



# SILVER

## INTRODUCTION

Like gold, silver has been known to mankind as a precious metal since ancient times. Silver is not just bought as an investment or fashioned into jewelry like gold; it is also the precious metal widely used in industry. Silver coins were widely used since 561 BC and later on silver became the mass form of coinage throughout the world. Silver's irreplaceable properties include its strength, malleability and ductility, its sensitivity to high reflectance of light and its electrical and thermal conductivity. Silver prices have suffered in 2009 as the metal used in industrial application such as in glass and electronics, batteries among others, reduced buying sharply due to the economic crisis. Silver was among the best performing commodities in 2010 gaining 83% during the 12 months ended 31 December. Shares of Mexico City – based Fresnillo Plc, for example, the world largest primary silver producer, gained 114% in 2010.

Silver futures hit a 31-month high at \$36.043 an ounce on March, 9 2011. With economic growth picking up, there may be more commercial demand for silver. Industrial production in the United States advanced at a rate of 5% or more from January to February 2011. In Germany, China and Russia, the increases during the period were even greater. Another source of demand which has helped propel both silver and gold in recent prices is the growth in the exchange-traded funds (ETF) and related investment tied to performance of the metals. As of 11th of March 2011, there was a 21% gain in ETF holdings of silver from a year earlier.

## SALIENT 'MARKET' FEATURES OF SILVER ARE:

- Silver is often seen as the poor man's equivalent of gold.
- Silver has benefited from demand for the 'white' look in ornaments which mirrors fashionable designs of white gold (an alloy of gold, platinum and palladium) but at lower prices.
- Besides being a precious metal, silver's unique physical and chemical properties like its strength, malleability and ductility make it a very useful 'Industrial Commodity', hence its contribution to the trading activity of the overall commodities segment.
- Due to its excellent electrical conductivity, silver finds many applications in electronics from printed circuit boards to switches and TV screens, especially in the Plasma Display Panels.
- Because of its resistance to pitting and tarnish, silver is used to make Digital Video Disks and Compact Disks.
- The price of silver is determined by its mine production and the prices of other precious metals. Silver is produced as a by-product of copper/lead/zinc extraction.
- The relationship between silver and economic activity is strong, given that around two-thirds of total silver fabrication is in the industrial and photographic sectors.

Silver displayed a volatile trend by the end of 2010 (refer to Chart 1). In fact silver is seen to be more volatile than gold because demand for the white metal is more 'elastic' (people are sensitive to price changes) compared to the demand of gold given the metal has a strong industrial demand. In addition, Chart 2 indicates an inverse relation between the poor man's gold and Dollar index (This index tracks the performance of the US dollar against major currencies).

Chart-1: Silver (5-day volatility)

