

UNCERTAIN PRICES AND SEGMENTATION OF MARKET AS A SURVIVAL STRATEGY: THE CASE OF LATEX PROCESSING INDUSTRY IN INDIA

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Received: 15 March 2013

Accepted: 21 October 2013

Joseph, J. and George, K.T. (2013). Uncertain prices and segmentation of market as a survival strategy: The case of latex processing industry in India. *Rubber Science*, 26(2): 297-303.

Historically, price movements of all forms of natural rubber in India have been either directly or indirectly linked to the trends in the price of the dominant RSS 4 grade. Under the protected price policy regime, the prevailing interlinkages among the prices have ensured comparative stability and margins at various stages. The price movements of all forms of processed/unprocessed rubber including preserved field latex (PFL) and centrifuged latex (CL) have also been based on the price movements of RSS 4. However, instability in the RSS 4 prices consequent to the trade policy reforms since the early 1990s led to important structural adjustments in the domestic market. As a survival strategy, the latex processing industry has gradually delinked PFL price from RSS 4 and linked to CL price in order to protect the margins since the mid 2000s. The preliminary observations of the study highlighted the crucial role of the growing narrowness of the domestic market due to the significant growth in the import of latex based value added products rather than the import of CL for the segmentation of the latex market. Hence, a two pronged strategy of rehabilitating the latex based manufacturing segment so as to ensure commensurate rate of growth in latex consumption and rejuvenating the latex processing industry to reinforce the focus on exports is suggested.

Keywords: Centrifuged latex, Latex processing industry, Preserved field latex

INTRODUCTION

Historically, the three important factors which had a strong bearing on natural rubber (NR) price movements in India had been: (i) growth of a large and diversified captive domestic market since the late 1930s, (ii) protected price policy regime since 1942 to 1991-92 and (iii) dominance of dry rubber products in the rubber products manufacturing sector (George and Joseph, 1992; George, 1999;

Mohanakumar and George, 1999). The persistent dominance of the dry rubber products manufacturing sector and the growth of a captive domestic market during the past eight decades had important implications for the relative status of various forms of processed NR and the price movements [Among the various forms of processed NR in India, the combined share of ribbed smoked sheets (RSS) was more than 71 per cent during 2010-11 (Rubber Board, 2011)]. Conversely, the relative share

of processed forms of concentrated latex has been revolving around 10 per cent compared to more than 85 per cent in the export oriented manufacturing sector of Malaysia (Rubber Board, 2011; ANRPC, 2011). In effect, the pre-eminence of dry forms of rubber, especially RSS 4, has imparted a price signaling status to the grade. More precisely, price movements of all other forms of processed/unprocessed forms of NR in the country have been either directly or indirectly linked to the price movements of RSS 4. The inter-linkages among prices of various forms of NR linked to price movements of RSS 4 ensured comparative stability and margins at various stages. Earlier studies on Indian NR price movements were also focused on RSS 4 price as the trigger (Lekshmi *et al.*, 1996; George, 1999; Mohanakumar and Chandy, 2005; Chandy *et al.*, 2010). Moreover, the inter-linkages among the prices have culminated into the growth of an integrated domestic market protected from external competition. In short, informal arrangements related to price fixing/determining formula for all forms of processed/unprocessed rubber including preserved field latex (PFL) and centrifuged latex (CL) have been based on the price movements of the dominant RSS 4 till recently. However, uncertainty in the price movements of RSS 4 consequent to trade policy reforms initiated since the early 1990s raised serious questions on the historical link between RSS 4 prices and prices of other forms of NR (The instability indices of RSS4, PFL and CL prices were 38.01, 39.99 and 36.68, respectively during the period between 1993-1994 and 2010-2011). The unprecedented instabilities in RSS 4 prices during the post-reforms phase precipitated a host of survival strategies among the stakeholders.

