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The evidence presented in this paper clearly establishes the economic efficiency of tractor use on farms. However, to ensure that tractorisation does not lead to displacement of labour, it is necessary to increase the cropping intensity through rapid extension of multiple cropping programme. The use of tractors indisputably raises both the farm production levels and returns to farmers. With the envisaged legislation on ceiling of agricultural land, it may also be desirable to undertake more empirical studies on the subject with a view to suggesting a suitable size of tractor which will be more economical to the Indian farmer.

G. MOTILAL*

PRICING EFFICIENCY OF THE INDIAN APPLE MARKET†

Fruits, vegetables and agricultural processing industries have not got sufficient attention in marketing research programmes in India. Fruit and vegetable production is of vital importance as it provides three to four times more calories of energy and cash incomes than cereals per hectare of land. Thus fruit and vegetable crops hold a great promise for fostering economic growth particularly in the backward hilly areas of the country and improving the diet of the people. The fruit and vegetable industry can be immensely expanded provided the producers are assured of better marketing facilities and reasonable prices for their produce.

Interest in apple production has rapidly increased during recent years in India. Apple has a great commercial value. A gross income of more than Rs. 30,000 per hectare is no longer a surprise from a well maintained apple orchard.¹ However, in the absence of regulated markets for apple and insufficient knowledge of the private market system for this commodity, producers face a number of difficulties in the marketing of this fruit. It is observed that in spite of very close interdependence of inter-market price movements, there exist wide inter-and intra-market price spreads net of transport and other marketing cost in the channels of trade. Along with increased production and marketed supply, the consumers' price of apple has also increased whereas farm prices received by the producers over the years have remained almost static for commercial varieties and have fallen for inferior varieties of apple.²

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† This Research Note is based on the author's Ph.D. thesis, "Economic and Operational Efficiency in Marketing of Apples in India," Indian Agricultural Research Institute (IARI), New Delhi, 1971. The author gratefully acknowledges the financial support given by the Indian Council of Agricultural Research, New Delhi and guidance given by Dr. D. Jha, Economist, IARI, throughout the course of the study. Thanks are due to Miss Lakshmi Menon, Institute of Co-operative Management, Ahmedabad, for secretarial assistance during the preparation of the manuscript.

1. H. Singh and T. R. Chadha: Horticultural Research and Development in Himachal Pradesh, Department of Agriculture, Himachal Pradesh, Simla, 1966.

2. D. S. Thakur and S. S. Johl, "Channels, Functions, Prices, Margins and Costs of Marketing Apple," *Journal of Research*, Vol. VI, No. 2 (Suppl.), June, 1969 and D. S. Thakur: Economic and Operational Efficiency in Marketing of Apples in India, *op cit*.

This research note analyses the structure and behaviour of apple prices and examines pricing efficiency of the marketing system for this commodity to explore the possibility of improving economic efficiency of the existing apple markets.

Design of Study

Primary data on production, marketed supply, marketing functions, channels, costs and apple prices were collected by means of personal interviews with apple growers in Himachal Pradesh which is the main quality apple producing State in India. The study was located in Kotgarh and Kotkhai in district Mahasu and Kulu and Nagar areas in Kulu Valley which are known for their apple production in the country. Four villages, which were relatively more important in terms of large number of orchards, geographical area and marketed surplus of the fruit, were selected from each of these four areas to obtain information on marketing procedures from the apple growers. Ten per cent of the growers with a minimum of one grower was selected at random from the three size-groups³ of growers from each of the sixteen sample villages. The details of the sample of apple growers are given in Table I.

TABLE I—SAMPLE APPLE GROWERS IN DIFFERENT SIZE-GROUPS

| Area | Number | | | |
|-------------|--------|--------|-------|-------|
| | Small | Medium | Large | Total |
| Kotgarh | 9 | 11 | 16 | 36 |
| Kotkhai | 7 | 10 | 6 | 23 |
| Kulu | 7 | 7 | 6 | 20 |
| Nagar | 11 | 5 | 5 | 21 |
| Grand total | 34 | 33 | 33 | 100 |

Primary data on marketing functions, costs and prices were also collected from the traders to whom the sample of growers had sold their produce and from 30 per cent of all other traders with a minimum of ten in Simla, Delhi, Calcutta, Madras and Bombay markets which are the major apple distributing markets in India. The distribution of traders studied in different markets is given in Table II.