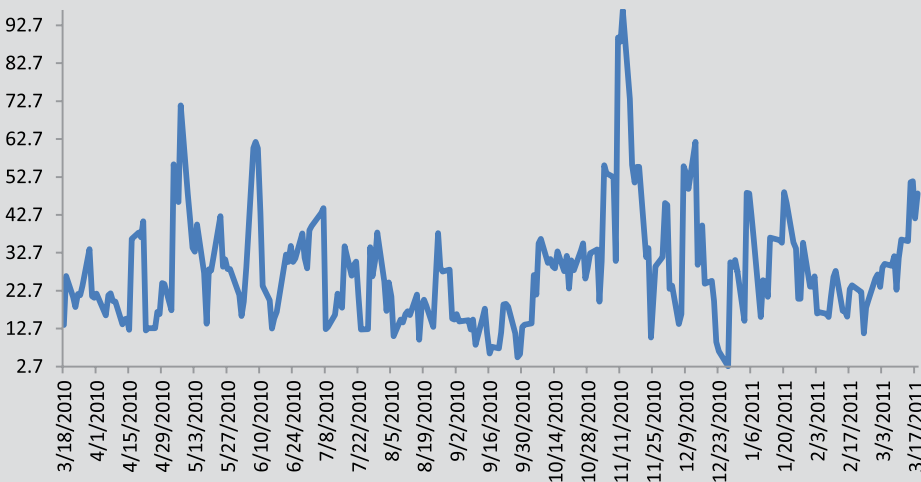
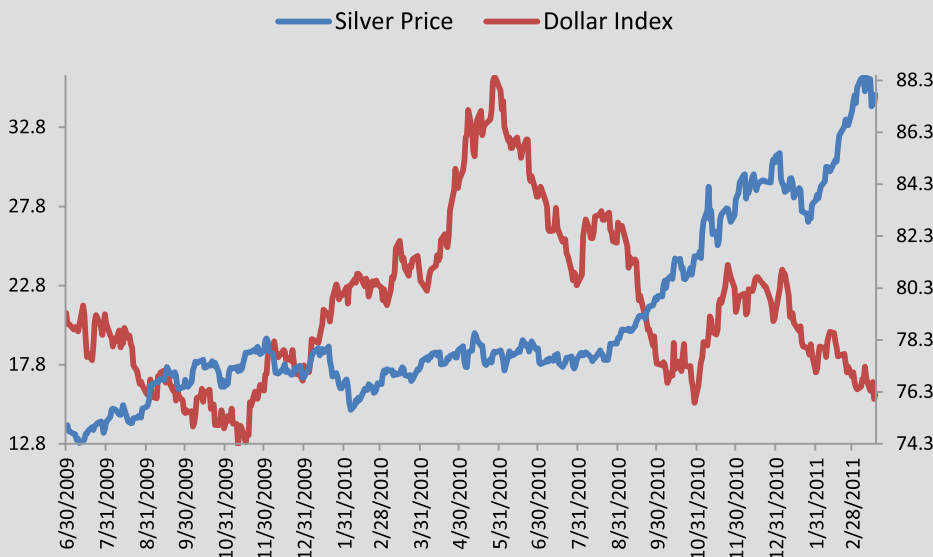


Chart-2: Dollar Index against Silver prices



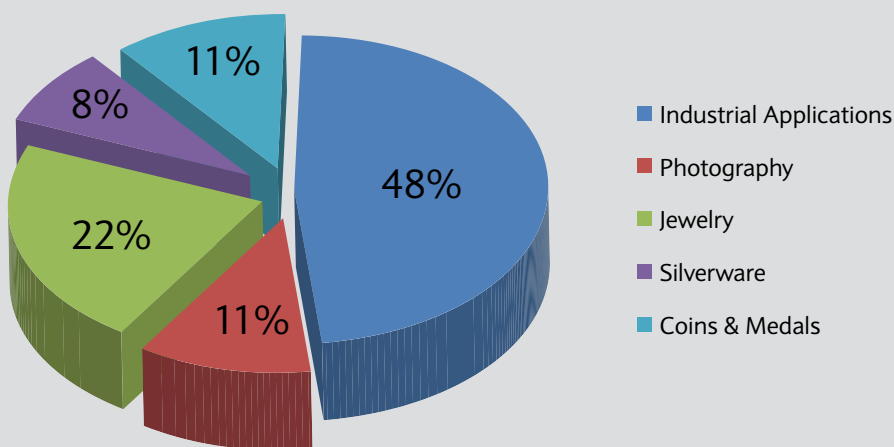
## ADDITIONAL INFORMATION ON SILVER

Global mine production of silver rose in 2010, by almost 4%, its seventh straight annual increase to reach a record high of 709.6 million ounces. Output was driven higher by strong production increases in several Latin American countries as mining projects, many of which are primary silver producers, came to fruition and by higher output principally from China and Turkey. Gains came both from primary silver mines and as a by-product of gold mining.

Regionally, the strongest growth stemmed from Latin America, where silver output increased by 8%, with the most visible gains recorded in Argentina and Bolivia. Peru was the world largest producer of silver with production around 125.3 million ounces reported in 2009 followed by China, Mexico, Chile and Australia. However, on 9th of March 2011, the Mining Chamber of Mexico (Camimex) informed that after five years, Mexico regained the world's first place as silver producer in 2010. From a period of January to November in 2010, Mexico produced 3,640.7 tons of silver, while the Ministry of Energy and Mines of Peru recorded a production of 3,637.4 tons of metal.

Furthermore, demand for silver in India, where imports of the metal surged more than six fold in the first half of 2010, is increasing as investors seek an alternative to higher-priced gold.

