

A Time Series Analysis on India's Tea Export during Post Globalization Era

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Abstract: The paper exactly analyzes the patterns in the execution of tea export and comparing capable factors in India. Routinely tea in India has been an essential item for generation just as fare. Nonetheless, accessible information confirms that the commitment of tea fare to add up to fare in India is ceaselessly declining. In this unique situation, the present paper is an endeavour to assess the execution of India's tea trade and explore the capable variables with the exchange of the possibilities of India's fares of tea. We gather the month to month information from different issues of tea measurements distributed by Indian Tea Board over the period 1998 to 2015. ADF and PP unit root tests are utilized to test the stochastic properties of the arrangement pursued by uses of cointegration test and VAR strategy to locate their dynamic connections. Results portray that factors are non-stationary at level however stationary at first contrast. Our discoveries infer that Indian tea export pursues an intermittent pattern of declining with a critical impact from its generation.

Index Terms - Tea, Export, Production, India, Unit Root, Cointegration, VAR

I. INTRODUCTION

Various types of manor items in India like jute, cotton, tobacco, tea, flavours and so forth have ruled the volume of fare since freedom. The presumptions of fare negativity with the technique of import-substituting industrialisation have been legitimized by the essential items drove fare. The generally known Prebisch-Singer theory is keeping up that the worldwide requests for essential items have been inelastic concerning cost and salary. So the yield gains in a considerable lot of the product sending out nations are relied upon to be passed on to bringing in nations through the adjustment regarding exchange support of the last mentioned. Essentially, the exporters of the essential products are value takers in worldwide markets and because of that they can't practice the market control. It is seen that the fare projections for essential items are mostly controlled by the long-run example of worldwide interest pretty much ruling out arrangements of supply side to make the progress from fares. The suspicion of value taking firms if there should be an occurrence of flawless challenge is sensible when the exporters are holding an irrelevant offer in world market. Then again the overall situation of worldwide market is portraying an image taking after defective challenge in fare markets. This is of our enthusiasm to break down if the exporters of estate items practice showcase control. On the off chance that the confirmations are recommending market control or not, at that point the ramifications of basic exchange approach dependent on the presumption that the exporters of the essential wares are value takers must be returned to. However, it may not be the situation that they are not having any command over their fares.

As indicated by Global Industry Analysts (2011), the world market for hot refreshments (tea and espresso) has been evaluated to achieve 10.57 million tons in volume and US\$ 69.77 billion in incentive continuously 2015. Because of explicit prerequisites of atmosphere and soil condition, development of tea is confined to just certain particular areas of the world. The real tea delivering nations are situated in Asia, which are China, India, Sri Lanka and so forth. Tea developing nations in Africa are found for the most part in the tropical areas, similar to Kenya, Rwanda, Malawi, Tanzania, Uganda and so forth. Other than these, couples of amounts of tea are likewise being created by South American, Near Eastern and the CIS nations. However, the significant makers of tea on the planet are China, India, Sri Lanka, Kenya and Indonesia, which represent 77 percent and 80 percent of world creation and fares individually.

Generally, tea in India has been recorded as an important item just as having its wealth in the volume of fare for India. India has turned into the biggest maker of dark tea and furthermore the biggest shopper of tea on the planet. Indian tea industry involves a critical and uncommon spot in the whole economy. India was the second biggest maker just as shopper of tea on the planet, representing right around 25 to 27 percent of worldwide tea generation. India has additionally represented around 10 to 12 percent of world tea export. Be that as it may, the offer of India's tea fare to the world has declined amid the 1990s, albeit couple of assortments of tea is selective to India, having an extraordinary interest over the world. Amid the last two and half decades, India's reality positioning as a tea exporter has descended from first to fourth because of firm challenge from worldwide players, for example, Sri Lanka, Kenya and China. Indian tea industry is in a dangerous position with the overabundance creation, falling costs and diminishing yield for the makers. The situation of increasing expense of creation with low yield, diminishing costs and extreme challenge from rest of the world are the serious difficulties for the proprietors of the tea manors in India.

