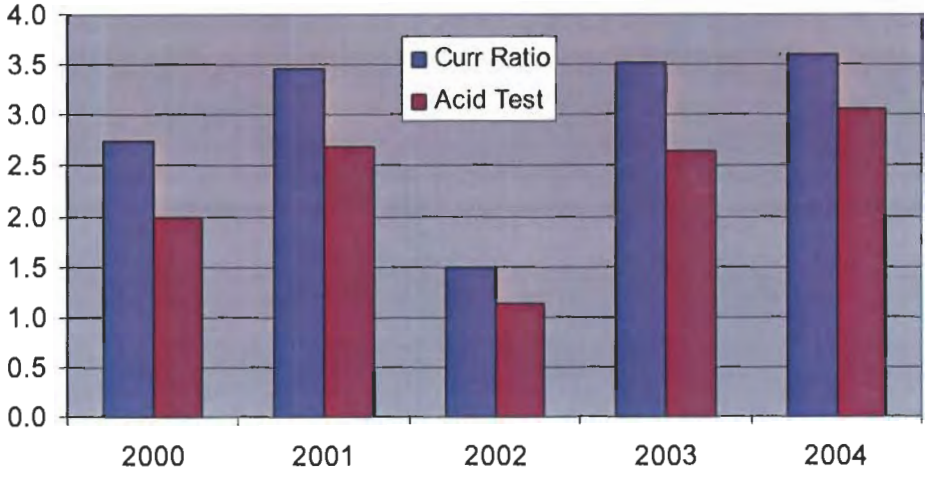
Rising steel prices, rising oil prices and strengthening local currencies are all outside of the control of Placer Dome. However, the fourth and final factor affecting cash costs is changing of mining plans due to rising gold prices. As discussed in Section 3.2.2.1, as gold prices rise, Placer Dome changes its mine plans to mine ore which is uneconomic during low gold prices. In this manner, the company is able to maximize the life of the asset, at the expense of profit margin. Due to the rising input costs and the cost pressure from rising currency, the mine plan changing has had to be somewhat tempered.

In summary, trend analysis has revealed that Placer Dome has shown strong earnings growth over the past five years. The growth was primarily due to the acquisition of Aurion gold, combined with rising revenues from higher gold prices. The company has been increasing spending on exploration to increase organic growth. At the same time, the company has been facing increasing cost pressures from rising world commodity prices and strengthening local currencies. The company's AMS program to restructure its business processes have resulted in increased spending on G&A. Although the AMS program will not be completely rolled out until 2007, some cost improvements will be seen in the next financial year.

3.4.2 Financial Ratio Analysis

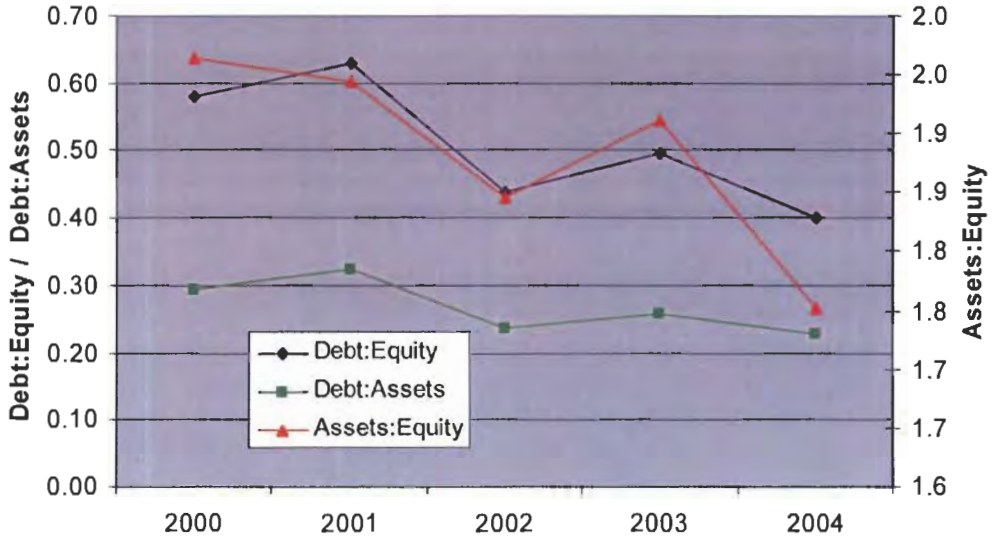
In order to better understand the trends in the previous section, several sets of financial ratios were calculated and are given in Appendix III. These ratios are divided into four categories: measures of liquidity, financial leverage, profitability and asset utilization.

Figure 3.13 Measures of Liquidity.



Placer Dome is relatively healthy in terms of its liquidity (Figure 3.13). In 2002, the company's liquidity decreased as it took on $137 million in short-term debt to finance the acquisition of Aurion. However, the liquidity has returned to a ratio of current assets to current liabilities of about 3.5.

Figure 3.14 Financial Leverage Ratios



With regards to financial leverage, the company has stabilized its long-term debt position and its ratio of debt:equity and debt:assets has stabilized between 0.4 and 0.5, indicating that the financial structure of the company is relatively low risk. However, the company's asset:equity ratio has been fluctuating (Figure 3.14). In 2001, the company was forced to write-down its investment in the Getchell mine, reducing the net fixed assets by $290 million. In 2002, the company issued 78 million new shares to fund the acquisition of Aurion gold, substantially increasing the equity of the company. In 2003, the company increased its asset base by purchasing East African Gold's North Mara mine in Tanzania for $230 million cash. In 2004, the company issued 21 million new shares for $22/share, increasing the equity base of the company. The funds are to be used to fund large organic growth development projects in the next few years. These corporate transactions have caused the asset:equity ratio to fluctuate, but remain relatively healthy between 1.8 and 2.0.

Figure 3.15 Debt Ratios Compared to Peers

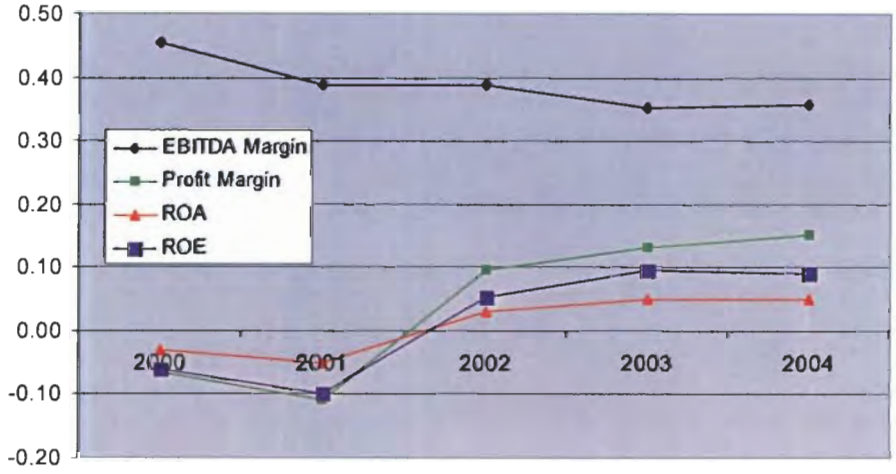
2004	Placer Dome	Newmont	Barrick
Debt:Equity	0.40	0.20	0.46
Debt:Assets	0.23	0.12	0.26
Assets:Equity	1.75	1.61	1.76

2003	Placer Dome	Newmont	Barrick
Debt:Equity	0.50	0.15	0.21
Debt:Assets	0.26	0.10	0.13
Assets:Equity	1.91	1.45	1.53

Source – Data from company Annual Reports, table by author.

