

**A
PROJECT REPORT
ON
“Fundamental & Technical Analysis of Selected
Commodities”**

**at
NIRMAL BANG SECURITIES PVT., LTD.
NASHIK-422002**

**A project report submitted in partial fulfilment of the requirement for the
Degree of Master of Business Administration**

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**To
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Objective of the study

1. To Study the Commodity Market of India with the help of MCX & NCDEX exchanges.
2. To Analyze Commodity of Gold using Fundamental and Technical Analysis.
 - I. Fundamental Analysis with the help of Production, Demand/Supply, Average Volatility of Gold.
 - II. Technical Analysis using Charts & Indicators.
3. To Analyze Commodity of Silver using Fundamental and Technical Analysis.
 - I. Fundamental Analysis with the help of Production, Demand/Supply, Average Volatility of Silver.
 - II. Technical Analysis using Charts & Indicators.
4. To Analyze Commodity of Copper using Fundamental and Technical Analysis.
 - I. Fundamental Analysis with the help of Production, Demand/Supply, Average Volatility of Copper.
 - II. Technical Analysis using Charts & Indicators.

Scope of the study

Scope of the commodity market is very large. Thus there is the study about the commodity market and investment in the commodity market. Every one can't know to about the commodities, commodity market and the investment opportunities in the commodity market. Here we can apply the tools for the fundamental and technical analysis of the selected commodities in the commodity market and to understand the price movement of commodity in specific period, so it helps to take decision of buying and selling the commodities in the market.

- The scope of this project is limited to only Commodity Market with respect to Metal Indices.
- The Project does not extend to any other sector.
- This study provide a chance to know about fundamental & Technical analysis and various tools that are used in the analysis.
- This study covers Price Movement & Average volatility of Commodities.
- The study covers various investment tools on the basis of that investment is done.

Limitations of the study

There is possibility for some discrepancies to come in between due to following limitations.

- Time interval for conducting the project is just 60 days; hence an exhaustive data cannot be collected due to time constraint.
- The suggestion of derived from fundamental analysis is valid for the long period only.
- Technical analysis is done for the short run basis i.e. daily trading into the market due to the prices and volume changes with every second.
- No technical Analysis tool is perfect, but it should be remembered that the indices are measuring what has already taken place; it is up to the interpreter to provide a meaningful forecast.
- A chart does not provide with the means to predict future price action with certainty.

CHAPTER-2

Research Methodology

Meaning of Research-

Research in common parlance refers to a search for knowledge. One can also define research as a scientific & systematic search for pertinent information on a specific topic. In fact research is an art of scientific investigation. Research as a “systematized effort to gain new knowledge”. Some people consider research a movement from the known to the unknown.

Area of the Research: - Finance

Topic of the Research: - Fundamental & Technical Analysis.

Period of the Research: - 55 days

Type of Research : - Descriptive vs Analytical Research

Methodology of study:

Research methodology is careful, patient, systematic, diligent enquiry or examination in some field of knowledge undertaken to establish facts or principle. From the above definition I can summaries the following nature of research

- It is a systematic, intellectual, creative thinking process.
- It adopts the systematic methodology.
- There is objective enquire based on factual observation that can be quantified.
- The objective is to establish a theory or principle.
- To make theory as generalization.
- To explain the existing knowledge is the objective of research.

Methodology refers as to the method, means of collection of various data related to the study of welfare facilities the data was collected in two ways.

Method of Data collection

- **Primary data:**

This is the original source of the information 1st hand in nature where the researcher goes to different people or by using observation method collects the data himself.

Sources of primary data:-

1. Observation
2. Interview

- **Secondary data:**

It is the data which is already present in the secondary form like press releases, magazines, newspaper, journals, newsletters which are derived by any other person or institute. It was already exists and it is in processed form. The researcher has only to decide that how it will be handled to appraise the project

Sources of secondary data:-

1. Books
2. Internet & Websites
3. Business Magazines.

Research Design:

It includes following steps

- Collection of data
- Analysing & Interpretation of Data.
- Research findings.
- Suggestion

Presentation of data:

Deliberate sampling method used for the sampling is also called as purposive sampling. Before the presentation of data first all data is sorted out and take only data which is required for the study, is Organised as per study.

