TRADE, ECONOMICS & MARKET OF ASM GOLD

Global Forum on Artisanal and Small Scale Gold Mining
MANILA 7-9 DECEMBER 2010

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TOPICS

1. SYMBOLISM, HISTORY, PROPERTIES & USES

2. SUPPLY - DEMAND - MARKET STRUCTURE

3. PRICE - PRICING MECHANISMS - MINING COSTS

******** QUESTIONS ********

4. MINING SUPPLY CHAINS & FINANCING

5. GOLD TAXATION

6. THE CONSUMER POINT OF VIEW

7. ASM GOLD: ASM’S FLAGSHIP: FAIRTRADE & FAIRMINED GOLD

******** QUESTIONS ********
1- GOLD: SYMBOLOGY, HISTORY, PROPERTIES & USES
"I was with God and I was with the devil"

Mario Sepulveda - 2nd rescued miner - Gold mine - San Jose - Atacama Desert - Chile - oct 2010
Gold: a pure metal

Divine symbol due to its stability (immortality) and brightness (sun)

Inca: Solar metal (Inty Raymi)

Egyptians: goddess Lakshmi symbol of prosperity

Hinduism: God’s light (San Fernando Bahia)

Christianism: Golden calf (idolatry) Solomon temple

Islam / Orthodox: God’s flesh

Diwali: lights feast

mercredi 8 décembre 2010
Gold: an impure metal

«Gold is a treasure, and he who possesses it does all he wishes to in this world, and succeeds in helping souls into paradise.» Colombus

Gold is a refuge but can become a curse

- the hellish mining life
- proslavery - massacres
- dirty gold
- environmental damages
Gold: Properties

- Rare: earth crust 5 ppb (Iron 5,8% X 10M)
- Dense: 1 liter = 20 kilograms
- Malleable and ductile: Gold leaf
- Best electrical and thermal conductivity
Gold: Properties (II)

- stable (best corrosion resistance)
- blazing
- INDESTRUCTIBLE
Gold: History

- discovered **4000 BC** in Nubia & Thrace
- gold is used in jewelry around **3000 BC** in southern Iraq
- first coin in electrum minted in Lydia by King Croesus approx. **640 BC**
- first «mechanized» mines in Spain & Dacia operated by the **Roman Empire**
Gold: History (II)

- South American Gold rush: King Ferdinand of Spain says to explorers, “Get gold, humanely if you can, but all hazards, get gold” (1511 AD)
- Isaac Newton, as Master of the Mint, sets the Gold Standard in 1711
- XIX century Gold rushes: USA, Canada, Australia, South Africa
Gold: History (III)

• First bullion transaction in London in 1684 by Moses Mocatta. 1st fixing in 1919
• In 1900, United States enters officially on the gold standard.
• 1944-45 : Bretton Woods agreement establishes a gold exchange standard. The new standard involves setting par values for currencies in terms of gold and the obligation of member countries to convert foreign official holdings of their currencies into gold at these par values.
• Americans are forbidden to own gold in 1961 - 1973 marks the ends of Bretton-Woods
• The last gold rush of the XX th century : Serra Pelada (50,000 miners in 1983: 13,9 tons)
Gold Uses: Financial

As Monetary exchange instrument: the ultimate currency

As an investment
Gold: Uses. Adornment and decorative

Jewellery

Plating salts, Gold leaf, liquid gold
Gold Uses: Industrial

Electronics

Thermal shield
Gold Uses: Medical

Dental

Ear Gold implant

Chris Johnson of the Tennessee Titans
Gold Uses (demand) : Volumes

Gold demand in 2009 (tons)

- Jewellery: 1759 t.
- Other fabrications: 658 t. (Elect. 246 t. - Coins & M 285 t. - dental 53 t. - other 74 t.)
- Bar Hoarding: 187 t.
- Net Producer Dehedging: 254 t.
- Implied Net Investment: 1429 t.