The shift in price fixing formula of PFL since the mid 2000s is an illustrious case of survival strategy pursued by the CL processing industry. Accordingly, there has been a steady shift from linking PFL prices to RSS 4 price and it is increasingly linked to the CL prices (Initially the informal price fixing formula was the price of CL minus Rs. 25 and currently it is in the range of Rs. 30-35). The resultant de-linking of PFL prices from RSS 4 and linking the same with the CL prices to ensure processors' margins have important policy implications from a long term policy perspective. The specific objectives of the study were:

1. to understand the trends in PFL, RSS 4 and CL price movements and the inter-linkages.
2. to analyse the factors behind the shift in price fixing formula.
3. to assess the implications of the shift in price fixing formula.

DATABASE AND METHODOLOGY

The analysis is based on the relevant data on annual average prices of PFL, RSS 4 and CL (60% DRC) during the eighteen-year period from 1993-94 to 2010-11. The choice of the period was influenced by the availability of reliable data on PFL prices as well as structural adjustments in the industry arising from the market integration process. The data on PFL prices during the study period were collected from primary sources. Annual average prices of RSS 4 and CL as well as data on external trade were gathered from the official databases of the Rubber Board and the Ministry of Commerce and Industry, Government of India. The data was analysed statistically.

RESULTS AND DISCUSSION

Trends in prices

Table 1 shows price ratios of PFL and CL to RSS 4 during the eighteen-year period under study which illustrates the comparative stability in the RSS 4-PFL price ratios in relation to RSS 4-CL. It is indicative of two important points: (i) the ratio between RSS prices and PFL prices has been stable over time despite the shift in the price fixing formula since the mid 2000s and (ii) the declining ratio of CL prices to RSS 4 price and the resultant compulsions on the CL processing industry to stabilize the margins enjoyed over time. However, the trends in

the differences among the absolute values of the prices were not captured in the analysis of the ratios. Hence, an attempt was made to analyse the differences in the absolute values of the prices during the period under review.

Figure 1 shows the trends in the absolute values of the price differences between RSS 4-PFL, CL-PFL and CL-RSS 4 during the period under study. The four important observations are (i) the price difference between RSS 4 and PFL had been increasing since 2006-07; (ii) the price difference between CL and PFL had also been increasing since 2006-07; (iii) whereas the price difference between CL and RSS 4 had narrowed down since 2009-10; and (iv) hence, growing compulsions on the CL processing industry to evolve mechanisms to shift the burden of uncertain prices so as to maintain the margins at remunerative levels.

Table 2 shows the comparative growth rates of the absolute price difference between RSS4 -PFL, CL-PFL and CL-RSS 4 during three time periods, *viz.*, 1993-94 to 2005-06 (prior to shift in price fixing formula), 2006-07 to 2010-11 (after the shift in price fixing formula) and during the eighteen-year period. In all the three phases, the price difference between RSS 4-PFL recorded the highest annual average growth rates and after the shift in price fixing formula there had been a substantial increase in the growth rate (55.12%). Similarly, growth rates of the price difference between CL-PFL had also exhibited increasing trends. Conversely, growth rate in the price difference between CL-RSS4 registered a negative growth rate (-5.39%) after the shift in price fixing formula indicating the fall in the margins of CL over RSS 4 prices. In effect, the declining margins of CL over RSS 4 have reflected on the

Table 1. Price ratios of PFL and CL to RSS 4

Year	PFL	CL
1993-94	0.94	1.72
1994-95	0.94	1.39
1995-96	0.97	1.51
1996-97	0.95	1.28
1997-98	0.89	1.50
1998-99	0.91	1.48
1999-00	0.90	1.32
2000-01	0.91	1.50
2001-02	0.87	1.35
2002-03	0.93	1.35
2003-04	0.95	1.29
2004-05	0.96	1.27
2005-06	0.96	1.18
2006-07	0.98	1.22
2007-08	0.97	1.15
2008-09	0.94	1.15
2009-10	0.95	1.14
2010-11	0.95	1.08

Sources: M/s. Periyar Latex Ltd. and Rubber Board (2003, 2011)