The Presentation of data is done by the help of various charts and tables:-

- For Fundamental analysis there are used Tables, Doughnut charts, and Column charts. The data is described by statistical way.
- For the Technical analysis there are used Technical chart of Particular commodity for the presentation and chart is explained by Analytical approach.

Fundamental & Technical Analysis of Gold

1. Fundamental analysis of Gold:

Introduction

- Gold (Chemical Symbol-Au) is primarily a monetary asset and partly a commodity.
- Gold is the world's oldest international currency.
- Gold is an important element of global monetary reserves.
- With regard to the investment value, more than two-thirds of gold total accumulated holdings is with central banks' reserves, private players, and held in the form of jewellery.
- Less than one-third of gold's total accumulated holdings are used as “commodity” for jewellery in the western markets and industry.

Global Scenario & Facts:

- London is the world's biggest clearing house.
- Mumbai is under India's liberalised gold regime.
- New York is the home of gold futures trading.
- Zurich is a physical turntable.
- Istanbul, Dubai, Singapore, and Hong Kong are doorways to important consuming regions.
- Tokyo, where TOCOM sets the mood of Japan.

Indian Scenario

- India, world's largest market for gold jewellery and a key driver of the global gold demand.
- The domestic drivers of gold demand are largely independent of outside forces. Indian households hold the largest stock of gold in the world.
- Two thirds of the Indian demand for gold comes from the rural parts of the country.
- In 2012, gold's role as an inflation hedge bolstered its appeal in India. India imported around 850 metric tonne (MT) of gold in 2012.
- Above ground supply of gold from central bank's sale, reclaimed scrap, and official gold loans.
- Hedging interest of producers/miners.
- World macroeconomic factors such as the US Dollar, interest rate and economic events.
- Commodity-specific events such as the construction of new production facilities or processes, unexpected mine or plant closures, or industry restructuring.
- In India, gold demand is also determined to a large extent by its price level and volatility.

1.2. Uses & Applications of gold:

- 1) **Jewellery:** India & China which contributes more than 50% of the world jewellery demand.
- 2) **Technology:** Gold is widely used as connectors & wires in various electronic items and reliability is high on the yellow metal.
- 3) **Medicine:** In the US, gold had been known for the heart and improved blood circulation. Gold has been used to cure cancers.
- 4) **Nanotechnology:** Gold now-days used as catalysts and the gold Nano particles has been efficient absorbers of mercury from the water and act as purifiers.
- 5) **Space & engineering:** Gold coating is work as reflector of heat & infrared radiation.
- 6) **Dental Industry:** Golden tooth is one of the major uses in the dental industry & Seen as Status Symbol.

5.1.3 Factors Affecting Gold Prices

1. Decline of mine production:
2. Inflation and interest rates:
3. Currency Fluctuation:
4. Geo political concerns:
5. Central bank Demand:
6. Hedging interest of producers or miners.
7. Demand for jewellery from the Asian markets especially India & China: .

Inventory Analysis of Gold (In Tonnes) :-

(Table No:-5.1.6)

Particular	2010	2011	2012	Net Change 2010-11	Net Change 2011-12
Global Total supply	4108	4515	4453	9.91%	-1.37%
Mine supply	2543	2835	2847	11.48%	0.42%
Secondary economy sales	1341	1313	1291	-2.09%	-1.68%
Transitional economy sales	342	342	373	0.00%	9.06%
Global Total demand	4115.12	4582.3	4405.6	11.35%	-3.86%
Jewellery	2060	1975.1	1894.40	-4.12%	-4.09%
Central bank Purchase	323.12	423.34	528.67	31.02%	24.88%
E.T.F.	318	185.1	264.33	-41.79%	42.80%
Medical	77.2	121.46	132.16	57.33%	8.81%
Official Coin	204.6	245.2	220.28	19.84%	-10.16%
Physical Bar	713.2	1180.4	925.17	65.51%	-21.62%
Dentistry	49.8	42.9	44.05	-13.86%	2.68%
Other Industry	82.8	88.9	88.11	7.37%	-0.89%
Electronics	287	319.9	308.39	11.46%	-3.60%