Although the company's financial structure is low risk, it utilizes moderately more debt than its closest North American peers, Newmont and Barrick. Barrick has increased its financial leverage in 2004 as it is currently constructing two large projects on the Chile-Argentina border.

Figure 3.16 Profitability Ratios

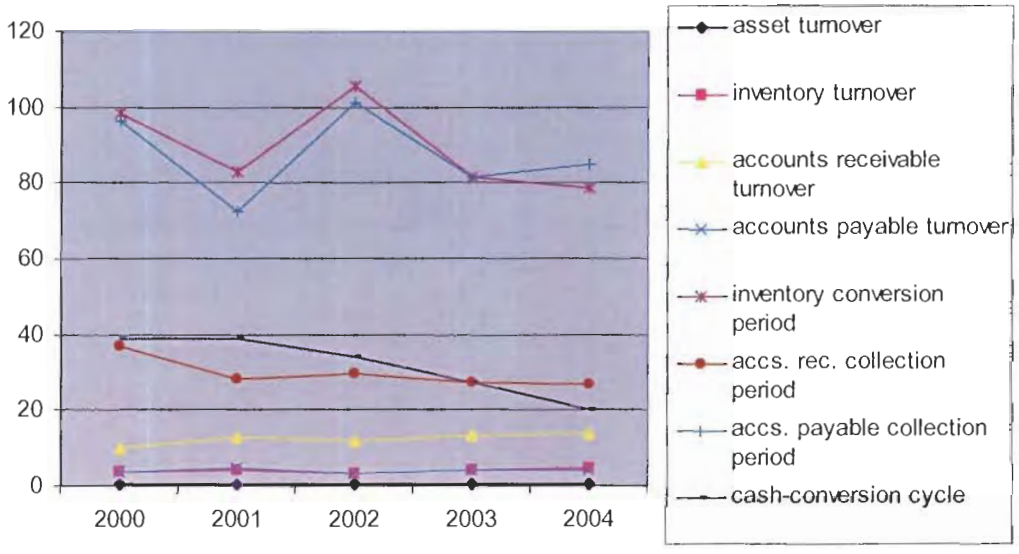


The profitability ratios: EBITDA Margin, profit margin, return on assets, return on equity and contribution margin are given in Figure 3.15.

Placer Dome was not running a profitable business during the period of low gold prices in 2000 and 2001. With the revival of gold prices above $300/oz ($310/oz in 2002), the company returned to profitability. The company projects a long-term gold price of $375/oz, similar to the

year experienced in 2003, indicating a return on equity of about 10% and a profit margin of 12%. The most interesting trend shown in Figure 3.14 is the eroding EBITDA margin. As discussed in the previous section, the company has experienced significant operating cost pressures from rising commodity prices and strengthening currencies. As well, rising G&A costs and exploration spending have added to the cost pressures and the erosion of the EBITDA margin. Cost structure improvements are expected from the roll-out of the AMS program. In addition the company has undertaken larger foreign currency hedge positions to protect against further increases in value of the Canadian, Australian and South African currencies.

Figure 3.17 Asset Utilization Ratios



The asset utilization ratios are shown in Figure 3.16. Most of the ratios are relatively constant and healthy. The only trend emerging from the asset utilization ratios is that the company has been improving its cash conversion cycle by reducing its inventory conversion period and decreasing its accounts receivable conversion period.

3.4.3 Share Price Performance Relative to Peers

One of the growth strategies pursued by senior gold producers is growth through acquisition. Typically, senior gold mining companies issue shares to fund acquisitions and therefore, share price performance is important in order for the company to be able to compete effectively for quality assets via acquisition.

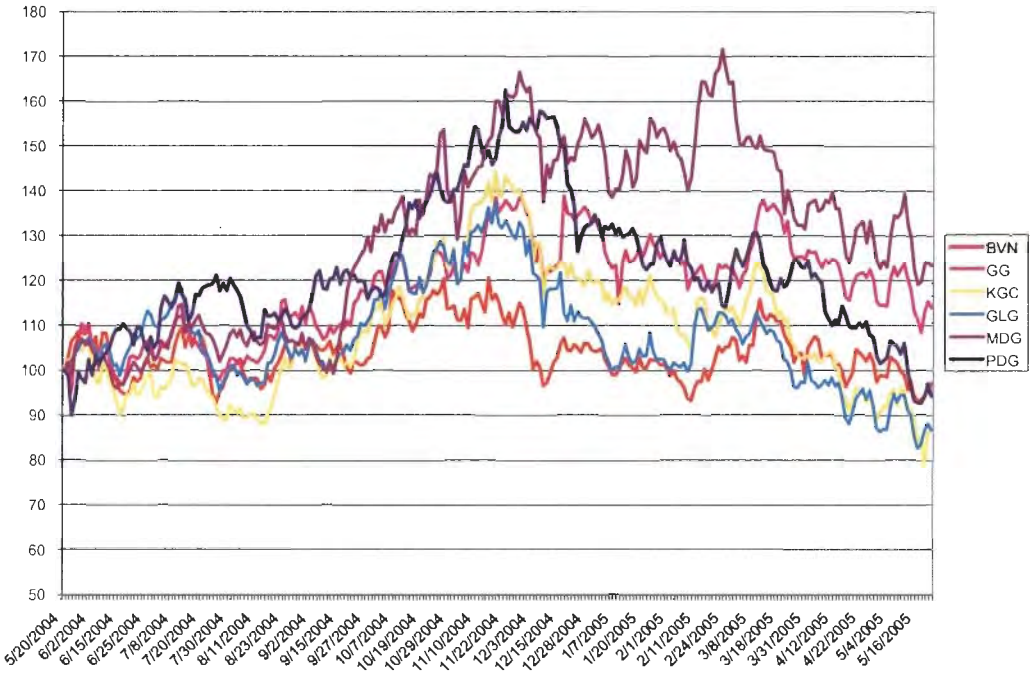
Figure 3.18 One Year Share Price Performance of Senior Gold Producers

Source: Data from Bloomberg Financial Services, graph by author.

Placer Dome's share price performance relative to other senior gold producers is shown in Figure 3.17. In the past year, Placer Dome has under-performed against Newmont (NEM) and Barrick (ABX), putting it in a competitive disadvantage when competing for acquisition targets. Harmony (HMY) and Goldfields (GFI) have been embroiled in a take-over battle with the smaller Harmony bidding for a hostile take-over of its South African rival, Golfields. The acquisition bid

has been expensive and slanderous and Harmony's shares have plummeted almost 50% since the bid. Placer Dome has outperformed both of these companies.

Figure 3.19 One Year Share Performance of Intermediate Gold Producers



Source: Data from Bloomberg Financial Services, graph by author.

In addition to the senior producers, it is also useful to look at some of the intermediate producers who are attempting to grow and will compete with Placer Dome for quality acquisition targets (Figure 3.18). Placer Dome has been outperformed by Meridian (MDG) and Goldcorp (GG), however it has slightly outperformed Glamis (GLG) and Kinross (KGC). Its performance has been equal to Minera Buenaventura (BVN).