Chart-3: Silver Demand Component wise (%)



Source: silverinstitute.org, GBOT Research

## WORLD SILVER MARKETS

As in the case of gold, London Bullion Market is the most active over the counter (OTC) market for silver. In the case of exchange traded futures, Multi Commodity Exchange of India (MCX) has become world number one exchange in terms of number of futures contracts traded. Silver is traded on the following exchanges:

Chart-4: Multi Commodity Exchange of India (MCX)

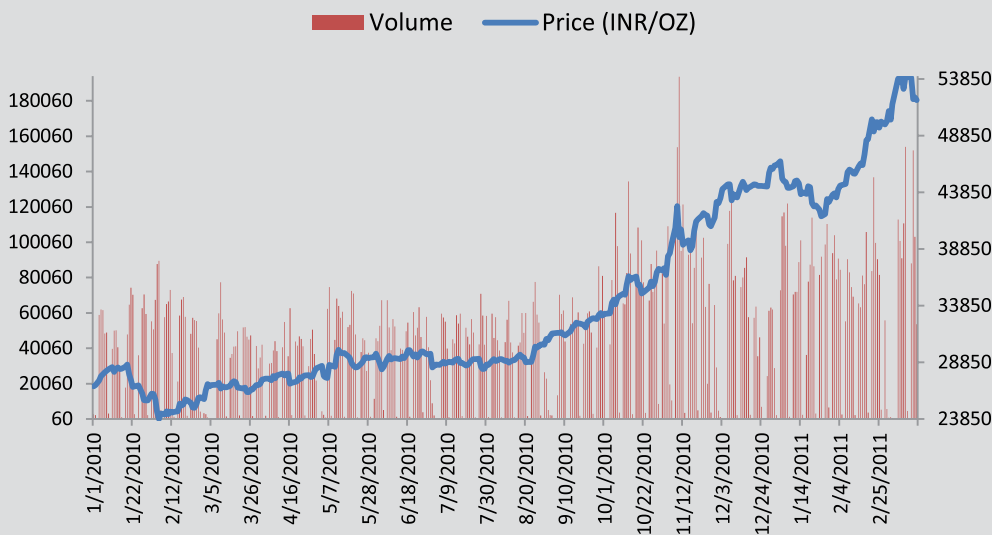


Chart-5: CME (Chicago Merchantile Group)