(Secondary Source)

analysis:

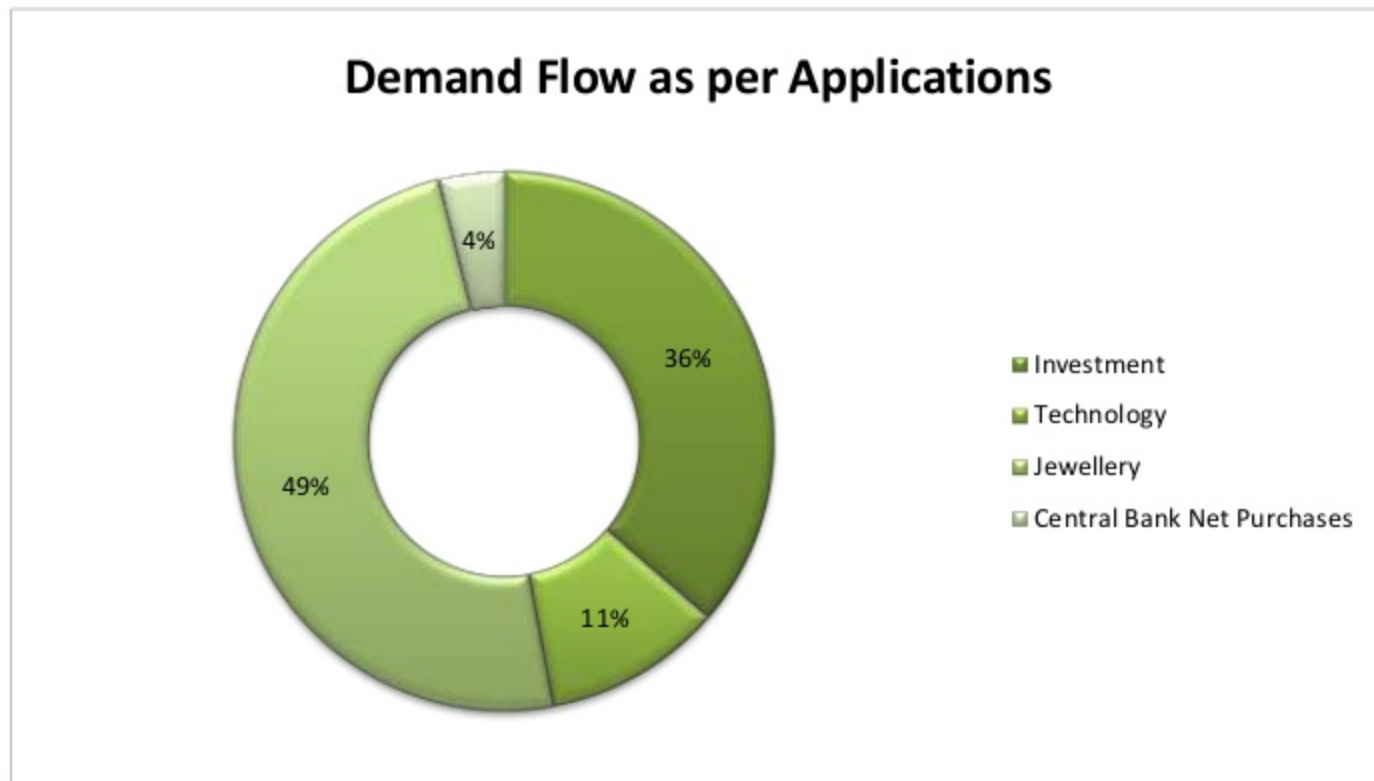
- From the above chart we get the information of Global Total Supply & Global Total Demand of Gold. Which is 4108, 4515, 4453 tonnes and 4115.12, 4582.3, 4405.6 tonnes, respectively.
- Central bank investment is 528.67 tonnes in 2012, broadly flat year-on-year, but the approximate value of this demand reached a new record of almost \$3.2 billion.
- Major drivers of this strong investment included further monetary loosening in the developed world, continued sovereign debt crisis, rising longer-term inflation fears and in key markets, negative real interest rates coupled with limited attractive risk-free investment alternatives to gold.
- In 2012, the gold mine production increased by 12 T to 2848 T and the combined demand for bars & coins dropped from 1425.6 T to 1146 T.