In summary, Placer Dome's share price has performed relatively poorly recently compared to its peers, particularly its closest rival, Barrick.

3.5 Summary

The strategic fit analysis shows that Placer Dome is structured well for a cost-based strategy with increasing alignment coming into effect with the AMS business restructuring program. The value chain analysis shows that Placer Dome is focused on the mining and processing with additional competencies in developing new technology and brining new projects on line.

The financial analysis revealed that the company is well structured and manages its debt well. The company's share price performance has been disappointing recently, despite a high gold price, as industry cost pressures have eroded the company's EBITDA margin. Business restructuring and currency hedging are being implemented to offset cost pressures.

Despite poor share price performance, the outlook for the company is positive with a strategy for organic growth. Increased investment in exploration spending indicates Placer Dome is planning on pursing this strategy, along with financing activity targeted at raising capital for development of its existing projects.

4 ISSUES

This section focuses on the issues facing Placer Dome regarding growth. Investors in Placer Dome expect the company to maintain a reasonable rate of growth, which can be achieved by:

- discovery of new gold resources ("organic" growth);
- diversification into other metals such as copper, or
- mergers and acquisitions.

Investors in Placer Dome seek a leveraged exposure to changes in the gold price, typically as a hedge against changes in the US dollar. As such, investors are willing to pay a premium to the company's net asset value (NAV). The premium, or "multiple", is higher for those companies who focus predominantly on gold and are not diversified into other metals or products. Therefore, diversification into other metals has not been a desirable growth strategy for most companies, including Placer Dome. Placer Dome's current growth strategy and the preferred strategy for most of the major companies is organic growth.

However, the amount of growth achieved by organic growth has been minimal as the number of significant new gold deposits discovered has been dwindling. The industry has responded to the organic growth difficulty by consolidation through mergers and acquisitions.

This section presents the specific issues with each of the available growth strategies. In Section 5 a recommendation of the strategy is devised to enable Placer Dome to meet its strategic growth goal of a sustainable gold production rate of 5 million ounces per year within four years.

4.1 Organic Growth

Senior gold mining companies typically follow an organic growth strategy when the price of gold is starting to rise and continue the strategy until close to the peak of the cycle. The industry is currently in one of the peak periods, with high gold prices predicted for the remainder of 2005 and for several years to follow.

The process of organic growth occurs in three phases. First, the company must discover new orebodies through grassroots exploration (assisted by junior mining companies). Second, the newly discovered mines must be developed into working mine sites through project development. Third, organic growth can occur at a working mine site through exploration of nearby areas (Minex). The issues regarding each of these phases of organic growth are discussed in the following sections.

4.1.1 Grassroots Exploration

Senior gold producers seeking growth via grassroots exploration all seek to discover large deposits. For Placer Dome, the prospective deposits must be greater than 4 million ounces if the location is a new country for Placer Dome or 3 million ounces with potential for finding additional ounces if the deposit is located in a country or region where Placer Dome has existing operations. The main issue with grassroots exploration is that deposits of the necessary size to satisfy the senior gold producers are rare.

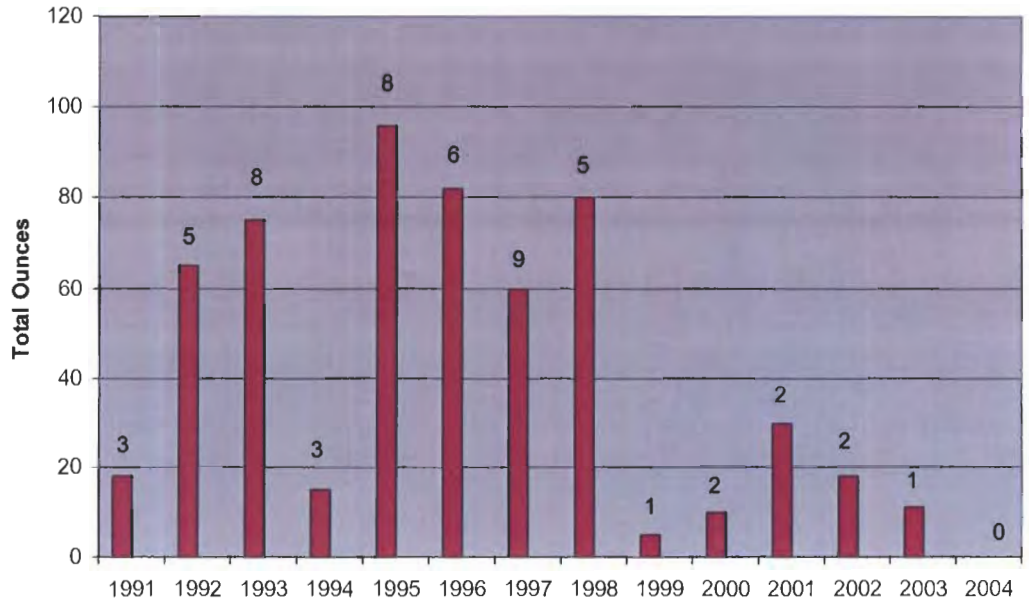
As large deposits are rare, when a junior mining company believes it has discovered a major deposit, it attempts to extract maximum value from the find by self-funding as much of the exploration work as possible. When the magnitude of the deposit is well defined, the junior mining company has significant bargaining power with the senior mining companies. Obtaining major deposits when they have already been delineated by a junior company is very expensive as a result of the strong rivalry between the senior players. As an alternative, Placer Dome can

negotiate with the junior mining companies at an early stage in the grassroots exploration process and lock the company in to a standard earn-in agreement. The issue with this approach is that the probability of finding an ore body of sufficient size to meet Placer Dome's development criteria is very low.

The probability of success is somewhat dictated by the amount of money spent on grassroots exploration by the company. As the financial analysis revealed, all of the senior gold producers have been increasing exploration spending since the gold price began to rise in 2002. Exploration spending was at a low during the period of low gold prices of the late 1990's and very few deposits of greater than 3 million ounces have been discovered since then. Greater exploration spending in the early nineties (1993 to 1997) led to more discoveries (Figure 4.1).

A significant issue with growth by grassroots exploration is that exploration spending tends to follow the price of gold. The lag between the spending and successful discoveries creates a lack of available ore bodies in the early stages of a high gold price cycle, just when senior companies are seeking to make deals with juniors. The lack of exploration spending in the early part of the decade is currently being felt by seniors seeking organic growth.

Figure 4.1 Number of Deposits Discovered Greater than 3 Million Ounces



Source: Data from Metals Economic Group Database, graph by author.

Despite the apparent exploration success in the nineties, less than one third of the deposits discovered actually make it into production phase. Difficult political climates, lengthy permitting processes and poor economics are all reasons why projects do not advance through the development pipeline. The five senior gold companies produced approximately 27 million ounces of gold in 2004.[12] Assuming the success rate of 33% for moving projects to development continues, grassroots exploration will need to develop 81 million ounces per year. This implies

[12] Barrick Gold Corporation, "Annual Report 2004", Barrick Gold Corporation, http://www.barrick.com/index.aspx?usesid=-1&sid=92 (accessed May 7, 2005).
Goldfields Limited, "Annual Report 2004", Goldfields Limited, http://www.goldfields.co.za/Investor/Annual_Reports/FY_2004/gf_ar04/ar_04/default.htm (accessed May 7, 2005).
AngloGold Ashanti Limited, "Annual Report 2004", AngloGold Ashanti Limited, http://www.anglogold.com/subwebs/InformationForInvestors/AnnualReport04/report/default.htm (accessed May 7, 2005).
Newmont Mining Corporation, "Annual Report 2004", Newmont Mining Corporation, http://www.newmont.com/en/investor/financial/index.asp (accessed May 7, 2005).
Placer Dome Incorporated, "Annual Report 2004", Placer Dome Incorporated, http://www.placerdome.com/investors/annualreports.html (accessed May 7, 2005).

that exploration will have to return to its success rate of the early 90's, just to satisfy the five senior producers.

