State Economic Index : Odisha

(April - June 2020)

Centre of Excellence in Fiscal Policy and Taxation (CEFT)

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1. Introduction

- COVID-19 has created many economic uncertainties by disrupting both demand and supply side, thereby, hurting lives and livelihoods.
- To understand the overall impact on Odisha's economy, a composite State Economic Index is constructed by taking 10 no. of state specific high frequency (monthly) indicators.
- These high frequency monthly indicators are assessable value of E-waybill, Electricity Consumption, Aggregate outstanding Bank Credit, GST, MV Tax, VAT on Non-GST Goods., Mining Royalty, Employment Rate, Excise Duty and Total Active workers in MGNREGA.

2. Objectives of the Study

- The objective of this study is to calculate the Economic Index of Odisha for the month April, May and June 2020.

3. Data and Methodology

- To construct the Index, monthly data on the selected ten economic indicators is taken for the period from August 2017 to March 2020 (32 months-datapoints).
- These indicators and their sources are listed in Table 1.

Table 1: Variables and Sources

Sl. No.	Variables	Time Point (April-2017 to June 2020)	Units	Source
1	Assessable value of E-waybill	Monthly	₹ Crore	CT&GST
2	Electricity Consumption	Monthly	MU	GRIDCO/OERC
3	Aggregate Bank Credit	Monthly	₹ Crore	RBI & SLBC
4	GST	Monthly	₹ Crore	CT&GST
5	MV Tax	Monthly	₹ Crore	CT&GST
6	VAT on Non-GST Goods	Monthly	₹ Crore	CT&GST
7	Mining Royalty	Monthly	₹ Crore	CT&GST
8	Employment Rate	Monthly	%	CMIE
9	Excise Duty	Monthly	₹ Crore	CT&GST
10	Total Active Workers in MGNREGA	Monthly	Crore (no.)	Ministry of Rural Development, GoI.

- Taking the above parameters, Principal Component Analysis (PCA) method is used for construction of the Index.

- However, parameters on outstanding aggregate bank credit, unemployment rate, total no. of Active Workers in MGNREGA and assessable value of E-waybill are dropped owing to inconsistencies in data.

- Finally, for construction of Index six parameters are considered.

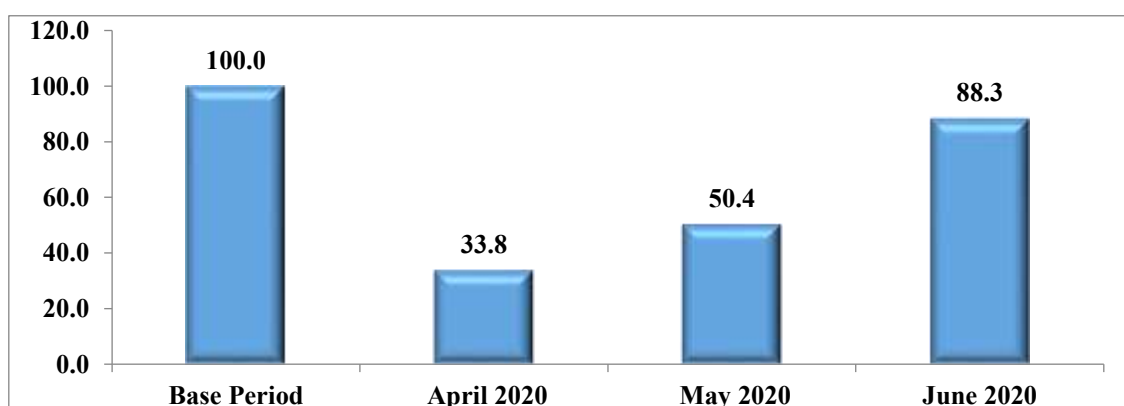- The monthly average from August 2017 to March 2020 is taken as Base Period.