From the initiative position in worldwide markets up to 1991, India lost its piece of the overall industry of tea to closer contenders like Sri Lanka, Kenya and China. A noteworthy misfortune happened in the past USSR, where India was having a monopolistic position amid the period from the 1960s to 1990. There happened a few recuperations in fare volume of tea in the late 1990s, yet more often than not, tea sends out from India pursue a declining pattern throughout the last three and half decades, primarily because of universal challenge with supply limitations and expanding request in the residential market.

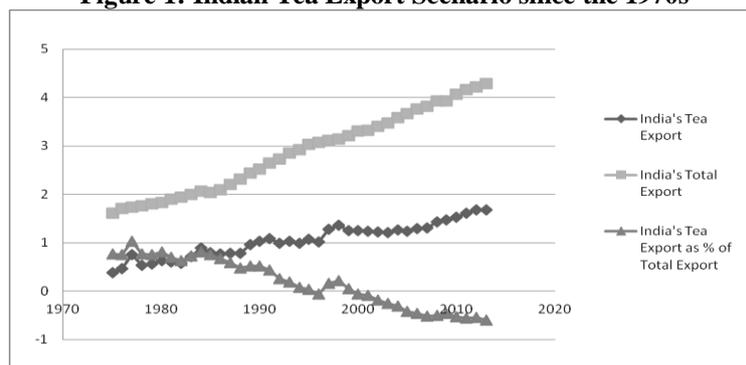
Fares are fundamental for outside trade to any country. Our tea industry customarily had been a noteworthy benefactor in such manner. In the late the 1980s, tea sends out had represented around 30 percent of the complete household creation in India. DGCIS (2014) information proves that the commitment of tea fare to add up to fare in India has diminished to 0.25 percent in 2013 from 5.87 percent in 1975. So consequently an inquiry emerges with respect to the explanations for the declining pattern in offer of India's tea trades in extent to the all out fare volume and furthermore world tea sends out. In this unique circumstance, the present paper is an endeavour to assess the execution of India's tea export and explore the capable variables with the discourse of the possibilities of India's fares of tea.

Whatever remains of the paper is organized as pursues. Next segment furnishes India's tea trade situation with the current confirmations in such manner pursued by the documentation methodological issues including theories and information base. Last area finishes up the paper subsequent to depicting experimental discoveries.

II. SCENARIO OF INDIA'S TEA EXPORT AND EXISTING EVIDENCE

The volume of total tea sends out from India has stayed consistent basically since 1950s, while the qualities are appearing real increment amid the end 1970s yet consistently recorded in the consequent years. India had sent out 205 thousand tons of tea in 1961 representing 35 percent of complete world fares. Be that as it may, India has neglected to misuse the conceivable outcomes of accessible exchange. Amid the time of 1961 to 2010, India's tea trades amount stayed in the scope of 150 to 200 thousand tons with change. Clearly, absence of world interest has not been accused for this stagnation for the world's tea trades, which expanded relentlessly from 592 thousand tons in 1961 to 1780 thousand tons in 2010. Offer of India's tea sends out in world has consistently declined from 35 percent in 1961 to 13 percent in 1993 and vacillated inside the scope of 10 percent to 14 percent amid this period, while the fares amount of tea stay steady all through the stage. Amid the time of 1960s, India represented 37 percent to 40 percent of the world fare estimations of tea estimated in US\$, however its offer altogether declined amid the last 50% of the time of 1960 and decreased to 28 percent of world piece of the overall industry in 1970. India's offer stayed over 25 percent until 1977.

Figure 1: Indian Tea Export Scenario since the 1970s



Source: Different issues of Handbook of Statistics on Indian Economy, RBI

In any case, the offer of India's tea export was fluctuating inside the scope of 20 to 25 percent amid the period 1978 to 1991 with an outstanding instance of a generally better act in 1980 and 1981. Amid 1992 to 2001 India's reality piece of the pie had been in the scope of 13 to 16 percent and further it has declined into the scope of 10 to 12 percent amid 2002 to 2010. The patterns in long run plainly demonstrate a wonderful decrease in a lot of tea fares to world. In any case in volume term, India is staying as one of the significant tea trading nations on the planet.