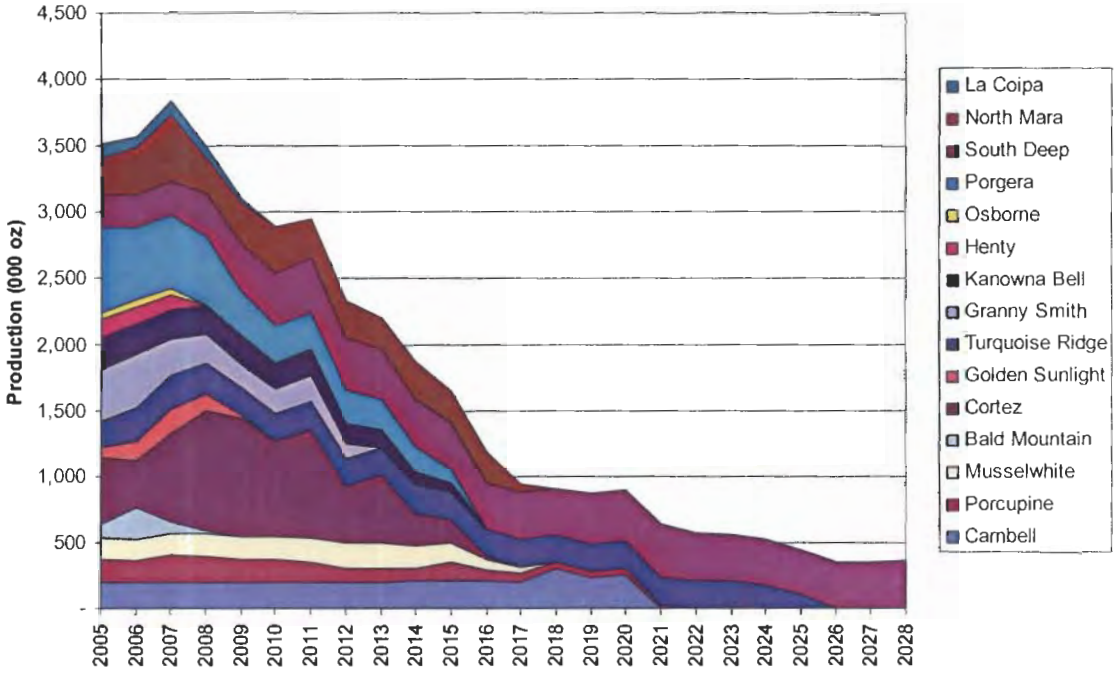
Clearly the main issue regarding growth by grassroots exploration is that there are simply not enough large deposits being discovered to satisfy the senior producers. This issue is manifested in a strong rivalry for large, well-defined ore bodies which creates a strong bargaining position for junior firms. This situation is exacerbated by cyclic exploration spending and the lag between the spending and actual discoveries.

4.1.2 Development of Existing Projects

Placer Dome has positioned itself well for the price upswing in gold with three major projects in the development pipeline: Cerro Casale (Chile), Pueblo Viejo (Dominican Republic) and Donlin Creek (Alaska). Of the three, Cerro Casale is the most advanced and as part of the earn-in agreement with the junior mining partner, Placer Dome must make a decision on whether or not to proceed with the project by the end of 2005. In the event that Placer Dome decides not to proceed, ownership will revert to the junior mining partner. Placer Dome has also signalled to the market that it will make an investment decision on Pueblo Viejo by the end of the year as well, although there is not a contractual obligation to meet this deadline. Donlin Creek is the least advanced of the three projects and no decision will be made this year.

The main issue with development projects is that they need to be of sufficient capacity to prevent Placer Dome's production profile from declining. Figure 4.2 shows the production expected from its existing operations without any of the development projects included.

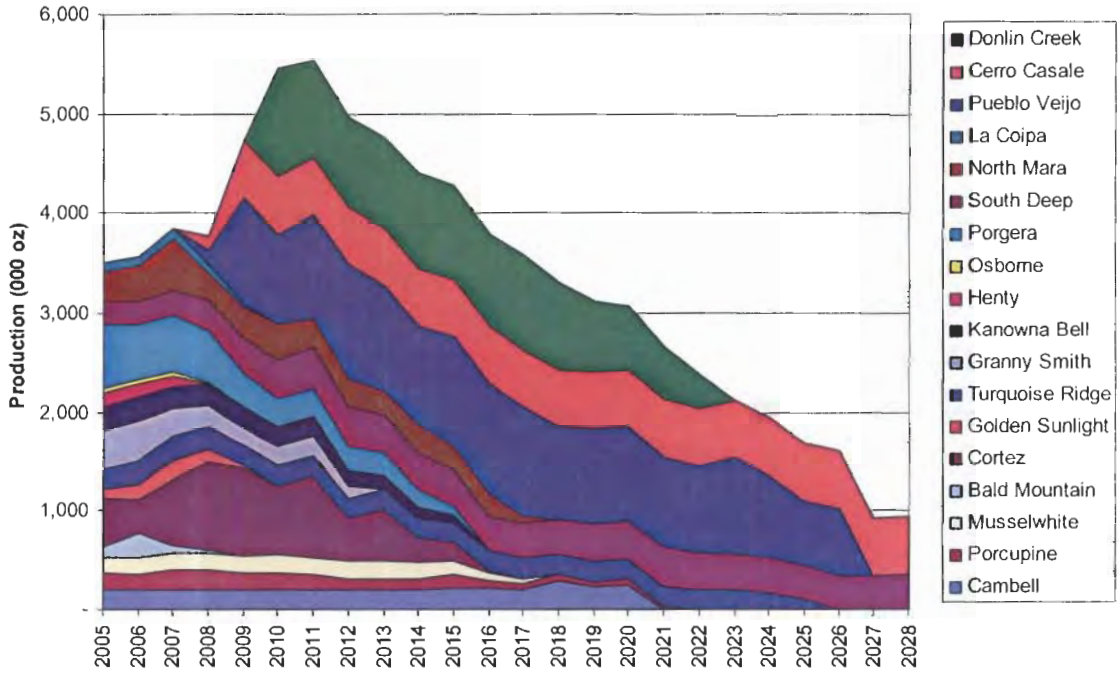
Figure 4.2 Production Profile Without Development Projects



Source: Placer Dome 2004 Strategic Business Plans.

Examination of the production profile above shows that the company's production of gold will peak in two and a half years (2007) and then begin a significant decline. The most advanced development projects, Cerro Casale and Pueblo Viejo, are both large projects with construction schedules of about 30 months from the time a decision is made until the first gold is produced. The effect of adding the development projects is shown in Figure 4.3.

