7.0 SUMMARY

7.1 IMPACT OF VOLUME ON THE SPOT AND THE FUTURES PRICE

The Futures market is known for its volatile behavior. The volatility of the market is affecting the participants of the market thereby influencing the prices of the shares. Volatility is the important function of the market, occurs in both the Spot and the Futures market during important information announcement. The impact of volatility on the Spot and the Futures price is inevitable. The GARCH (1,1) model was used to analyse the impact as suggested by Bollerslev (1996). The GARCH (1,1) model is used to witness the impact of volatility on the Spot and the Futures price. The present information has more impact when compared to the previously available information on the Spot and the Futures price in the selected Mid-cap shares. The shares’ positive information is having a positive impact on its prices. The Analysis proves that the previous day information is having a good impact on the present prices. It shows that the Futures market is having good memory of information which is disseminated from the big traders to the small traders and group by group.

7.2 IMPACT OF OPEN INTEREST ON THE SPOT AND THE FUTURES PRICE

Futures market depends on so many factors that influence its prices, impact its price and the price of its underlying. The main determinants such as Trading volume of Futures and the open interest are considered. The objective is to find out the impact of changes in the determinants on the Spot prices and the Futures
Due to the financial leverage, the trading volume and Open interest play a dominant role in the determinants of the Futures market. Trading volume is having a significant impact on the Spot and the Futures price in the 17 shares such as Nifty Index, Aditya Birla Nuvo, Ashok Leyland, Auro Pharmaceuticals, Cesc Ltd., Hindustan Zinc, IDBI, IFCI, JSW Steel, Oriental Bank of Commerce, Petronet LNG, Reliance Capital, Siemens, Syndicate Bank, Tata Chemicals, Union Bank of India and Voltas.

The Open Interest is having a significant impact on the Spot and the Futures price in the 16 shares such as Nifty, Aditya Birla Nuvo Ltd., Biocon, Cesc Ltd., Crompton Greaves, Divis Labs, HDIL, Hindustan Zinc, IDBI, Petronet LNG, Reliance Capital, Siemens Ltd., Sun TV, Syndicate Bank, Tata Chemicals and Voltas.

7.3 LEAD LAG RELATIONSHIP BETWEEN THE SELECTED MID-CAP SHARES

The causality relationship between the Spot and the Futures market reveals the lead lag relationship between them. The advantage of leverage function of the Futures market plays a major role in the lead lag relationship. The Futures market prices leads the Spot market prices in the Long run in 17 shares such as Nifty Index, Aditya Birla Nuvo Ltd., Aurobindo Pharma, Bharat forge, Biocon, Crompton Greaves, IDBI, Oriental bank of commerce, Petronet, Reliance Capital, Siemens, Sun TV, Syndicate bank, Tata Chemicals, Union Bank of India, Unitech and Voltas. The Spot market prices lead the Futures market prices in the long run in 10 shares such as Ashok Leyland, Cesc, Divis Lab, GMR Infrastructure, HDIL, Hindustan zinc, IFCI, JSW Steel, Reliance Communication and Sail.
In the Bull phase of the market, Futures market leads the Spot market in the all the 4 selected Mid-cap shares such as Nifty Index, Oriental Bank of Commerce, Syndicate bank and Union Bank of India.

In the Bear phase of the market, Futures market leads the Spot market in the selected Mid-cap shares such as Nifty Index, Oriental Bank of Commerce and Union Bank of India. Spot market leads the Futures market in Syndicate bank share.

Futures market leads the Spot market in all the selected shares, which shows the confidence of the players in the Futures market on the price discovery process. The Futures market plays a very active role during the Bull phase of the market. In the Bear phase of the market, Futures market plays an important role in the long term lead lag relationship except Syndicate Bank.

7.4 SHORT TERM RELATIONSHIP BETWEEN THE SELECTED MID-CAP SHARES

The selected Mid-cap shares are tested for the short term relationship between the Spot and the Futures market. For the purpose, the Wald coefficient test was used for analyzing the short term relationship. There is Short term lead – lag relationship, the Futures market is leading the Spot market in the short term in the 14 shares such as Nifty Index, Ashok Leyland, Aurobindo Pharma, Bharat forge, Divis Lab, GMR Infra, Hindustan zinc, IFCI, Petronet, Reliance communication, Reliance capital, Siemens, Unitech and Voltas. There was no Short term relationship between the Futures and the spot market in the 13 shares such as
Aditya Birla Nuvo Ltd., Biocon, Cesc Ltd., Crompton greaves, HDIL, IDBI, JSW steel, Oriental Bank of Commerce, Sail, Sun TV, Syndicate bank, Tata Chemicals and Union bank of India. It indicates the flow of information is not from the Futures market to the Spot market, but it was vice versa.