TABLE II—DISTRIBUTION OF APPLE TRADERS IN MAJOR APPLE MARKETS

| Type | Market | | | | | Total |
|-------------------|--------|-------|----------|--------|--------|-------|
| | Simla | Delhi | Calcutta | Madras | Bombay | |
| Commission agents | 8 | 10 | 7 | 8 | 7 | 40 |
| Wholesalers | 10 | 14 | 10 | 8 | 10 | 52 |
| Retailers | 8 | 10 | 7 | 7 | 7 | 39 |
| Grand total | 26 | 34 | 24 | 23 | 24 | 131 |

3. Small : Below 500 boxes.
 Medium : 500 to 1,000 boxes.
 Large : Above 1,000 boxes.
 Standard size 16-18 kg. wooden box is considered in this study.

Secondary data on weekly apple prices in the major apple markets were collected from the marketing section of the Department of Agriculture, Himachal Pradesh and from the Regional Offices of the Directorate of Marketing and Inspection, Government of India. These data were not available for Simla market.

The nature of trend and seasonal pattern of apple prices were studied through regression and time-series analysis. Pricing efficiency of the marketing system was examined (i) by obtaining correlation matrix of weekly market prices, and (ii) by analysis of marketing margins and price spread.

Marketing System

The marketing system for apple in India is purely a private system. Assembly of the fruit is done by the growers, contractors, forwarding agents of the traders, co-operatives and to a very small extent by some other agencies. These also do 'grading and packaging'⁴ operations right in the producing areas which are generally meaningful throughout the marketing channel. Storage of apple at the farm site is done in the residential buildings and ordinary godowns which are improvised structures. In the plains, fruit is stored in cold storage mostly by the traders. Transport in the villages upto the shipping centre located on the main road is done mostly through human labour, mules and motor jeeps. Thereafter, apple is shipped to distant markets across the country mainly by motor trucks and to a very limited extent through railways.

The private marketing system for marketing of apple consists purely of apple growers and apple merchants. The bulk of the produce is sold to contractors on the farm or to wholesalers in different markets on commission basis who in turn, sell to secondary wholesalers and retailers either in the same market or in other markets through agent middlemen.⁵ Some sales are made by the producers direct to co-operatives, retail stores and consumers:

Structure and Behaviour of Prices

The marketing season of important 'commercial apple varieties'* commonly grown at present and considered in this study, generally, extends over the period July to October. All the apple fruit arrives in the markets from the producing area up to December every year. Thereafter, the market supply of apple comes mainly from cold stores in the markets. The traders in these markets distribute the fruit to apple merchants in different markets

4. Grading in apple consists of inspecting the individual fruit for size, weight, colour and quality to separate the produce into seven different prevalent grades for packing in suitable 16-18 kg. wooden boxes of three different dimensions especially designed to accommodate these different grades. For details see, D. S. Thakur, "Marketing of Apple in Mahasu District of Himachal Pradesh," *Indian Journal of Agricultural Sciences*, Vol. 41, No. 7, July, 1971.

5. Contracts, commission sales, co-operatives, sale to retailers and sale direct to consumers account for about 14.3, 77.8, 1.5, 0.4 and 6.0 per cent respectively. For details see footnote 2.

* Royal Delicious, Rich-A-Red, Red Delicious and Golden Delicious.

throughout the country from time to time depending upon the prices prevailing in different markets.

Trend in Wholesale Prices

The weekly wholesale price data have been used to analyse the trend in apple prices of commercial varieties in the major apple markets in India. The results of regression analysis of trend are given in Table III. In general the wholesale prices of commercial varieties of apple show a rising trend over the years in almost all the large city markets. The pattern of average prices of Royal Delicious, Rich-A-Red, Red Delicious and Golden Delicious varieties show a rising tendency of Rs. 0.028, Rs. 0.038, Rs. 0.049 and Rs. 0.059 per box per week in Delhi, Madras, Calcutta and Bombay markets respectively over the period 1965-66 through 1969-70.