The territory of concentrates on fare just as exchange examples of farming items isn't excessively little. In any case, the writing on generation and fare patterns of tea, as a horticultural item especially in India, is not many. Chand and Tiwari (1991) analyzed the development and insecurity of fares and imports of horticultural wares in the event of Indian economy. Goyal et al. (2000) examined the size with the circumstances and end results of shakiness of agrarian fare profit in India amid 1979 to 1989. Talwar (2002) endeavoured to evaluate the insecurities of fare income of chose gatherings and items amid the time of mid 1970s as far as possible of 1990s. Various examinations likewise endeavour to break down the present status of worldwide tea market and tea industry in India.

Alagh (2002) and Singh and Goyal (2005) concentrated on the intensity of tea exchange the World and features the significance of Indian tea industry. Utilizing a stochastic boondocks investigation to consider the specialized proficiency of natural tea little possessions in chose zone of Sri Lanka, Jayasinghe and Toyoda (2004) saw that the tea creation can be expanded up to 55 percent by productive utilization of existing innovation and work. This paper likewise uncovered that Sri Lanka is probably going to be a solid contender of India. Yearly Report distributed by Tea Board of India (2007) indicated out a few noteworthy advances be taken to advance the India's tea export. Dutta (2007) examined about the qualities and shortcomings of Indian tea industry. The paper additionally recommended a few arrangement solutions for expanding the fare of tea from India.

Banerjee and Banerji (2008a) expressed the serious issues that businesses were confronting and the ramifications of approach to tackle these sorts of bottlenecks are drawn. The examination likewise clarified the tea ventures among various nations and attempted to clarify their particular issues. Banerjee and Banerji (2008b) additionally investigated the chance of further fortifying the fare market of tea on the planet from India's perspective. Hicks (2009) talked about the present status of the worldwide tea generation. In the meantime the examination additionally talked about the future advancement of worldwide tea generation and tea items. Adhikary and Maity (2010), and Maity and Ghosh (2015) distinguished lower profitability as the significant reason for decrease of fare of tea from India.

From the previously mentioned exchange in can be contended that, no investigation has attempted to discover the primary elements affecting the pattern of tea trades particularly in India. In this specific situation, the present paper attempts to assess the pattern and example of fare of tea from India to rest of the world with the investigation of the shakiness in India's tea export. Accessible investigations investigated the patterns and examples of India's tea export with its dependable factors for the most part in the inconsequential period by utilizing yearly information with unseemly philosophy. In this foundation, the present paper is an endeavour to give a quantitative examination of India's tea trade in the period of globalization with solid rivalries from different nations by utilizing month to month information with time arrangement econometric approach as talked about in the following section in subtleties.

III. DATA AND METHODOLOGY

The contributions within theoretical and literature show the ambiguity of the relationship between declining share of tea export and time with the production as well as domestic consumption of tea. In this background the basic null hypotheses to be tested for achieving the above mentioned objective of the study are categorized as following:

- *India's tea export is not following any time trend;*
- *Production of tea has not any causal effect on tea export and;*
- *Domestic consumption of tea does not have any causal effect on tea export.*

We obtain the monthly data of India's tea export, production and domestic consumption of tea in India from various issues of tea statistics published by Indian Tea Board mainly from 2000-01 to recent period. Our empirical study covers the period from January 1998 to August 2015, comprising 176 observations. All the data series have been taken in value terms in Rupees in crores. We measure the tea export in terms of the ratio of tea export to the Indian total export. A number of studies views that India has been facing very tough competition in world market, one important reason of lowering trend of tea exports from India. So the competition in world market is considered to be a relevant variable here, to be incorporated in the empirical analysis of the study on following its standard neoclassical measure by foreign exchange rate. We collect the monthly data on real effective exchange rate over the same period from Handbook of Statistics on Indian Economy published by Reserve Bank of India (2016). All the series have been taken in log form to make them stationary at lesser order of integration. Export, production, domestic consumption of tea and real effective exchange rate are denoted by TEXP, TPRO, TCON and REER respectively in our empirical analysis.