Gold Demand: 2000-2009

- Implied Net Investment
- Net Producer Dehedging
- Bar Hoarding
- Other Fabrications
- Jewellery
2- GOLD: SUPPLY - DEMAND - MARKET STRUCTURE
Gold Supply

- World gold offer in 2009: 4,287 tonnes - Highest in the last 10 years - +8% vs. 2008
- SUPPLY = NEW GOLD + ABOVE THE GROUND GOLD


- Mining - 2,572 tons
- Official sector sales - 41 tons
- Old gold scrap - 1,674 tons

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Gold Supply: Mine production

• In 2009: 60% of the offer 2,572 tons

• Exists in all continents except Antartica

• China became the 1st mining producer in 2007 after more than 100 years of South Africa domination. China produced in 2009: 324 tons

• The period for an industrial mine between first exploration and production is around 10 years and is increasing => non elastic supply

• Largest gold producing mine in the world is in Indonesia and is a Copper Mine (Grassberg) nearing 100 ton production
Gold Supply: Mining: WHERE?

2000: 2,620 tons

- CIS: 284 tons
- Europe: 510 tons
- North America: 20 tons
- Oceania: 312 tons
- Latin America: 378 tons
- Africa: 647 tons
- Asia: 470 tons

2010: 2,571 tons

- CIS: 326 tons
- Europe: 315 tons
- North America: 18 tons
- Oceania: 241 tons
- Latin America: 518 tons
- Africa: 501 tons
- Asia: 652 tons

- The winners: LATAM + ASIA + AFRICA (excl. SAR)
- The losers: AFRICA (due to SAR) + NORTH AMERICA
Gold Supply:
Mining: the world leaders (TOP 20 = 87% w.o.)

2009 mine production in tons

Rest of the World: 322 tons
China: 324 tons
Australia: 223 tons
South Africa: 220 tons
USA: 219 tons
Russia: 205 tons
Peru: 182 tons
Indonesia: 158 tons
Canada: 96 tons
Ghana: 90 tons
Uzbekistan: 75 tons
Papua New Guinea: 71 tons
Brazil: 65 tons
Mexico: 56 tons
Mali: 49 tons
Argentina: 49 tons
Tanzania: 41 tons
Chile: 40 tons
Philippines: 37 tons
Colombia: 27 tons
Venezuela: 25 tons
ASGM: 300 tons

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Gold Supply:
Mining: Who? LSM

15 largest mining companies in 2009 (output in tons)

- Barrick Gold - CAN: 230.9 tons
- Newmont Mining - USA: 161.9 tons
- AngloGold Ashanti - RSA: 143 tons
- Gold Fields - RSA: 106.7 tons
- Freeport McMoRan - USA: 74.8 tons
- Goldcorp - CAN: 75.3 tons
- Kinross Gold - CAN: 64 tons
- Navoi MMC - UZB: 62 tons
- Newcrest Mining - AUS: 49.2 tons
- Harmony Gold - RSA: 45.2 tons
- Buenaventura - PER: 41.2 tons
- Polyus Gols - RUS: 39.2 tons
- Rio Tinto - GBR: 34.6 tons
- Lihir Gold - AUS: 34.5 tons
- Yamana Gold - CAN: 31.4 tons
- ASGM: 300 tons

• VERY CONCENTRATED: 15 first corporations = 46% world output (1,194 t.)
Gold Supply:
Mining: Who ? ASM

- 1015M miners => +60M people indirectly
- 90/10 rao (volumetoworkforce)
- Generang 200300MT of Gold (913BN$) (8 to 12% world minesupply)
- Low Mechanization => Very High local economic value index compared with LSM => Guinea example:
  - 1 mine produces 11,5 MT with 2.973 direct workers (1/2 contractors) and high technology
  - 200000 ASM miners population produces 7 MT of Gold with no mechanization
  "HANDMADEGOLD"
- Offers an opportunity for growth and an escape from poverty
- Fixes workforce and family in the countryside
Luis Ramos: "Gold is a wealth providing us a job and allowing us to make a living, but I never gave a gold jewel to my wife"