TABLE III—WEEKLY TREND IN WHOLESALE APPLE PRICES IN MAJOR APPLE MARKETS IN INDIA, 1965-66 THROUGH 1969-70

| Variety | Markets | | | | | | | |
|-------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|
| | Delhi | | Calcutta | | Madras | | Bombay | |
| | Value for constant | Regression coefficient | Value for constant | Regression coefficient | Value for constant | Regression coefficient | Value for constant | Regression coefficient |
| Royal Delicious | 51.25 | 0.045† (0.007) | 54.19 | 0.068† (0.007) | 57.02 | 0.045† (0.007) | 59.89 | 0.078† (0.007) |
| Rich-A-Red .. | 47.41 | 0.028† (0.006) | 49.02 | 0.059† (0.006) | 51.13 | 0.048† (0.005) | 54.03 | 0.072† (0.006) |
| Red Delicious .. | 45.09 | 0.029† (0.006) | 46.98 | 0.062† (0.006) | 48.99 | 0.054† (0.005) | 52.96 | 0.070† (0.006) |
| Golden Delicious | 31.78 | 0.012† (0.003) | 35.30 | 0.007† (0.003) | 34.25 | 0.0001 (0.003) | 39.64 | 0.019† (0.004) |
| Average (all varieties) | 43.81 | 0.028† (0.006) | 46.37 | 0.049† (0.005) | 47.95 | 0.038† (0.004) | 51.56 | 0.059† (0.006) |

† Significant at 1 per cent level.

Figures in parentheses are the standard errors of the respective coefficients.

However, there is a wide variation among the prices of different varieties and also in the trend in price of the same variety in different markets. The price of Royal Delicious, Rich-A-Red and Red Delicious varieties show a significant rising trend in all the markets. The trend in the Golden Delicious variety shows a significant rise in Delhi and Bombay markets only and shows a slight increase in the Calcutta market.

Seasonal Movements in Prices

Apple prices are characterized by wide fluctuations over time and space according to the position of arrivals and stocks in the market and the variation

in weather and demand for outstation dispatches. The results of analysis of data on the seasonal variation in wholesale prices of apple in different markets calculated through ratio to trend method are given in Appendix 1. The seasonal behaviour of prices is almost similar in all the markets.

Prices are highest in the months of May and June. Prices begin to fall with the marketing of fresh crop in July and show a sharp decline during the months of August and September. Thereafter, prices show a constant rise.

The price analysis also indicates that the prices are below the annual average in the months of July to November in Delhi, August to December in Madras and Bombay and August to February in the Calcutta market when the seasonal index is less than 100. For other months in the year, the price index is higher than 100. Also, it can be observed that price fluctuations are highest in the case of the Delhi market which is the biggest wholesale arrivals market and the principal distributing market for apple in India.

Pricing Efficiency of the Marketing System

Price movements in one market are closely followed in other markets in a competitive market system. Secondly, price differences in different markets would be fairly near transportation and other handling costs plus a minimum profit margin accruing to the middlemen in the system. These two criteria are used to determine the pricing efficiency of the marketing system.

Price Formulation and Market Integration

The apple producers make up the supply side and the traders in the market make up the buyers' side to establish wholesale apple prices. On the producers' side, the market has all the characteristics of pure competition.⁶ However, competition amongst the apple buyers does not fit the model of pure competition. In any one market, a few big traders buy most of the fruit regularly and try to establish prices for their mutual benefit by avoiding price competition.

Table IV gives correlations between weekly wholesale prices of apple in the major Indian apple markets. These indicate the degree of market integration and competition.

TABLE IV—CORRELATION MATRIX OF WEEKLY WHOLESALE PRICES OF APPLE IN DIFFERENT MARKETS, 1965-66 THROUGH 1969-70

| Markets | | Delhi | Calcutta | Madras | Bombay |
|----------|---------|-------|----------|--------|--------|
| Delhi | | 1.00 | 0.80 | 0.74 | 0.72 |
| Calcutta | | | 1.00 | 0.86 | 0.85 |
| Madras | | | | 1.00 | 0.90 |
| Bombay | | | | | 1.00 |

6. The prices of important varieties and grades of apple are closely related due to their high degree of substitution. Apple growers are a large number, each producer is a price taker because he produces too little of the total supply to influence the market price. They can freely substitute one market and one trader for another in the drive for a higher profit.

It will be observed from Table IV that the correlation coefficients between the markets suggest that price movements in one of the markets are influenced and closely followed by the price movements in other markets. In general, prices are most closely associated in those markets located nearest to each other.