Figure 4.3 Production Profile With Development Projects



Source: Placer Dome Strategic Business Plan, Project Feasibility Study Documents.[13]

As shown above, in order to achieve the desired growth target of 5 million ounces by 2010, all three of the major development projects will need to be undertaken with project decisions made this year for Cerro Casale and Pueblo Viejo. In addition to developing all three projects, the company will need to move other projects through the development pipeline quickly in order to be able to sustain 5 million ounces of production for more than two years.

The main issue with developing two major (both projects are greater than US$1 billion in capital cost) projects at the same time will be company resources. Project development personnel are relatively stretched currently as the company cut back the number of people on roll in this area during the period of low gold prices from the late nineties to late 2001. The personnel

[13] Placer Dome U.S. Incorporated, "Donlin Creek Joint Venture 2004 Summary Report", Placer Dome Incorporated (December 8, 2004): 4.
Placer Dome Technical Services Limited, "Aldebaran Project Feasibility Study Update Report". Placer Dome Incorporated (March 2004): 5-6.
Placer Dome Technical Services Limited, "Pueblo Viejo Pre-Feasibility Study", Placer Dome Incorporated 6 (December 2004): 6.10.

resources of the company are also stretched very thin due to secondments to the AMS business restructuring program. Currently there are over 200 people working on the AMS project, including many key project personnel. The AMS program is not expected to begin winding down until late 2007, beyond the required development period.

In addition to personnel resources, executing three projects which require more than $1 billion in capital each over three years will also stretch the company financially. As the financial analysis showed, the company has begun raising capital with a US$400 million equity offering at $22/share in November 2004. However, with the company's share price declining to US$13/share recently, it will be highly dilutive to current shareholders to raise further financing by equity offerings. The company will need to use debt financing if more than one of the projects is executed. Although this is not a major issue, it will stress the company's balance sheet to some extent and add more risk.

A further significant issue with organic growth via development projects is the current trend of rising commodity prices. As discussed in the financial analysis section, the rising steel and oil prices have put gold mining companies under operating cost pressures. This pressure also applies to capital costs. In addition to steel and oil, concrete, copper, nickel and other construction materials have shown similar rising costs trends. Construction labour is also in tight supply and currently very expensive. Escalating capital costs may have an impact on the decision to proceed with projects as it is difficult to predict the final capital cost at the time the project is presented to the company board for approval. With two projects being pushed to the approval level in 2005, capital cost escalation will be a significant issue with respect to organic growth via project development.

In summary, it is possible for Placer Dome to meet its growth objective by organic growth through development of its current projects. However, the company will be stretched to

supply personnel resources and financial resources for all the projects. As well, escalating capital costs are a significant issue for project approval.

4.1.3 Mine Site Exploration (Minex)

Since 1996, Placer Dome has produced 26.7 million ounces of gold. In the same period, the company has discovered 26.4 million ounces of reserves by Minex.[14] The benefit of focused exploration efforts at existing mines is that the company's assets are more fully utilized. As well, an intimate knowledge of regional geography improves the probability of exploration success. However, there are several issues with growth via Minex.

Minex seeks to find additional gold resources within an economic radius of the existing operating plant. The main issue with this practise is defining the boundaries of this radius. Often, resources are discovered which are profitable to mine, but not nearly as profitable as the original deposit. This occurs when new discoveries are further from the processing plant, increasing trucking costs, or when the new discoveries are too deep to mine by open pit methods. Both result in increased cash costs and reduced profitability. Therefore, if Minex is the only source of new resources for the company, the portfolio of assets will slowly evolve to be higher cost operations.

The nature of Minex is that it can usually, for a short-term period, be relied upon to replace the ounces that were mined, i.e. it can stop the company's production profile from declining, but it is less likely to create significant growth in the profile. Any significant growth by Minex is impaired by the high-cost nature of the discovered ounces.

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[14]Placer Dome Incorporated, "Exploration", Placer Dome Incorporated, http://www.placerdome.com/exploration/ (accessed June 1, 2005).

4.2 Diversification

Diversification into other metals would seem like a natural growth strategy for senior gold mining companies as many of the same core competencies required in gold mining could be applied directly to mining other materials. The main issue with diversification for gold companies is that the share price premium paid by the market is eroded with increased diversification.

Placer Dome already has some exposure to copper, which causes it to trade at a multiple slightly lower than its peers with less copper exposure (Table 4.1). Placer Dome's copper exposure results from owning a substantial copper mine in Chile. Typically for gold mining companies, some exposure to copper occurs as a by-product from gold mining operations as copper and gold are commonly found in the same mineral structures.

Table 4.1 Share price multiple compared to peers.

2004	Placer Dome	Newmont	Barrick
Gold (MM oz)	3.6	7.0	5.0
Price (US$/oz)	$391	$412	$391
Revenue (US$MM)	$1,408	$2,884	$1,955
Copper (MM lbs)	413	422	0
Price (US$/lb)	$1.16	$1.21	--
Revenue (US$MM)	$479	$511	--
Total Revenue	$1,887	$3,395	$1,955
% Gold	75%	85%	100%
% Copper	25%	15%	0%
P/NAV "Multiple"	2.0	2.4	2.5

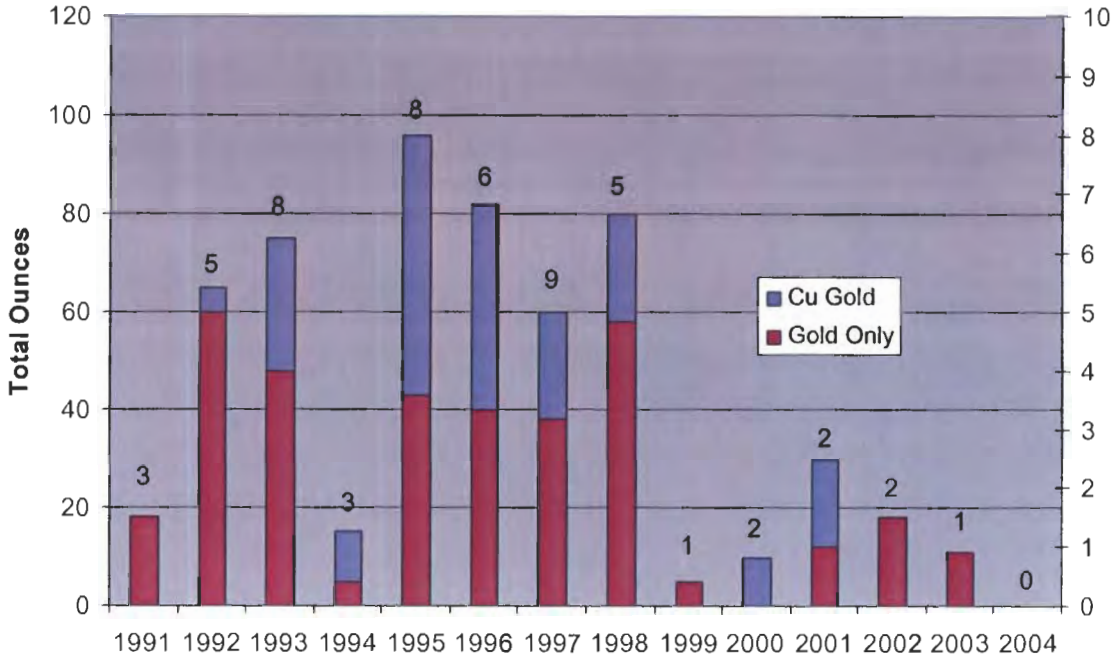
Source – Data from company Annual Reports, table by author.