4. Global Demand and Supply Outlook Gold:-

Shifting dynamics have driven the gold market's evolution from concentration to dispersion, across both borders and sources of demand and supply. The demand and supply dynamics of the gold market underpin the precious metal's extensive appeal and functionality, including its characteristics as an investment vehicle.

demand :-

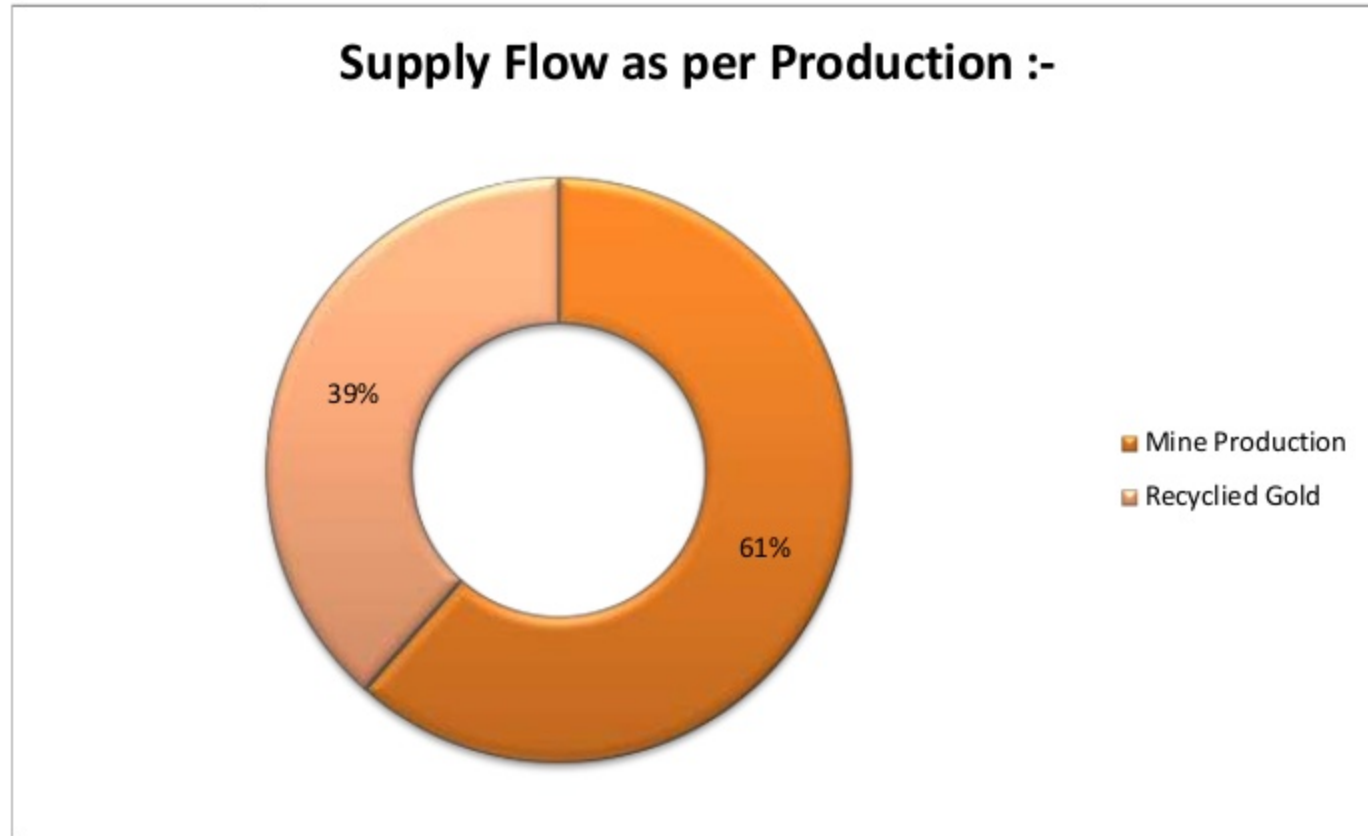
(Chart no: - 5.1.1)