Time series information may contain either deterministic pattern or stochastic pattern or both. Ramifications of them are subjectively unique. The time series with deterministic pattern pursues pattern stationary procedure (TSP), while a non-stationary time series appearing stochastic pattern is a difference stationary procedure (DSP). The issue of whether a macroeconomic time series is of DSP or TSP is critical in light of the fact that the dynamic properties of the two procedures are unique. While the previous is unsurprising, the last is totally flighty. In a series following TSP, patterned vacillations are brief around a steady pattern, while for DSP any arbitrary stunt to the series has a lasting impact. The repetitive segments of a TSP begin from the residuals of a relapse of the series on the variable time, and a DSP includes relapse of a series all alone slacked qualities and time. A TSP has a pattern in the mean however no pattern in the change, yet a DSP has a pattern in the fluctuation with or without pattern in the mean and here it ought to be referenced that an irregular stroll without float has no pattern in the mean estimations of the variable.

The most widely used model to take over stochastic trend is autoregressive of order p [AR(p)]:

$$X_t = \alpha + \beta_1 X_{t-1} + \beta_2 X_{t-2} + \beta_3 X_{t-3} + \dots + \beta_p X_{t-p} + \varepsilon_t \quad (1)$$

X_t gives values in log form in time t and ε_t is a stationary series with mean zero and variance σ^2 .

This model can generate the trend behaviour of macroeconomic time series and the randomly fluctuating behaviour of their growth rates. If, for example, X_t is generated by the model:

$$X_t = \alpha + X_{t-1} + \varepsilon_t \quad (2)$$

Equation (2) is AR(1) with $\beta_1=1$, accumulating X_t starting with an initial value X_0 we get,

$$X_t = X_0 + \alpha t + \sum_{j=1}^t \varepsilon_j \quad (3)$$

The Equation (3) has the same form as the conventional log-linear trend equation, excepting for the fact that the disturbance is not stationary.

One important property of time series data, not usually present in cross-sectional data, is the existence of correlation across observations. Income today, for example, is highly correlated with income of the last year. Thus X_t tends to exhibit trend behaviour and to be highly correlated over time. The non-stationary time series containing a unit root will give a stochastic trend. If $\beta_1 = 1$ for the AR(1) model, then X_t has a unit root and exhibit trend behaviour, especially when $\alpha \neq 0$. Unit root series contain a so called stochastic trend.

The Augmented Dickey-Fuller (ADF) test is performed for unit root hypothesis. The more appropriate model for testing a unit root is the AR(p) with deterministic trend:

$$\Delta X_t = \alpha + \rho X_{t-1} + \eta_1 \Delta X_{t-1} + \eta_2 \Delta X_{t-2} + \dots + \eta_{p-1} \Delta X_{t-p+1} + \delta + \varepsilon_t \quad (4)$$

A series belongs to the class DSP exhibiting stochastic trend if $\rho = 0$, $\delta = 0$, and the TSP class if $\rho < 0$. If $\rho = 0$, then X_t contains a unit root. In this case we cannot perform hypothesis testing by utilising the usual distributions appropriate for least square. Thus we have to follow ADF test. If the t-statistics on ρ are less negative than the Dickey-Fuller critical value, we conclude that the series X_t has a unit root.

To test whether the series has a unit root, we have to choose lag length (p). Many sophisticated statistical criteria and testing methods are available to determine the appropriate lag length in an AR(p) model. But we have performed a simple route by choosing a maximum lag length and then sequentially dropping lag lengths if the relevant coefficients are insignificant. The maximum lag length is chosen by following Schwert (1989) rule:

$$P_{\max} = \text{integer part of } [12(T/100)^{.25}] \quad (5)$$

Akaike (1969) Information Criterion (AIC) is also used for selecting the appropriate lag length. By following such criteria, the maximum lag length is found to be 1. Thus our model would be:

$$\Delta X_t = \alpha + \rho X_{t-1} + \eta_1 \Delta X_{t-1} + \delta + \varepsilon_t \quad (6)$$