Placer Dome's development project in Chile, Cerro Casale, is an example of a mixed copper-gold deposit. The processing route for these types of ores is different than for typical gold ores. In the case of Cerro Casale, the product from the mine will be a copper concentrate which contains gold, still in its mineral form. The concentrate will be shipped to a copper smelter,

where the gold will be recovered as a by-product. Building a smelter on-site at Cerro Casale is both uneconomical and outside of Placer Dome's competencies. Since the product has less value added, the revenues generated will be substantially lower. The company will have to pay to ship the concentrate to a smelter (likely in Japan or Korea), and pay the smelter treatment and refining charges. These charges are negotiated in contracts which are subject to the law of supply and demand, adding cash flow uncertainty and risk to the project. However, the biggest concern within the company regarding the development of Cerro Casale is the effect that the increased copper exposure will have on the company's share price multiple.

Placer Dome is not the only company facing the issue of whether or not to diversify into copper. As the discovery of large pure-gold deposits becomes rare, there is increased temptation to develop large copper-gold deposits. A substantial portion of the large (greater than 3 million ounce) deposits discovered since 1991 have been copper-gold deposits (Figure 4.4).

Figure 4.4 Portion of 3 Million Ounce Deposits that are Copper-Gold



Source Data from Metals Economic Group Database, graph by author.

A second issue with diversification is that new metals require new competencies. Mining can be grouped into five general areas: gold and silver, platinum group metals, diamonds, coal and tar sands, and base-metals (copper, zinc, lead). Each group requires a special set of skills and competencies as there are differences throughout the value chain for each of these groups. However, there are some similarities as well and Placer Dome would be well-suited to diversify into base metals, having competency with copper from its Chilean operations.

Diamond mining has traditionally been located in high risk countries such as Angola and the Democratic Republic of the Congo. However, an emerging diamond industry in Canada has opened the door for mining companies to diversify into the lucrative diamond mining industry. Recently, both Barrick and Newmont have acquired equity interest in junior firms exploring for diamonds in northern Canada. Specific issues with diversification into diamond mining include competition from established senior firms such as DeBeers. New competencies are also required

in the sales and marketing functions of the value chain, an area which Placer Dome has almost no experience.

Platinum group metals occur primarily in Russia and South Africa where there are several senior established firms. Placer Dome is considering minor diversification into platinum group metals through a relatively small exploration project underway in South Africa. A specific issue with diversification into platinum group metals is increased exposure to country risk.

Coal and tar sands mining is an extremely low-tech industry and mainly involves mining and moving material. As such, Placer Dome would be well-suited for diversification into this industry. Teck Cominco, a diversified mining company, has recently had success by expanding its interest in coal mining and is rumoured to be considering diversification into tar sands. Recently Newmont has acquired an equity interest in a tar sands development project, primarily as a natural hedge against rising power prices.

In summary, diversification is not a preferred growth strategy for Placer Dome as diversification causes the company's share price multiple to erode, reducing shareholder value. Of the diversification options, copper is a natural diversification possibility as Placer Dome has existing competencies in copper from its Chilean operations. As well, gold producers may be forced into diversifying into copper as more of the large gold deposits being discovered are associated with some base metals.

4.3 Mergers and Acquisitions

As major gold discoveries become increasingly rare, senior gold producers have turned to acquisitions to satisfy market growth demands. Although there has been some significant consolidation in the industry, the market remains largely fragmented with room for further consolidation.

In order to acquire a company via an acquisition, it is common to have to pay a premium of 15 to 30% above the market share price. The market share price reflects the demand for the company's shares at the margin. Investors buying and holding shares at the marginal price likely believe that the shares are of greater value. Therefore, in order to gain a controlling interest, the acquiror will have to pay a sufficient premium to convince the majority of shareholders to tender their shares to the offer. The need to pay a premium is an issue for growth by acquisition.

A second issue with growth via acquisition is that the multiple which gold companies trade to their net asset value results in accounting Goodwill being created from a transaction at market prices or greater. Under old accounting rules, the Goodwill was simply amortized proportionally to the known resource and mine life at the time of the acquisition. However, under new GAAP rules, the Goodwill must be subject to an impairment test each year. For mining assets, this rule is not well understood and the presence of a substantial amount of Goodwill on a company's balance sheet can be confusing to investors who do not understand when it is going to be written down. Goodwill related to a mining asset must be written down at some point as all mines run out of ore and eventually close. However, with effective Minex, the Goodwill write-down could be postponed for many years. Alternatively, if the company has a poor year of Minex, it could face a substantial Goodwill impairment charge which will negatively impact on earnings and surprise investors. The issue of accounting for Goodwill in the mining industry is currently undergoing several test cases with the Security and Exchange Commission (SEC). The result is that some intermediate mining companies have had to delay their annual reporting, causing market concern with mining accounting methods. It is likely this issue will be resolved as companies test the SEC rules, but the substantial amounts of Goodwill may still be seen by the market as a lurking surprise for future company earnings.

A further issue with growth via acquisition is the relative performance of the company's share price. The gold company share price multiple makes it less expensive to issue shares to

acquire a company than to pay cash. Therefore, most acquisition deals in the industry are all-share transactions. As such, in order to compete against rival bidders for an acquisition target, it is important that the company's shares perform on par with its rivals. As well, it is also advantageous to outperform the acquisition target company. In effect, the ratio of the acquiror to the acquiree's share price is a determining factor in whether an acquisition will create value for the acquiror's shareholders.

Share price performance is determined by many factors, including cash costs, production growth, gold price and exploration success. However, one of the key factors in a company's share price performance relative to its peers is its ability to provide the market with accurate guidance for future reporting periods. The market generally does not respond well to negative surprises and typically punishes a company's stock for one or more reporting periods. Following such events, it is very difficult for a company to find an acquisition deal which will add value for its shareholders, essentially halting growth via acquisition.

In summary, growth via mergers and acquisition requires a strong company share price relative to competitors and to acquisition targets. As well, consideration must be given to the accounting treatment of Goodwill and to the premium required to obtain a controlling interest in a company.

5 RECOMMENDATIONS

Placer Dome is currently facing a declining gold production profile. In order to reverse this trend and achieve its growth goal of sustainable gold production of 5 million ounces per annum within 4 years, Placer Dome must address several issues.

First, grassroots exploration has had a low instance of success due to under spending during a period of prolonged weak gold prices. In addition, the number of pure gold deposits being discovered which are of sufficient capacity to improve the production profile are becoming increasingly rare. Junior mining companies are recognizing this fact and rivalry amongst the senior players for quality deposits is intensifying.

Second, the company's development project portfolio will only temporarily achieve the desired growth in production. Developing major projects in succession will stretch the company's financial and personnel resources due to a poor share price performance relative to peers and the business restructuring project currently underway. Development projects have substantially increased in risk during the current environment of rising commodity and labour prices. Capital cost escalation could jeopardize the value added to shareholders.

Third, the company has little opportunity for diversification as the market continues to punish gold companies which diversify away from pure gold. Placer Dome's exposure to copper is already reducing its share price multiple, despite the copper unit's significant contribution to cash flow.

Based on the above analysis, recommendations for Placer Dome to achieve its growth goal are presented in the following sections.