(Secondary Source)

ipply:-

(Chart no: - 5.1.2)



(Secondary Source)

5.1.5.1. Countrywide production and consumption:

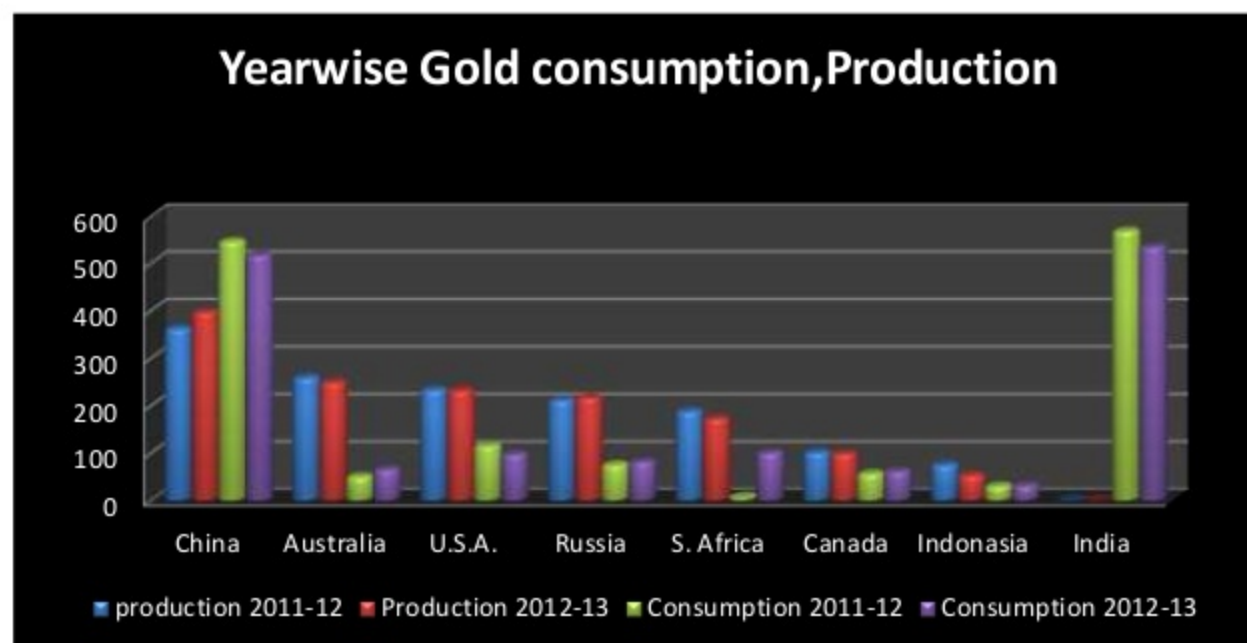
(Table No: - 5.1.5)