The stochastic properties of the time series used in this study have been examined by carrying out Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) unit root tests. Both the intercept and trend components have been incorporated in the ADF estimated relation as following:

$$\Delta X_t = \phi_0 + \beta t + \rho X_{t-1} + \sum_{i=1}^p \gamma_i \Delta X_{t-i} + \varepsilon_t \quad (7)$$

The ADF measurement is the t-esteem related with the assessed coefficient of ρ , the likelihood dispersion of which is a useful of the Weiner procedure, the procedure utilized in clarifying Brownian movement of a molecule with extensive number of atomic

stuns (Maddala and Kim, 1998). The PP test is the non-parametric expansion of the DF unit root test by adding an amendment factor to the DF t measurement. The tests have been performed for all the logarithmic series and their first differences. The decision of slack length is especially pivotal at this stage and the quantity of slacks utilized in the ADF relapses is chosen by the AIC.

We have connected cointegration hypothesis created in Engle and Granger (1987) by using the strategy created by Johansen and Juselius (1990). The idea of cointegration, first created in Granger (1981), is important to the issue of the assurance of long-run harmony connections in financial matters as it were that the factors move together after some time so momentary unsettling influences from the long haul pattern will be revised.

Engle and Granger (1987) have appeared if two time series are cointegrated there will be a causal connection in somewhere around one bearing. Moreover, the Granger Representation Theorem exhibits how to display cointegrated I(1) series as vector autoregression (VAR). Specifically, the VAR can be built either as far as the dimensions (logarithmic qualities) of the information, the I(1) factors; or as far as their first differences, the I(0) factors, with the expansion of a mistake redress instrument (ECM) to catch the short-run elements. In the event that the information are I(1) yet not cointegrated, causality tests can't precisely be performed except if the information series are changed into stationary series.

For two variables Y and X, the model can be presented either of the following form:

$$\ln X_t = \theta + \sum_{i=1}^p \pi_i \ln X_{t-i} + \sum_{j=1}^r \phi_j \ln Y_{t-j} + v_t \tag{8}$$

$$\ln Y_t = \alpha + \sum_{i=1}^m \beta_i \ln X_{t-i} + \sum_{j=1}^n \gamma_j \ln Y_{t-j} + u_t \tag{9}$$

or,

$$\Delta \ln X_t = \theta + \sum_{i=1}^p \pi_i \Delta \ln X_{t-i} + \sum_{j=1}^r \phi_j \Delta \ln Y_{t-j} + \lambda ECM_{t-1} + v_t \tag{8.a}$$

$$\Delta \ln Y_t = \alpha + \sum_{i=1}^m \beta_i \Delta \ln X_{t-i} + \sum_{j=1}^n \gamma_j \Delta \ln Y_{t-j} + \delta ECM_{t-1} + u_t \tag{9.a}$$

Where u_t and v_t are zero-mean, serially uncorrelated, random disturbances, error-correction mechanism is denoted by ECM . If the data are I(1) but not cointegrated, valid tests may be done by using the first differences without the error correction term:

$$\Delta \ln X_t = \theta + \sum_{i=1}^p \pi_i \Delta \ln X_{t-i} + \sum_{j=1}^r \phi_j \Delta \ln Y_{t-j} + v_t \tag{10}$$

$$\Delta \ln Y_t = \alpha + \sum_{i=1}^m \beta_i \Delta \ln X_{t-i} + \sum_{j=1}^n \gamma_j \Delta \ln Y_{t-j} + u_t \tag{11}$$

When the variables are not cointegrated then we have to examine the short run dynamic relationships between them by utilising the unrestricted VAR structure shown as the following two equations. By incorporating one period lag as suggested by the minimum AIC rule, the bi-variate VAR used in this study takes the following form:

$$\Delta \ln X_t = \alpha_0 + \alpha_1 \Delta \ln X_{t-1} + \alpha_2 \Delta \ln Y_{t-1} + \varepsilon_{1t} \tag{12}$$

$$\Delta \ln Y_t = \beta_0 + \beta_1 \Delta \ln X_{t-1} + \beta_2 \Delta \ln Y_{t-1} + \varepsilon_{2t} \tag{13}$$