In the Bull and Bear phase, Nifty indexes, Oriental bank of commerce, Syndicate bank were not having short term relationship during the Bull phase but the relationship persists in the Bear phase. In the Union Bank of India Share, the short term relationship does not exist in both the Bull and the Bear phase of the market.

The study result reveals the existence of the Price discovery relationship between the Spot and the Futures market. The Granger Causality test indicates the Causality of prices between the markets, Vector Error correction model indicates the Long run relationship between the markets and the Wald Coefficient test indicates the Short run relationship between the Spot and the Futures markets. The analysis indicates the existence of price discovery relationship between the markets. In the 19 shares, Futures market plays a significant role in the price discovery process and in the 8 shares; Spot market plays a significant role in the price discovery process.

In the Bull phase of the market, all the selected 4 shares indicate the domination of Futures market in the Price discovery relationship. There is significant price discovery relationship between the Spot and Futures market during the Bull phase of the market as the Futures market plays an active role in the price discovery process.
In the Bear phase of the market, all the selected 4 shares indicate the active participation of both the Spot and the Futures market in the Price discovery relationship. There is significant price discovery relationship between the Spot and Futures market during the Bear phase of the market as the Futures market and the Spot market play an active role in the price discovery process.

7.5 PRICE DISCOVERY RELATIONSHIP BETWEEN THE SELECTED MID-CAP SHARES

The Spot and the Futures price were not stationary at levels and stationary at first differencing, indicates the co-integrating relationship between them. The selected Mid-cap shares were tested for Co-integration between the Spot and the Futures price and it was analysed using the Trace statistics and Max Eigen value test. The results of the Co-integration test for the selected Mid-cap shares were co-integrated with one or more vectors in both the markets. In the shares such as Nifty Index, Aditya Birla Nuvo, Ashok Leyland, Bharat forge, Biocon, Crompton Greaves, Divis labs, GMR Infra, Hindustan zinc, Petronet Lng, Reliance communication, Sail, Siemens and Voltas indicates that there is strong co-integrating relationship between the Spot and the Futures market. Further shares such as Aurobindo pharma, Cesc, Hdil, IDBI, IFCI, JSW Steel, Oriental Bank of Commerce, Reliance Capital, Sun TV, Syndicate Bank, Tata Chemicals, Union Bank of India, Unitech indicates the existence of more than one co-integrating vector between the Spot and the Futures price. In the Bull phase, Nifty index, Syndicate bank and Union Bank of India proves the existence of a co-integrating relationship between the Spot and the Futures price. Oriental Bank of Commerce is having more than one co-integrating vector during the Bull and Bear phase. In the Bear phase, Nifty index, Syndicate bank and Union bank of India have more
than one co-integrating vector between the Spot and the Futures price. The stocks in the Bull phase and the Bear phase are having co-integrating relationship between the markets. The existence of co-integrating relationship between the Spot and the Futures market suggest that the price discovery is happening in a single direction.

The Granger Causality test was employed to analyse the causality between the Spot and the Futures market. The Futures market prices were causing the Spot market prices in the 9 shares such as Aditya Birla Nuvo Ltd., Biocon, CESC, Crompton Greaves, Divis Labs, Petronet Lng, Siemens, Sun TV and Tata Chemicals. The Spot market prices were causing the Futures market prices in the 3 shares such as Oriental Bank of Commerce, Sail and Union bank of India. There was Bi-directional relationship between the Spot market and the Futures market in the 13 shares such as Nifty index, Ashok Leyland, Aurobindo pharma, Bharat forge, GMR infrastructure, HDIL, Hindustan zinc, IFCI, Reliance communication, Reliance capital, syndicate bank, Unitech and Voltas. In the Bi-directional relationship, both the Futures market and the Spot market play a dominant role in the price discovery process. There was no price causality happening between the Spot and the Futures markets in the 2 shares such as JSW steel and IDBI.

In the Bull phase of the market, all the 4 selected shares for the study indicates the dominance of the Futures market over the Spot market. In the Bear phase of the market, all the shares indicate the existence of Bi-directional causality between the markets, where both the Spot and the Futures play a dominant role in the price discovery process.