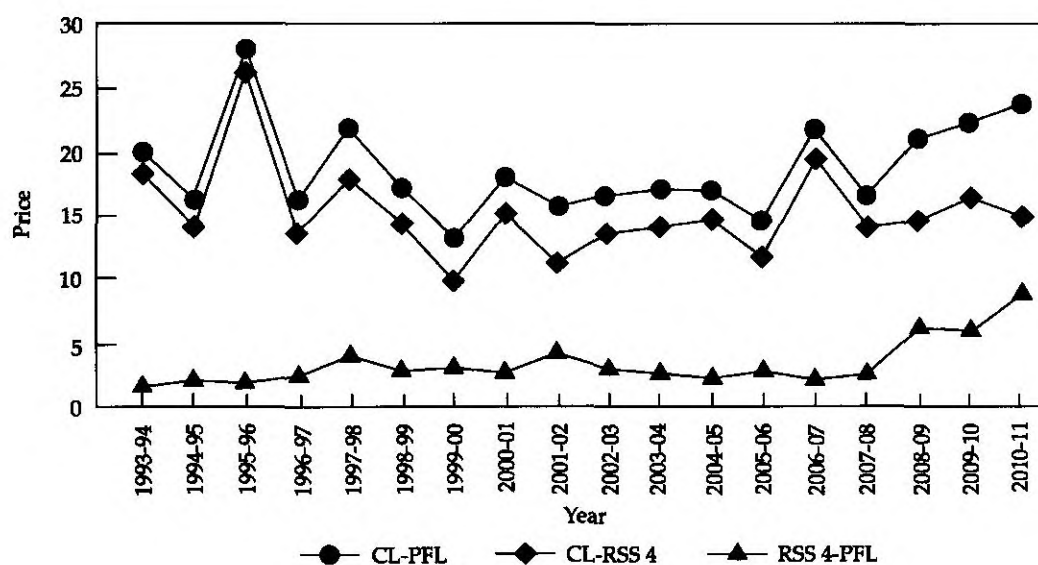


Fig. 1. Trends in price differences

Table 2. Annual average growth rates (%) of the price differences

Year	RSS 4-PFL	CL-PFL	CL-RSS 4
1993-94 to 2005-06	10.67	1.7	2.69
2006-07 to 2010-11	55.12	3.94	-5.39
Total	18.86	5.07	4.65

Sources: M/s. Periyar Latex Ltd. and Rubber Board (2003, 2011)

growing price differences between CL-PFL and RSS 4-PFL. In the emerging context, the CL processing industry has limited options of stabilizing the margins either by shifting the burden of uncertain prices to the raw material segment (PFL suppliers) or to capitalize the export opportunities. While the first option was implemented through consensual approaches among the processing units, the attempts to explore export opportunities require further explanation.

External trade factor

Although India had been a net importer of all forms of NR during the past six decades, concerted efforts have been made to export selected forms of NR as a strategy to stabilize the domestic prices since the early 2000s. Accordingly, NR latex, which had been accorded highest levels of protection from external competition (All forms of NR latex are unbound with 70 per cent MFN tariff compared to the bound status of all other forms of NR with lower rates of tariffs), was also earmarked for export promotion. Table 3 shows the trends in the external trade of NR latex during the past one decade.

The trends in the external trade of NR latex deserve closer scrutiny as the CL processing industry in the country was reported to be working with less than 50 per cent capacity utilisation (The estimated installed capacity of the 86 CL processing

Table 3. External trade in NR latex concentrates (tonnes)

Year	Export	Import	Export as a percentage of imports
2000-01	65	3075	2.11
2001-02	82	2515	3.26
2002-03	6927	1243	557.28
2003-04	17125	1757	974.67
2004-05	10496	979	1072.11
2005-06	24153	783	3084.67
2006-07	16056	1401	1146.04
2007-08	22639	855	2647.84
2008-09	20836	1412	1475.64
2009-10	13106	4439	295.25
2010-11	10717	3500	306.20

Source: Rubber Board (2011)

units is around 0.2 million tones/annum). The co-existence of the lower levels of capacity utilization (around 50%) and higher export intensity of production (14.9%) were indicative of the limited size of the domestic market to absorb the current levels of CL production. It could be due to a higher growth rate in CL production than consumption arising from a stagnant or shrinking domestic market.