5.1 Focus Grassroots Exploration During Weak Portion of Cycle

Reduced spending on grassroots exploration by gold mining companies during the period of low gold price in the late 1990's has led to a shortage of quality deposits available for development during the current gold price upswing. In order to sustain long term organic growth, the lag between exploration spending and exploration discoveries must be more carefully managed during future periods of low gold prices.

In order to ensure a continual string of high quality exploration successes continues through periods of low gold prices the company should focus its exploration spending. First, the reduced exploration budget should be directed into areas where Placer Dome already has existing operations. Second, the spending should be focused on more mature projects in order to reduce the risk of failure.

By directing exploration spending into countries or regions in which Placer Dome currently operates, several advantages can be exploited. A strong presence in the local mining community likely means that Placer Dome will have established relationships with local juniors. By directing exploration spending to companies with which Placer Dome has already established relations, the company will cement its relationship with these firms. This exploration spending will keep Placer Dome's preferred junior mining partners active during weak periods in the market and enhance its bargaining position with these companies.

As well, by focusing the exploration spending in areas in which Placer Dome already operates, the probability of success will improve through knowledge of the local geology. The geology of gold deposits varies greatly from region to region and local experience gained through Minex can be applied to grassroots exploration to improve the chances of success.

In addition to concentrating on regions in which Placer Dome already operates, the company should focus its exploration spending on more advanced projects in order to reduce risk.

During periods of low gold prices, competition for deposits between senior players is somewhat reduced as companies are less likely to bring projects on line. This period of reduced rivalry creates an opportunity for Placer Dome to be more selective in exploration targets.

In essence, by focusing its grassroots exploration efforts during periods of low gold price in areas which the company already operates and on more advanced prospects, Placer Dome will improve its exploration efficiency and gain the maximum benefit from its reduced budget.

In addition to improving the efficiency of grassroots exploration spending, the company must take a longer term outlook when adjusting its exploration budget. During the late 1990's, Placer Dome almost cut grassroots exploration spending entirely. The industry was feeling the effects of an extended period where gold prices held below $300/oz. During periods of low prices, firms begin to exit the industry and high cost operations are shut down. Placer Dome must maintain its confidence that the price cycle will reverse and not cut exploration budgets to a level that is detrimental to the long term success of the company.

5.2 Expand Geographic Portfolio During Strong Portion of Cycle

During the current high gold price environment, the company has increased exploration spending. The above recommendations for improving exploration efficiency are equally applicable during periods of high gold prices. However, the strong portion of the cycle is an opportune time to expand the company's geographic horizons and improve its knowledge and expertise in other regions of the world. The company must take on additional country risk to exploit regions of the world where quality gold deposits may still exist. In particular, the company should direct exploration spending into Asia. Countries such as China, Mongolia and Russia contain great potential for finding high quality deposits.

The company is currently active in China, with one exploration project underway and an exploration office established in Shanghai. However, Mongolia and Russia remain on the company's "no-go" list. The company must reassess its criteria for determining country risk and leverage its expertise from entering other difficult countries such as Tanzania and Papua New Guinea. By taking a more aggressive approach to managing country risk, the company will create a competitive advantage. A lesson could be learned from oil and gas companies which seem to manage country risk effectively and operate successfully in just about any country in the world.

5.3 Reduce the Risk of Development Projects

The company has three large projects in the development pipeline: Cerro Casale, Puelbo Viejo and Donlin Creek. Large projects require substantial financial and project management resources – areas in which the company is currently quite thin. The company must reduce the risk of these projects by considering further joint ventures and carefully controlling capital cost escalation.

For Cerro Casale, the company currently has a joint venture agreement with Bema Gold (Placer Dome 50%, Bema and Bema Group Companies 50%). The company could substantially reduce its risk in the development of the project by bringing on a third joint venture partner. It is recommended that a joint venture be considered with a senior copper company such as Codelco, Phelps Dodge or Southern Peru Copper.

The agreement should be structured to split the commodities (copper and gold) between the partners. A major benefit of this type of agreement would be reduced diversification for Placer Dome and Bema. In addition, a senior copper player would bring much needed financial backing and project management expertise to the table. As well, each of the companies

mentioned have substantial experience in project management in Chile and South America which would also reduce risk.

The company owns 100% of the Pueblo Viejo project. In order to reduce the risk in developing this project it is recommended that the capital cost be studied very carefully before a project decision is undertaken. In the current environment of rising world commodity and construction labour prices, the capital cost of projects in the industry have been exceeding feasibility study estimates. Placer Dome should expend more engineering effort during the current feasibility study for Pueblo Viejo to improve its confidence in the capital cost of the project.

As well, the company should consider delaying the start of the project if a positive decision is made on the Cerro Casale project. Undertaking two major projects at the same time may stretch the company's project management team too thin and jeopardize the success of the AMS business restructuring project. A delay in starting the project may also allow sufficient time for the construction labour and commodity price markets to stabilize.

5.4 Develop a Diversification Strategy

It is becoming more and more difficult for Placer Dome to remain focused solely on gold and maintain a reasonable growth rate. The company must develop an effective diversification strategy. Diversification into copper would leverage the company's expertise in this area and allow the company to pursue the increasing number of gold-copper deposits being discovered around the world.

The company has copper exposure from its mining operation in Chile, Zaldivar, and to a lesser extent from the Osborne gold-copper mine in Australia. Zaldivar is a large, low cost operation which provides solid cash flow to the company, but the diversification away from gold

causes the company's share price multiple to be lower than its gold focused peers. In order to address this issue, the company should consider spinning off the Zaldivar asset into a separate company. The Zaldivar mine could act as a cornerstone operation for the spin off, providing cash flow and operating expertise. Placer Dome could then enter into joint ventures with the new spin off, splitting commodity streams from gold-copper projects such as Cerro Casale. This type of arrangement would allow Placer Dome to remain focused on gold and allow it to increase its exposure to gold-copper deposits.

A precedent for this type of spin off arrangement is the US Steel Company, which split its energy and steel businesses in response to market concerns that the company was not a focused play in either the steel or energy sector. The company now trades as two separate entities on the New York Stock Exchange, providing investors with a pure play in either steel or energy. However, the two companies are commonly controlled and synergies between the companies are fully exploited.

It is not recommended for the company diversify into platinum, diamonds or coal as the company does not have sufficient expertise in these areas. Also, there is significant risk that the market will not respond well to diversification in these areas and further trade down the company's share price multiple. As such, the company should consider divesting its platinum exploration project in South Africa and better utilize its exploration budget as discussed in section 5.2.

5.5 Increase M&A Efforts

The company's current strategy of focusing solely on organic growth will likely not provide sufficient growth to achieve its target of sustainable gold production of 5 million ounces per year within four years. In order to supplement its organic growth strategy, the company must

increase its efforts in mergers and acquisitions and focus on improving its share price relative to acquisition targets and peer rivals.

The company's share price has been disappointing recently due to the company missing its guidance targets in the last two quarters. In order to improve this track-record and restore market faith, the company must improve its Strategic Business Plan (SBP) accuracy. It is recommended that the SBP process be examined carefully and improved as necessary to ensure that the correct message is given to the market. Although it may take several months to rectify, the company must improve its guidance accuracy before its share price will improve relative to its rival peers.