The lagged terms of ΔX_t and ΔY_t appeared as explanatory variables, in the VAR structure indicate short run dynamics or cause and effect relationship between the two series. Thus, if the lagged coefficients of ΔY_t appear to be significant in the regression of ΔX_t this means that Y affects X. Similarly, the opposite holds if the lagged coefficients of ΔX_t are significant in ΔY_t . If none of the lagged coefficient is significant anywhere this implies that there is no cause and effect relationship between the two series.

IV. EMPIRICAL FINDINGS

On the basis of methodology taken in our study as discussed in earlier, we present the results of unit root tests.

Unit Root Test

The table 1 speaks to the ADF and PP test measurements for testing unit roots of the considerable number of factors. Like more often than not series investigation, here the invalid theory of the nearness of unit roots is acknowledged in the first series demonstrating that all the series are non-stationary at level in the event of both ADF and PP tests. Be that as it may, every one of the factors winds up stationary at their first differences. We additionally test the regularity in the series with twelve periods slack, yet no regularity is found in any series.

To locate the dynamic connections between tea export and diverse dependable components of India's fare of tea as referenced above we utilize cointegration system created by Engle and Granger (1987). Both ADF and PP unit root tests recommend that every one of the factors are coordinated of request one I(1). As the factors pursue a similar request of mix, so they may have a typical pattern and it is sensible to scan for the conceivable cointegrating relationship among them. In this unique situation, we plan for the co-incorporation test. We can likewise contend that tea sends out from India constantly pursue a time pattern.

Table 1: Estimated Statistics of Unit Root Tests

Series	ADF Test Statistics		PP Test Statistics	
	Level	First Difference	Level	First Difference
TEXP	3.13	-7.59***	-2.09	-7.59***
TPRO	-1.65	-4.90***	-1.71	-4.91***
TCON	-1.73	-7.12***	-1.93	-6.99***
REER	2.02	5.19**	2.27	6.01***

Note: ***, ** and * denote the level of significance at 1%, 5%, and 10%, respectively

Source: Author's estimation by using data from Tea Board and RBI

Cointegration Test

The assessed aftereffects of Johansen's cointegration tests are appeared table 2. Both the follow or LR test measurement and the eigenvalues are utilized for testing the speculation of the nearness of cointegrating connection, against the elective theory of full position. Both follow and greatest eigenvalue test measurements show no cointegration at the 5 percent dimension.

Table 2: Estimated Statistics of Johansen Cointegration Test

Unrestricted Cointegration Rank Test					
Tests	Hypothesized No. of CE(s)	Eigenvalue	Statistic	5% Critical Value	Prob.**
Trace	None	0.26	21.12	28.23	0.23
	At most 1	0.25	12.49	29.80	0.91
	At most 2	0.10	3.50	15.49	0.94
	At most 3	0.00	0.13	3.84	0.72
Maximum Eigenvalue	None	0.26	14.23	21.13	0.35
	At most 1	0.25	9.00	21.13	0.83
	At most 2	0.10	3.37	14.26	0.92
	At most 3	0.00	0.13	3.84	0.72
Trace test indicates no cointegrating eqn at the 0.05 level					
Max-eigenvalue indicates no cointegrating eqn at the 0.05 level					
* denotes rejection of the hypothesis at the 0.05 level					
**MacKinnon-Haug-Michelis (1999) p-values					

Source: Author's estimation by using data from Tea Board and RBI

So there isn't any long run cointegrating connection between India's tea export and its conceivable capable factors as considered in this examination. As variables are not cointegrated, so we can continue to investigate the short run elements connections among them by utilizing the unhindered vector auto-regression (VAR) models with two period slack as proposed by the base AIC rule. The table 3 demonstrates the assessed consequences of unhindered VAR models to discover short run causal connections among TEXP, TPRO, TCON and REER.