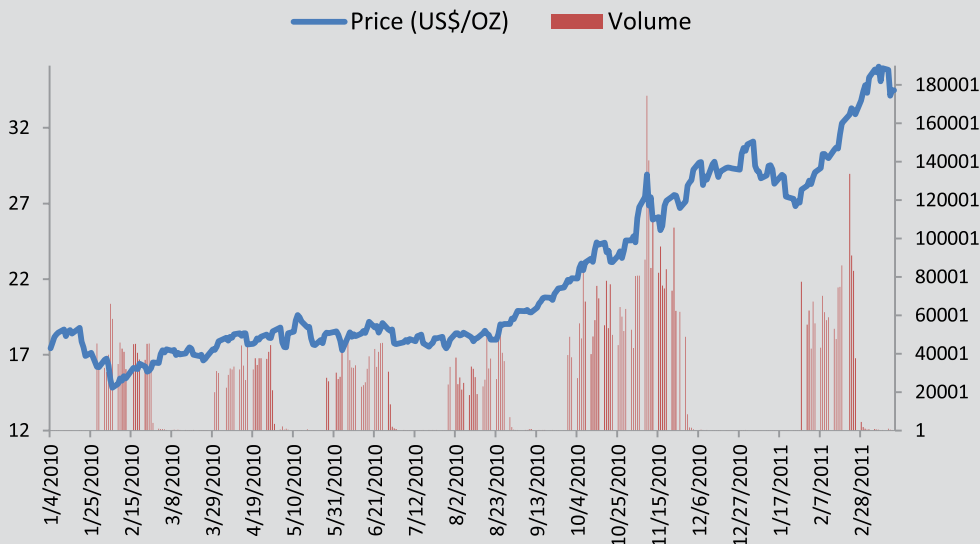


Chart-6: Russian Trading System

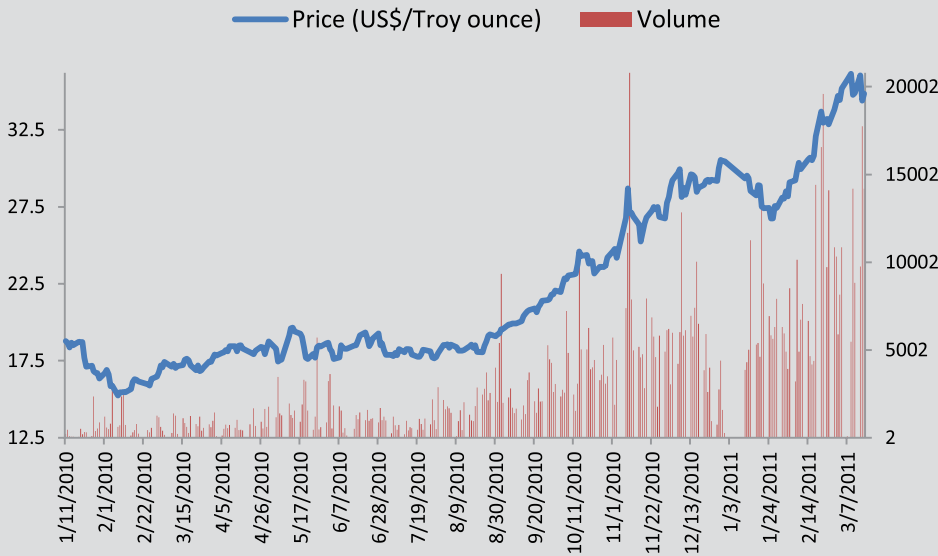
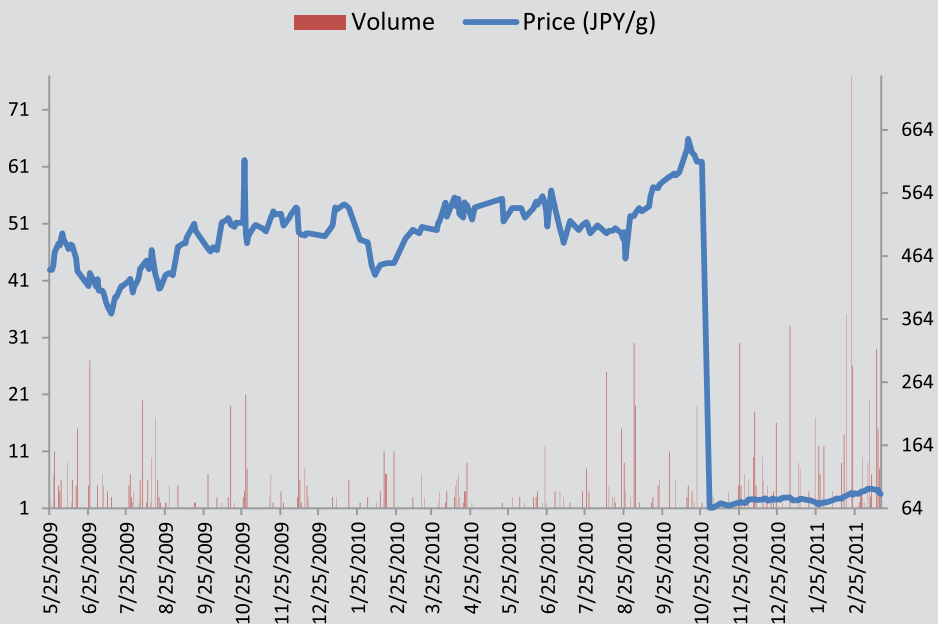


Chart - 7: TOCOM (Tokyo Commodity Exchange)



## Important Websites

The Institution of Materials, Minerals and Mining - <http://www.iom3.org/>

Silver Research Consortium - <http://www.ilzro.org/src/>

Silver Valley Mining Association - <http://www.silverminers.org/>

U.S. Geological Survey Silver - <http://minerals.er.usgs.gov/minerals/pubs/commodity/silver/index.html>

Silver-Investor.com - <http://www.silver-investor.com/>

Silver.com - <http://www.silver.com/>

Silverseek.com - <http://www.silverseek.com/>

## Measurement\*

Troy weight is a system of measurement for precious metals, precious stones etc. where a pound is equivalent to 12 ounces. The name “Troy” is derived from Troyes, France, the city where the system was first used.

1 oz troy = 480 grains  
31.1035 grams  
1.0971 ounces avoirdupois  
20 pennyweights  
0.08333 pounds troy  
0.6857ds avoirdupois

Source: [ccsilver.com](http://ccsilver.com)