Marketing Margins and Price Spread

In this section, pricing efficiency is examined by the analysis of marketing margins and price spread to find out whether the marketing margins and price spread are fairly near transportation and handling costs and whether the profits of the traders are reasonable. Marketing margins and price spread measured and analysed in terms of (i) rupees per box, and (ii) as per cent of consumers price are given in Table V. The cost of marketing apple is high enough and the apple grower gets generally less than 50 per cent of the consumers' price. The balance of more than 50 to 57 per cent or more goes for marketing functions and services. It is more profitable to sell apple in the distant markets in the country than in markets situated near the production area. However, the variation in the consumers' price in different markets is much wider than the variation in the share of producers from different markets, showing thereby that a large portion of consumers' price is lost enroute and not reflected back in the producers' price. The traders are found to make good bit of profits in the trade. In order to examine the extent of actual profits of the traders and to determine whether price differentials between markets are near transportation and handling charges, the functional analysis of marketing margin is done in Table VI.

The functional analysis of marketing margins shows that commission and profits of traders form more than 40 per cent of the total marketing margin and account for the highest, *i.e.*, more than 20 per cent addition to the consumers' price as also for the wide spread between the consumer and the producer prices. The portion of the overall margin for transportation and handling charges is much less than the share of the traders.

The traders can and do make profits in another way. Apple is sold primarily through auction by the commission agents on behalf of the producers to the traders in the market. The producers remain ignorant of the procedure of price fixation which goes on between the commission agent and the buyer trader under a cover system in the unregulated markets. This provides an additional opportunity for traders to benefit from price manipulation. Also, the traders withhold payments to be made to the producers for sometime and earn interest on this account.

Conclusions

This study shows that the marketing system for apple in India is fairly integrated so far as inter-market price movements are concerned. But it is

TABLE V—MARKETING MARGINS AND PRICE SPREAD PER BOX OF APPLE : 1969-70

| Trade level | Markets | | | | | | | | | | | | | | |
|---|---------------|----------------|-------------|---------------|----------------|-------------|---------------|----------------|-------------|---------------|----------------|-------------|---------------|----------------|-------------|
| | Simla | | | Delhi | | | Calcutta | | | Madras | | | Bombay | | |
| | Cost (Rs.) | Price (Rs.) | Per cent | Cost (Rs.) | Price (Rs.) | Per cent | Cost (Rs.) | Price (Rs.) | Per cent | Cost (Rs.) | Price (Rs.) | Per cent | Cost (Rs.) | Price (Rs.) | Per cent |
| 1. Producer level | | | | | | | | | | | | | | | |
| Net price received by the apple growers | | 25.40 | 49.80 | | 29.72 | 49.75 | | 33.50 | 45.92 | | 32.25 | 43.00 | | 36.48 | 44.15 |
| Preparation of produce for the market | 6.90 | | | 6.90 | | | 6.90 | | | 6.90 | | | 6.90 | | |
| Transport | 1.80 | | | 3.40 | | | 6.00 | | | 5.90 | | | 5.50 | | |
| Storage, loading, unloading and octroi | 0.36 | | | 1.00 | | | 2.00 | | | 2.00 | | | 2.00 | | |
| Miscellaneous deduction in the market | 0.10 | | | 0.12 | | | 0.16 | | | 0.20 | | | 0.20 | | |
| 2. Commission agent level .. | 2.60 | | | 3.10 | | | 3.64 | | | 3.48 | | | 3.92 | | |
| Agents' profit : Commission paid by the grower (7 per cent) | 11.76 | 37.16 | 72.86 | 14.52 | 44.24 | 74.05 | 18.70 | 52.20 | 71.56 | 19.48 | 51.73 | 68.97 | 18.52 | 55.00 | 66.57 |
| 3. Wholesaler level | | | | | | | | | | | | | | | |
| Transport and handling in the market | 0.50 | | | 1.00 | | | 1.00 | | | 1.00 | | | 1.50 | | |
| Storage | 0.25 | | | 0.50 | | | 0.50 | | | 0.50 | | | 1.00 | | |
| Spoilage : 4 per cent | 1.75 | | | 2.08 | | | 2.46 | | | 2.50 | | | 2.80 | | |
| Wholesalers' profit | 4.25 | | | 4.18 | | | 5.34 | | | 6.64 | | | 9.82 | | |
| | 6.75 | 43.91 | 86.09 | 7.76 | 52.00 | 87.04 | 9.30 | 61.50 | 84.30 | 10.64 | 62.37 | 83.16 | 15.12 | 70.12 | 84.87 |
| 4. Retailer level | | | | | | | | | | | | | | | |
| Transport and handling in the market | 0.25 | | | 0.50 | | | 0.50 | | | 0.50 | | | 1.00 | | |
| Spoilage : 4 per cent | 2.04 | | | 2.38 | | | 2.92 | | | 3.00 | | | 3.30 | | |
| Retailers' Profit | 4.80 | | | 4.86 | | | 8.03 | | | 9.13 | | | 8.20 | | |
| | 7.09 | 51.00 | 100.00 | 7.74 | 59.74 | 100.00 | 11.45 | 72.95 | 100.00 | 12.63 | 75.00 | 100.00 | 12.50 | 82.62 | 100.00 |
| 5. Price paid by the consumer | | 51.00 | 100.00 | | 59.74 | 100.00 | | 72.95 | 100.00 | | 75.00 | 100.00 | | 82.62 | 100.00 |
| 6. Marketing margin | | 25.60 | 50.20 | | 30.02 | 50.25 | | 39.45 | 54.08 | | 42.75 | 75.00 | | 46.14 | 55.85 |