Table 3: Estimated Coefficients in Unrestricted VAR

	D(TEXP)	D(TPRO)	D(TCON)	D(REER)
D(TEXP (-1))	-0.68	0.11	-1.22	0.47
	[-2.98]	[0.31]	[-1.48]	[0.69]
D(TEXP (-2))	-0.39	0.03	-0.40	-1.08
	[-2.44]	[0.34]	[-0.55]	[-1.11]
D(TPRO (-1))	0.21	-0.22	0.34	-1.10
	[2.04]	[-1.18]	[0.23]	[-1.89]
D(TPRO (-2))	0.16	0.13	1.17	1.25
	[2.23]	[0.74]	[0.82]	[1.44]
D(TCON (-1))	0.07	0.00	0.06	0.58
	[1.37]	[-0.01]	[0.23]	[7.47]
D(TCON (-2))	0.05	0.01	0.02	-0.15
	[1.36]	[0.49]	[0.09]	[-0.86]
D(REER (-1))	-0.55	1.25	8.73	-20.74
	[2.19]	[1.04]	[1.09]	[-0.60]
D(REER (-2))	0.43	0.58	0.73	14.20
	[0.45]	[0.47]	[1.21]	[0.48]
C	0.22	-0.15	-1.13	1.44
	[2.23]	[1.16]	[1.24]	[2.04]
R-squared	0.36	0.30	0.24	0.21
Adj. R-squared	0.18	0.22	0.16	0.14
Sum sq. resids	0.07	0.02	0.35	1.02
S.E. equation	0.04	0.02	0.08	0.08
F-statistic	9.71	0.80	5.27	4.28
Log likelihood	89.13	98.38	87.58	81.48
Akaike (AIC)	-2.18	-2.24	-2.40	-2.31
Schwarz (SC)	-2.04	-2.22	-2.09	-2.10

Source: Author's estimation by using data from Tea Board and RBI in E-views 7

We have four concurrent VAR equations with ward variables of TEXP, TPRO, TCON and REER separately. Each of the four variables with their two period slacks are considered as autonomous regressors in the four unique models. Our center model is the primary equation with TEXP as the clarified variable and the assessed outcomes from that unhindered VAR demonstrate infer that production of tea with both one and two period slack and genuine compelling conversion scale with one period slack fundamentally decide the India's tea export. There isn't some other factor to be responsible for declining pattern of tea exports from India. Other three models can't give any important and noteworthy outcome.

V. CONCLUSION

During the time of the changing situation of tea industry in India, this paper has attempted to see that why tea exports from India to worldwide market pursues the declining way. The paper based on some exact exercise with time series information uncovers the huge effects of tea production on its export exhibitions where household consumption assumes an irrelevant job. Thus, through the significant improvement in efficiency, volume of tea production can be expanded in India, that would advance the export of tea from India. It is additionally a vital perception from our exact examinations that challenge in world market estimated by genuine viable conversion scale has negative and noteworthy impact on India's tea export, and efficiency ought to likewise assume a vital job here. With the experimental examination the present investigation additionally endeavours to record the issues of difficulties of the Indian tea industry in the present setting.

Low profitability with mind-boggling expense of production and truancy of elements particularly work are the imperative hindrances of the Indian tea industry. In spite of the fact that few measures are taken to settle these sorts of requirements, and without those India can't advance the production of tea. Likewise because of extreme interest in residential market India's export execution is backing off than different exporters of tea. In any case, the unparalleled method to showcase the tea is the esteem expansion in the production in worldwide market. Other than those inward issues distinctive universal factors additionally should be concentrated, in light of the fact that worldwide challenge has been a most imperative one these days.

Exhibitions of different countries in such manner should be referenced here. Kenya drives the situation of tea export and catches the greater part of the major worldwide markets because of the production of its CTC tea at lower cost of production. As we discover the nations like Vietnam, Argentina and Indonesia are additionally expanding logically its offer on the planet tea advertise with high profitability and lower cost of production. Presently, India is confronting a few issues in efficiency gain and in bringing down expense of production. As indicated by Food and Agricultural Organization (FAO) in favour of supply, the unit cost must be decreased through profitability gain.

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