

# Kenji Sawada LAB.

## [Mineral Security Strategies]

International Research Center for Sustainable Materials

Mineral Security Strategies, Resource Geology, Mineral Economics

### Mineral Security Strategies

For Sustainable Supply of Mineral Resources

World Mining Business has been rapidly changing, and paradigm shift such as Emerging Market Economy, M&A, Resource Nationalism, Inflow & Outflow of investment money are observed at the current mineral commodity market.

Under the volatile metal prices, it is indispensable for Japanese industries to secure the stable supply of industrial materials.

Demand & Supply of Commodities: Metal prices, and expanding demand in China  
 Strategy of Global Mining Companies: Reserve Replacement, and its cost  
 Supply Chain Management: Flows from ore to materials for the metal industry

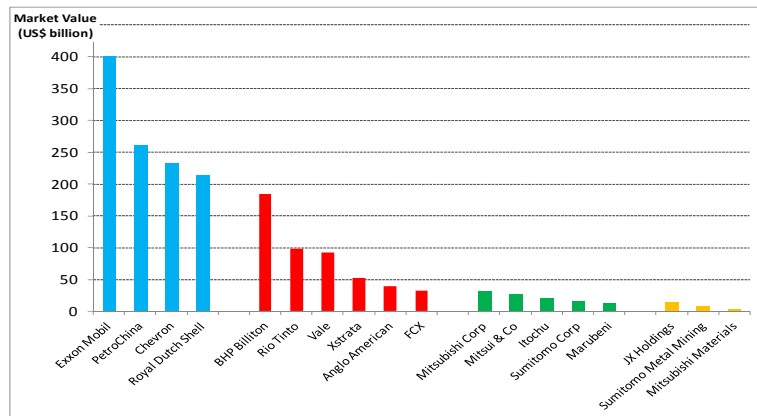
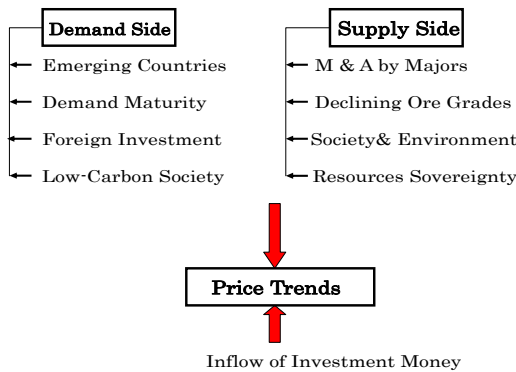


Fig.1 Current factors for metal price determination

Fig.2 Market value of Oil majors, global mining companies and Japanese trading & smelting companies .

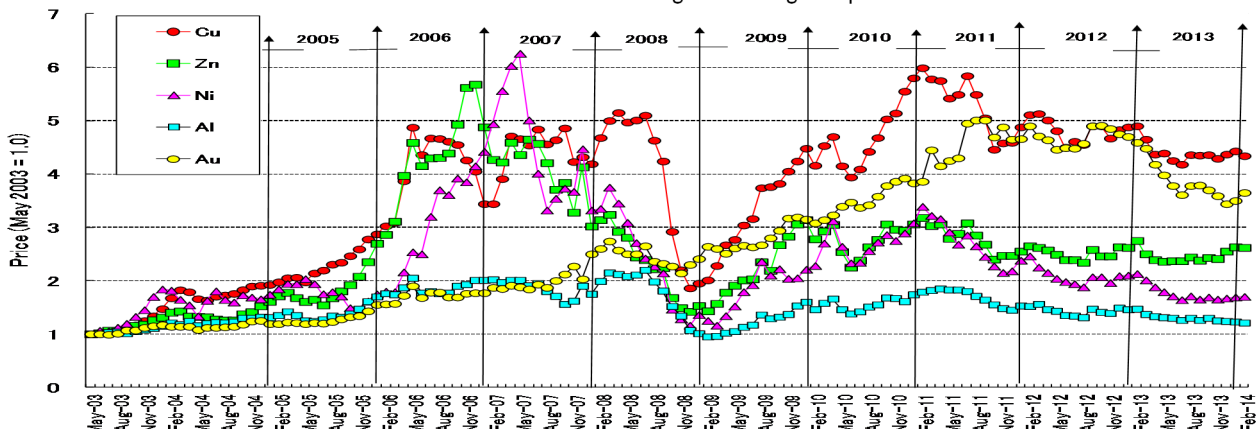


Fig.3. Change in metal prices (May 2003~February 2014)