NOTES

TABLE VI—FUNCTIONAL ANALYSIS OF MARKETING MARGIN PER BOX OF APPLE : 1969-70

| Service or item | Markets | | | | | | | | | | | | | | |
|---------------------------------|------------|------------------------------|----------------------------|------------|------------------------------|----------------------------|------------|------------------------------|----------------------------|------------|------------------------------|----------------------------|------------|------------------------------|----------------------------|
| | Simla | | | Delhi | | | Calcutta | | | Madras | | | Bombay | | |
| | Cost (Rs.) | Per cent of marketing margin | Per cent of consumer price | Cost (Rs.) | Per cent of marketing margin | Per cent of consumer price | Cost (Rs.) | Per cent of marketing margin | Per cent of consumer price | Cost (Rs.) | Per cent of marketing margin | Per cent of consumer price | Cost (Rs.) | Per cent of marketing margin | Per cent of consumer price |
| Preparation of produce .. | 6.90 | 26.56 | 13.52 | 6.90 | 22.98 | 11.55 | 6.90 | 17.49 | 9.47 | 6.90 | 16.23 | 9.20 | 6.90 | 14.95 | 8.35 |
| Handling and other deductions : | | | | | | | | | | | | | | | |
| Loading, unloading and de- | | | | | | | | | | | | | | | |
| ductions in the market .. | 0.36 | 1.80 | 0.72 | 0.97 | 3.24 | 1.62 | 2.01 | 5.10 | 2.74 | 1.95 | 3.47 | 2.60 | 2.05 | 4.45 | 2.48 |
| Storage and spoilage .. | 4.14 | 16.17 | 8.12 | 5.11 | 17.02 | 8.56 | 6.03 | 15.29 | 8.27 | 6.15 | 14.39 | 8.20 | 7.27 | 15.71 | 8.78 |
| Transport | 2.55 | 9.96 | 5.00 | 4.90 | 16.32 | 8.20 | 7.50 | 19.01 | 10.28 | 8.50 | 19.88 | 11.33 | 8.00 | 17.34 | 9.68 |
| Traders' commission and profit | 11.65 | 45.51 | 22.84 | 12.14 | 40.44 | 20.32 | 17.01 | 43.11 | 23.32 | 19.25 | 45.03 | 25.67 | 21.94 | 47.55 | 26.56 |
| Total .. | 25.66 | 100.00 | 50.20 | 30.02 | 100.00 | 56.25 | 39.45 | 100.00 | 54.08 | 42.75 | 100.00 | 57.00 | 46.14 | 100.00 | 55.85 |

observed that the traders' profit margin accounts for quite a large proportion of the price paid by the consumers. This is a symptom of inefficiency.

The government has the responsibility to price satisfactorily to ensure more and better production, consumption and economic growth. The apple growers will have to be assured of some remunerative minimum prices at least for important commercial apple varieties as in the case of foodgrains. This will help them to plan future plantations and production on scientific basis.