Country name	Production (Tonnes)		Consumption (Tonnes)		Net change	Net change
	2011-12	2012-13	2011-12	2012-13	(Production)	(Consumption)
China	361	396	545	516	10%	-5.32%
Australia	258	248	50	65	-4%	30%
USA	232	231	115	97	0%	-15.65%
Russia	210	216	75	81	3%	8%
S.Africa	187	172	67	100	-8%	49.25%
Canada	100	98	56	61	-2%	8.93%
Indonesia	74	53	30	31	-28%	3.33%
India	-	-	567	533	0	-6%

(Secondary Source)

5.1.5.2. Country comparison chart:

(Chart no: - 5.1.5)



i. Calculation of Average volatility of Gold Prices:

(Table No: - 5.1.8)

Date	Closing Prices	Returns	STDEV		Volatility in %	
01-Apr-13	30530	-0.014478				
02-Apr-13	30088	-0.012696				
03-Apr-13	29706	0.0045782				
04-Apr-13	29842	0.0105221				
05-Apr-13	30156	0.0021223				
06-Apr-13	30220	-0.007214	0.010098	6 days	16.03093	16% for 6 days
08-Apr-13	30002	0.0033331	0.00849		13.47834	
09-Apr-13	30102	-0.013288	0.00867		13.76423	
10-Apr-13	29702	-0.00202	0.008389		13.31726	
11-Apr-13	29642	-0.033972	0.013915		22.0907	
12-Apr-13	28635	-0.010197	0.012906		20.4879	
13-Apr-13	28343	-0.079102	0.030523		48.45457	
15-Apr-13	26101	0.0032566	0.03051		48.434	
16-Apr-13	26186	-0.003017	0.031409		49.86075	
17-Apr-13	26107	0.0006512	0.031746		50.39614	
18-Apr-13	26124	0.0042107	0.032302		51.27974	
19-Apr-13	26234	0.0085004	0.033622		53.37358	
20-Apr-13	26457	0.0116415	0.00528		8.383105	
22-Apr-13	26765	-0.007323	0.00711		11.28823	
23-Apr-13	26569	0.008318	0.006876		10.90834	
24-Apr-13	26790	0.0247107	0.010404		16.51723	
25-Apr-13	27452	-0.000401	0.010928		17.34815	
26-Apr-13	27441	0.0049561	0.010964		17.40479	
27-Apr-13	27577	-0.001414	0.011148		17.69801	
29-Apr-13	27538	-0.00886	0.011495		18.24863	
30-Apr-13	27294	-0.014069	0.013488		21.41294	

(Secondary Source)

Technical Analysis of Gold :-





Fundamental & Technical Analysis of Silver

. Fundamental Analysis :-

Introduction

- Silver (Chemical symbol-Ag) is a brilliant grey-white metal that is soft and malleable.
- Silver's unique properties include its strength, malleability, ductility, electrical and thermal conductivity, sensitivity, high reflectance of light, and reactivity.
- The main source of silver is lead ore, although it can also be found associated with copper, zinc and gold and produced as a by-product of base metal mining activities.
- Secondary silver sources include coin melt, scrap recovery, and dis-hoarding from countries where export is restricted. Secondary sources are price sensitive.

Global Scenario

- Silver is predominantly traded on the London Bullion Market Association (LBMA) and COMEX in New York.
- LBMA, the global hub of over-the-counter (OTC) trading in silver, is the metal's main physical market. Comex is a futures and options exchange, where most funds' activities are focused.
- Silver is invariably quoted in US Dollars per troy ounce.

Indian Scenario:-

- The average annual demand for silver in India is about 2500 Metric tonnes (MT) per year. In 2011, the country's production was around 342.13 MT.
- Nearly 60% of India's silver demand comes from farmers and rural India, who store their savings in the form of silver bangles and coins.

World Markets

- London Bullion Market is the global hub of OTC (Over-The-Counter) trading in silver.
- Comdex futures in New York is where most fund activity is focused