Table 4 shows the annual average growth rates in production and consumption of NR latex and other forms

Table 4. Annual average growth rates (%) of production and consumption of NR latex and other forms of NR in India (2000-01 to 2010-11)

Type	Production	Consumption
NR latex	1.85	0.99
Others	3.47	4.53
Total	3.26	4.17

Source: Rubber Board (2011)

of NR in India during 2000-01 to 2010-11. It is illustrative of the unique case of NR latex with lower annual average growth rate in consumption than production. More over, production of CL exceeded consumption since 2003-04 except during the year 2010-11. Therefore, it is necessary to focus on the trends in the imports of value added latex based products having the potential of displacing the domestic latex products segment. Table 5 shows the trends in the external trade of two major latex based product groups.

Table 5 reveals the higher growth rates in the imports of value added rubber products displacing the domestic segment and curtailing the latex consumption potential. In an operational sense, the higher growth in the imports of value added products not only displace the small and medium sized latex based rubber products manufacturing units in the country but also integrate the domestic product and raw material markets with the external markets. The observed trend in the export of NR latex is primarily due to the excess production emanating from the displacement of the latex based small and medium sized units in the country. This process of integration through the export of NR latex entails the adoption of marketing practices followed in the major NR latex exporting countries. An important feature of the pricing system in the major NR exporting countries has been the backward pricing formula wherein the margins of intermediaries including the processors and exporters are fixed irrespective of the movements in the FOB prices. Hence, the burden of the price fluctuations is borne by the growers with important policy implications. The recent shift in the price fixing formula linked to CL price is in tandem with the strategies

Table 5. Annual average growth rate (%) of external trade in major latex based product groups (2000-01 to 2010-11)

HS Code	Product description	Export	Import
4014	Hygienic or pharmaceutical articles (including teats), of vulcanised rubber other than hard rubber, with or without fittings of hard rubber	10.31	32.39
4015	Articles of apparel and clothing accessories (including gloves, mittens and mitts) for all purposes, of vulcanised rubber other than hard rubber	29.82	44.77
Total		14.27	36.84

Source: Export Import Data Bank, Ministry of Commerce and Industry, Government of India

pursued in the major NR exporting countries. Moreover, India's CL industry is poised to graduate as the key export segment within the NR sector as its export intensity of production is already more than 14 per cent compared to other forms of NR.

CONCLUSION

The segmentation of the latex market facilitated by de-linking the price fixing formula of PFL from RSS 4 and linking the same to CL price is a major landmark in the history of primary marketing of NR in India. Technically, the observed trend is an inevitable outcome of the structural adjustment process in the domestic market during the transitional phase. Though the proximate reasons for the shift are rooted in the survival strategies to stabilise the margins of the processing industry, the basic issues are underlined by the steady growth in the imports of value added latex based products and the resultant displacement of the small and medium sized manufacturing units leading to a shrinking domestic market for processed forms of latex. The lower growth rate of domestic latex consumption *vis-à-vis* production and the compulsions to export

CL even with less than 50 per cent capacity utilization are indicative of the changing dimensions of the latex processing industry in India. While the committed trade policy reforms under the multilateral and regional trade agreements are non-negotiable, it is imperative to address the serious policy questions on the sustenance of latex based rubber products manufacturing segment, latex processing industry and farm gate prices of PFL. In the ongoing process of changes and consolidation, it is an essential pre-requisite to understand the current status of the latex based rubber products manufacturing, CL processing and the PFL producing segments in order to evolve comprehensive policy initiatives from a long-term perspective. In this backdrop, a multi-disciplinary study focusing on the varied aspects of the observed trends is necessary to understand the issues and to provide the relevant inputs.

ACKNOWLEDGEMENT

The authors are grateful to Mr. K.T. Chacko, IAS (Rtd.) for the critical suggestions on the study. The valuable inputs provided by Mr. P. Achuthankutty, Mr. Satish Abraham, and Mr. T. Siju, are acknowledged.

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