The monopoly of traders in procurement, building stocks and profiteering should be checked to establish fair prices for the producers and the consumers. This could be done by regulation of markets and encouraging marketing of apple through co-operatives and State trading corporations. Besides, a network of truck transport to link the production areas directly with all the main markets throughout the country should be provided in the marketing season. Storage facilities in the production areas and the major apple markets and market information also need to be provided on a much wider scale. The growers need be given credit against the produce stored, for their immediate financial requirements. These measures are necessary to avoid price fluctuations over time and space and to establish fair prices both for the producers and the consumers.

D. S. THAKUR†

APPENDIX 1

INDEXES OF SEASONAL VARIATION IN APPLE PRICES BY FOUR WEEK PERIODS IN MAJOR APPLE MARKETS : 1965-66 THROUGH 1969-70

| Month | Market | | | |
|-----------|--------|----------|--------|--------|
| | Delhi | Calcutta | Madras | Bombay |
| July | 108.71 | 115.18 | 112.71 | 110.78 |
| | 98.05 | 110.06 | 108.16 | 107.87 |
| | 89.12 | 110.17 | 105.57 | 104.18 |
| | 87.57 | 103.47 | 100.75 | 101.06 |
| August | 84.66 | 96.41 | 95.70 | 99.21 |
| | 83.18 | 91.26 | 93.14 | 96.88 |
| | 82.54 | 89.67 | 90.94 | 93.50 |
| | 82.16 | 88.37 | 89.34 | 91.03 |
| September | 81.58 | 88.00 | 89.56 | 90.33 |
| | 81.43 | 85.00 | 85.88 | 86.45 |
| | 83.03 | 86.79 | 86.60 | 84.01 |
| | 87.21 | 88.47 | 87.93 | 84.24 |

(Contd.)

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APPENDIX I (Concl.)

| Month | Market | | | |
|----------|--------|----------|--------|--------|
| | Delhi | Calcutta | Madras | Bombay |
| October | 91.46 | 89.07 | 88.34 | 84.57 |
| | 93.59 | 90.71 | 87.46 | 86.43 |
| | 95.17 | 91.11 | 89.60 | 88.71 |
| | 97.39 | 96.61 | 90.32 | 90.35 |
| November | 97.57 | 95.90 | 90.87 | 89.68 |
| | 98.70 | 96.78 | 90.81 | 91.27 |
| | 98.20 | 96.91 | 96.52 | 94.57 |
| | 98.71 | 96.81 | 96.30 | 95.89 |
| December | 99.57 | 96.18 | 97.99 | 95.53 |
| | 101.41 | 95.51 | 97.99 | 96.68 |
| | 102.33 | 95.59 | 98.72 | 97.88 |
| | 102.26 | 96.46 | 100.57 | 99.20 |
| January | 102.05 | 97.49 | 101.99 | 100.48 |
| | 101.89 | 99.43 | 102.37 | 100.95 |
| | 100.64 | 99.23 | 102.60 | 101.52 |
| | 100.35 | 99.50 | 103.76 | 103.08 |
| February | 100.16 | 99.34 | 102.19 | 101.85 |
| | 101.12 | 99.37 | 101.37 | 101.30 |
| | 103.27 | 99.37 | 101.66 | 101.76 |
| | 102.21 | 99.08 | 102.72 | 101.97 |
| March | 102.12 | 100.22 | 103.09 | 102.76 |
| | 103.21 | 100.09 | 103.52 | 102.20 |
| | 103.19 | 101.05 | 104.71 | 105.22 |
| | 105.03 | 101.63 | 104.33 | 106.13 |
| April | 106.03 | 103.39 | 105.03 | 106.83 |
| | 107.56 | 104.14 | 105.09 | 107.12 |
| | 109.15 | 105.93 | 105.84 | 108.00 |
| | 109.16 | 107.80 | 106.58 | 108.05 |
| May | 110.19 | 107.90 | 107.40 | 109.24 |
| | 111.04 | 108.95 | 106.81 | 109.40 |
| | 112.02 | 109.47 | 106.90 | 109.16 |
| | 112.84 | 110.04 | 106.73 | 106.68 |
| June | 114.57 | 111.16 | 107.41 | 108.02 |
| | 115.86 | 114.12 | 110.97 | 109.87 |
| | 119.12 | 115.52 | 112.49 | 112.96 |
| | 120.61 | 117.54 | 113.96 | 114.87 |