At current share prices, the company is at risk of being acquired by one of the other senior players or an aggressive intermediate company. In particular, the company's share price has performed poorly against Newmont, Barrick and Goldcorp. Both Newmont and Barrick have the size and resources necessary to acquire Placer Dome. Goldcorp is also a serious threat. Having just completed a successful merger with Wheaton River, its share price is highly valued and its new management team is hungry for further growth. Mergers and acquisitions are a two-way street and Placer Dome must improve its share price performance to avoid being acquired itself.

Assuming that the market guidance can be improved and the company is not acquired, the company should re-examine its strategy of pursuing acquisitions only during weak portions of the gold price cycle. Since the "currency" for acquisitions is company stock, the ratio of Placer Dome's share price to the share price of the target acquisition company determines whether an acquisition will add value to Placer Dome. Therefore, acquisitions can be economically justified through superior share price performance, independent of the price cycle. Even when acquisition targets are "expensive", value can be added through acquisition if Placer Dome's pre-acquistion

share price performance is superior to that of the target. It is equally important that Placer Dome's share price be at least as strong as its competitors in order to effectively compete for target companies.

In the next 4 to 5 years, several key acquisitions will be required for the company to meet its growth target. Therefore, the company must be active in evaluating acquisition targets and ready to act when a quality target is found.

5.6 Conclusions

The recommended strategy that will enable Placer Dome to meet its growth goal of a sustainable gold production rate of 5 million ounces per year within four years is a combination of organic growth, diversification and increased M&A efforts.

First, the company must ensure that its grassroots exploration efforts are focused during periods of low gold prices to improve efficiency. The company can do this by focusing exploration in areas where Placer Dome has existing operations and by pursuing more mature projects to reduce risk. As well, the company must recognize the lag between exploration spending and the discovery of a new deposit and ensure sufficient exploration continues during weak price periods.

Second, the company must expand its geographic operating portfolio during strong portions of the gold price cycle. China, Mongolia and Russia offer significant potential which the company can exploit through effective management of country risk.

Third, the company should reduce its development risk on it current portfolio of advanced projects. A senior copper company as third joint venture partner for Cerro Casale would bring added project management and financial resources. The Pueblo Viejo project feasibility study should be completed in sufficient detail to improve confidence in the capital cost.

If Cerro Casale proceeds, the company should consider delaying Pueblo Viejo until sufficient financial and project management resources are available.

Fourth, the company must acknowledge that diversification will be required to maintain growth and develop an effective diversification strategy. By spinning off its copper assets into a separate financial entity, the company will be able to offer the market a pure gold play while exploiting the many gold-copper deposits being discovered.

Finally, the company must increase its efforts in mergers and acquisitions to supplement organic growth. Initially, the company must improve its share price performance relative to its peer rivals and its potential acquisition targets. An improved SBP process would aid in providing more accurate guidance to the market. Subsequently, the company should actively pursue quality acquisition targets regardless of the current gold price.

APPENDICES

Appendix I Income Statements

Placer Dome
Comparative Statement of Earnings
for Fiscal Years 2000 through 2004
Millions US$

	2004	2003	2002	2001	2000
Sales	1,888	1,763	1,209	1,223	1,413
Costs and Expenses					
cost of production	1,149	1,090	698	705	727
G&A	64	51	40	41	43
Exploration	77	76	52	44	56
Other Selling Expenses	83	64	55	357	432
EBITDA	515	482	364	76	155
Depreciation and Depletion	255	267	187	182	244
amortization of goodwill	-	-	-	-	-
interest income (expense)	77	65	66	70	75
other income (expense)	(39)	43	42	13	85
Income before Taxes	144	193	153	(163)	(79)
Provision for Tax (Recovery of Tax)	(140)	(36)	37	(30)	13
NET EARNINGS	**284**	**229**	**116**	**(133)**	**(92)**
Earnings per common share	0.66	0.56	0.33	(0.41)	(0.28)
DATA SECTION:					
Dividends per common share	0.10	0.10	0.10	0.10	0.10
Outstanding Shares - Fully Diluted	430.80	411.30	350.40	328.00	328.00

Appendix II Balance Sheets

Placer Dome
Comparative Statement of Financial Position
for Fiscal Years 2000 through 2004
Millions US$

	2004	2003	2002	2001	2000
Current Assets					
cash and short-term investments	1,153	591	544	439	340
accounts receivable	138	131	99	95	143
loans receivable	0	0	0	0	0
inventories	248	244	202	160	196
unbilled revenue	0	0	0	0	0
prepaid expenses	97	17	10	7	36
	1,636	983	855	701	715
Investments	50	51	53	58	66
Other Assets	173	168	154	145	142
Deferred commodity and currency contracts	54	48	0	0	0
Income and resource tax assets	400	230	28	24	74
Deferred stripping	170	107	0	0	0
Net Fixed Assets	2,607	2,544	2,695	1,683	1,975
Goodwill	454	454	200	0	0
	5,544	4,585	3,985	2,611	2,972
Current Liabilities					
Operating Loan	113	0	0	2	0
Accounts payable and accrued liab.	268	243	194	140	192
income taxes payable	27	26	37	25	33
current portion of long-term debt	45	10	340	35	35
	453	279	571	202	260
Long-term Debt	1,109	1,179	607	807	843
Reclamation and Post Closure Obligations	251	225	241	166	156
Future Income Taxes	265	216	195	67	188
Other Liabilities	302	287	212	26	12
Shareholders' Equity	3,164	2,399	2,159	1,343	1,513
	5,544	4,585	3,985	2,611	2,972

Appendix III Financial Ratios

Placer Dome
Comparison of Standard Ratios
for Fiscal Years 2000 through 2004

STANDARD FINANCIAL RATIOS	2004	2003	2002	2001	2000
Profitability Ratios					
net operating Margin (EBITDA)	0.36	0.35	0.39	0.39	0.46
profit margin	0.15	0.13	0.10	-0.11	-0.07
return on assets	0.05	0.05	0.03	-0.05	-0.03
return on equity	0.09	0.10	0.05	-0.10	-0.06
Asset Utilization Ratios					
asset turnover	0.34	0.38	0.30	0.47	0.48
inventory turnover	4.63	4.47	3.46	4.41	3.71
accounts receivable turnover	13.68	13.46	12.21	12.87	9.88
accounts payable turnover	4.29	4.49	3.60	5.04	3.79
inventory conversion period	78.78	81.71	105.63	82.84	98.40
accs. rec. collection period	26.68	27.12	29.89	28.35	36.94
accs. payable collection period	85.13	81.37	101.45	72.48	96.40
cash-conversion cycle	20.33	27.46	34.07	38.71	38.95
MEASURES OF LIQUIDITY					
current ratio	3.61	3.52	1.50	3.47	2.75
acid-test	3.06	2.65	1.14	2.68	2.00
times interest earned	5.45	5.46	4.30	4.21	5.32
Debt Service Coverage	3.44	4.73	0.70	2.81	3.63
FINANCIAL LEVERAGE					
debt-to-equity	0.40	0.50	0.44	0.63	0.58
debt-to-assets	0.23	0.26	0.24	0.32	0.30
assets-to-equity	1.75	1.91	1.85	1.94	1.96
THE LEVERS OF PERFORMANCE					
profit-margin	0.15	0.13	0.10	-0.11	-0.07
asset-turnover	0.34	0.38	0.30	0.47	0.48
assets-to-equity	1.75	1.91	1.85	1.94	1.96
ROE	**9%**	**10%**	**5%**	**-10%**	**-6%**

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