#### **MILESTONES REACHED**

Avoca Resources Ltd has passed all performance tests required by financiers to access A\$71 million (US\$47.2 million) of debt for the Higginsville gold project in Western Australia. The performance tests were the final conditions relating to the financing and were based on mining production rates, mill throughput rates, ounces produced and cost profiles during a continuous 30-day period prior to 31 December. The debt facility was arranged by Société Générale Australia Branch and the Commonwealth Bank of

#### **YAMANA RAISING**

Yamana Gold Inc, owner of the Chapada gold and copper mine in Brazil, plans to raise C\$135 million (US\$107 million) through the sale of stock to fund mine expenses and working capital. The company will sell 22.5 million new shares at C\$6 each, a 9.1% discount to the closing price of stock the day prior to the announcement. Yamana said the cash raised may also be used to pay down debt.

#### **UNDER THREAT**

Zimbabwe-focused platinum producer Zimplats Holdings Ltd said it is under "serious threat" and unable to fund both existing operations and expansion work. The company forecast a loss and cash shortfall for the next six months, if metals prices did not improve. However, Zimplats is seeking additional debt funding to continue its expansion plans. The company told shareholders: "At prevailing metal prices, your company is not able to generate sufficient cash to meet its ongoing operational needs as well as the requirements of the Ngezi Phase 1 expansion project which is now at a critical stage of implementation."

## **ALUMINA EXPANSION**

Alumina Ltd purchased
US\$385 million of currency options to limit its exposure to the Brazilian real.
The company said: "These currency options substantially reduced the risk that additional project funding might have been required as a result of any strengthening of the BRL during the remaining period of construction of these long-life bauxite and alumina production facilities."

### **BUMI APPROVAL**

PT Bumi Resources will seek shareholder approval to pledge assets for financing. At a meeting on February 26 a vote will be cast on whether Bumi can use assets, including shares in units, as collateral for loans.

# Hedging: what can be done now?

#### BY MARK HANSEN AND JEFFREY CHRISTIAN

AS PRECIOUS metals prices rose throughout 2001 to 2008, mining companies found it difficult to engage in traditional price risk management transactions to protect these higher selling prices. A variety of reasons were behind the general aversion to hedging, among them shareholder opposition to selling away price upside and the rise of competing investor products, such as exchange-traded funds, that allowed investors to gain direct exposure to metal prices.

Perhaps the roots of management aversion to hedging precious metals may be because many of the hedging strategies commonly offered to mining companies include giving up most if not all of the exposure to further increases in prices, and the risk of open-ended contingent financial liabilities that can be devastating to balance sheets. This is true of forwards and collars, the two most commonly-offered producer hedges. There are alternatives to the most commonly-offered hedge structures.

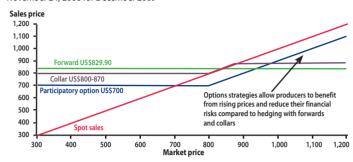
Unfortunately for producers that did not wish to sell into a rising market, prices now have come down with a thud. Many producers now find themselves in the untenable situation of producing metal at costs above current prices. Others find themselves with greatly reduced profits, producing metal with very thin margins above current costs. Those producers could be locking in prices for the metal with hedges that guarantee them a floor, while preserving most of their upside exposure Producers that missed the opportunity to engage in even minimal risk management activities when metal prices were substantially higher should not miss an opportunity to lock in a portion of production that is still profitable.

## **PARTICIPATORY OPTION**

A common misconception is that by hedging even a portion of production a miner is giving away all exposure to rising prices. A strategy called a participatory option allows producers to lock in a floor price while still participating in favourable metal price increases. On top of this, while the credit freeze has reduced companies' ability to take on the unlimited contingent liabilities that they would face if they hedged with collars or forwards, the participatory option is a limited risk strategy that often uses far less balance sheet for credit risk.

The two charts illustrate various hedging strategies that were available to producers in the middle of November. They use gold as an example, but the same rules apply to all metals, to varying degrees. It is true that the forward and

Figure 1: Gold producer hedges: participatoary options, forwards and collars November 24, 2008 for December 2009



options markets for gold are far more liquid than the forward and options markets for other metals. This means that hedges in other metals tend to be more expensive in terms of the upside exposure a producer gives up, as forward and option transactions simply have higher prices in these metals than they do in gold, however the concepts still remain valid across commodities.

Figure 1 compares the revenue profiles of various hedges. The two hedging strategies most commonly offered to producers are forwards and collars. In each case, the producer takes on an unlimited contingent liability: If prices rise and the producer cannot deliver into its hedge, it is financially responsible for making up the difference. That scenario is not as crucial to the producers as is the credit management of that exposure as prices rise. If prices rise, the producer will be required to set aside money to cover at least a portion of its contingent liability, even if it still is in production and looks secure in its ability to deliver into the hedge. This may take the form of a formal margin or escrow account, or it may be a less structured but equally onerous financial reserve fund the producer is required to establish by its hedging counterpart. These financial reserves and contingent liabilities can tie up a company's ability to borrow money, even though the prices of its products are rising.

These limitations can be reduced to a minimum and capped by using a participatory option strategy. In such a case, the company would buy a floor for its metals sales. It would pay for that floor with a combination of other options

transactions. The result would be that the producer would have a floor price for its metals with predetermined maximum risks and contingent liability.

Figure 2 is meant to illustrate the flexibility that producers have in developing hedges. In this chart, there are three different hedges that the producer can choose among. In fact, there are many more levels at which a producer can establish a hedge, based on its financial requirements and desires. A producer might choose a lower floor price and preserve more of its exposure to higher prices. Other producers may face higher production or capital costs, and thus may seek or require higher floor prices, and be willing to give up more of the upside.

The point of this exercise is to establish that hedging need not lock producers out of their own market. As the commodity markets have proven, precious metals included, even the most bullish fundamental scenario can quickly change both on the upside and, unfortunately, the downside. In such an environment, even the most bullish precious metal miner shareholders would be thankful for a management that hedged a portion of production with a limited risk strategy such as a participatory option.

CPM Group works with producers, consumers, institutional investors, governments, and international organisations to manage commodity price risks. Our independence affords clients an unbiased assessment of hedging structures and terms. For additional information on CPM Group's commodity price risk management services, contact Adam Crown at (212) 785-8324 or info@cpmgroup.com

Figure 2: Gold producer hedges: participatoary options November 24, 2008 for December 2009