4. Results and Analysis

Figure 1: Actual Index Values
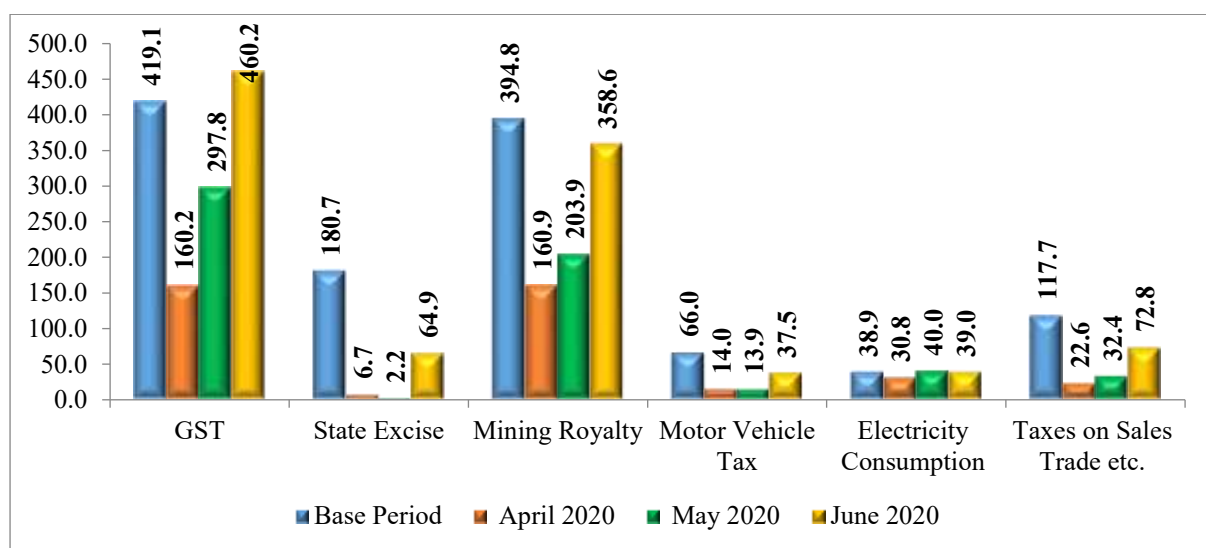
As compared to the base period (monthly average value from August 2017 to March 2020), the most of the parameters has shown a sharp decline during April 2020, the month of 'lock-down', and a moderate recovery (except the state excise duty) in May 2020. In June 2020, except Electricity Consumption most of the parameters is showing an improvement.
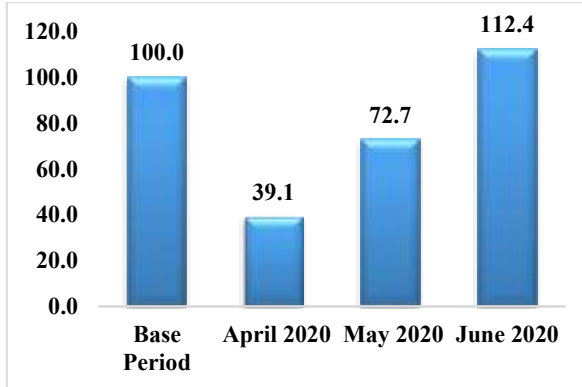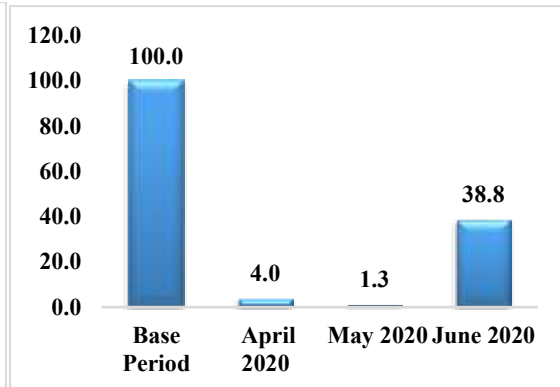
Figure 2: State Economic Index: Odisha

(Base Period :Aug-2017 to March-2020)

- The base period is pegged at 100 by taking monthly average from August 2017 to March 2020.
- State Economic Index for April 2020 witnessed a sharp deterioration to 33.8, spreading across all indicators. In May 2020, SEI recovered moderately to 50.4 and further to 88.3 in June 2020 (Figure 2).
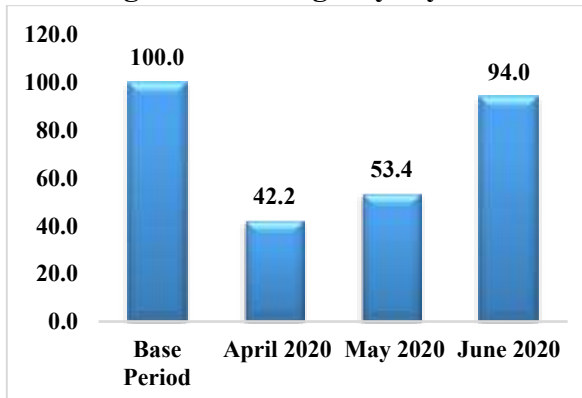- The weighted Index of individual parameters is given below (Figure 3 to Figure 8).
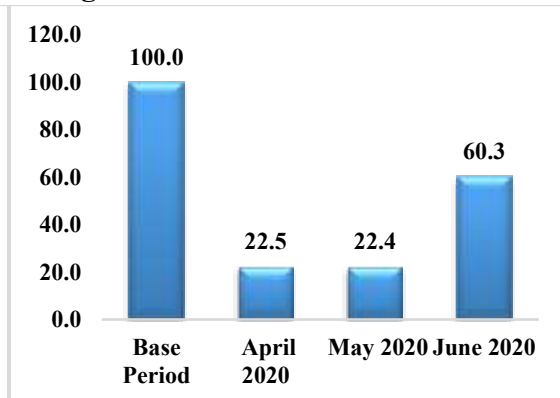
Figure 3: GST Index

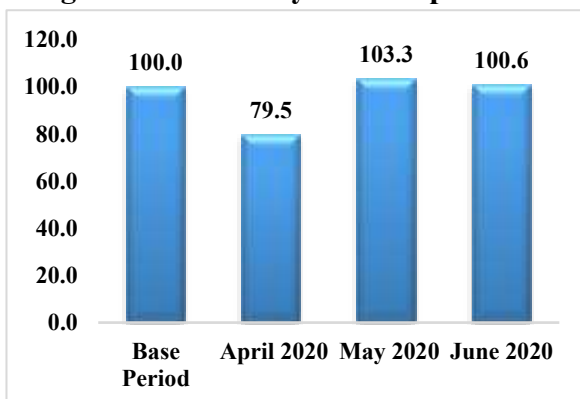| Base Period	April 2020	May 2020	June 2020
100.0	39.1	72.7	112.4

Figure 4: State Excise Index

Base Period	April 2020	May 2020	June 2020
100.0	4.0	1.3	38.8

Figure 5: Mining Royalty Index

Base Period	April 2020	May 2020	June 2020
100.0	42.2	53.4	94.0

Figure 6: Motor Vehicle Tax Index

Base Period	April 2020	May 2020	June 2020
100.0	22.5	22.4	60.3

Figure 7: Electricity Consumption Index

Base Period	April 2020	May 2020	June 2020
100.0	79.5	103.3	100.6

Figure 8: VAT on Non-GST Goods

Base Period	April 2020	May 2020	June 2020
100.0	20.3	29.2	65.4
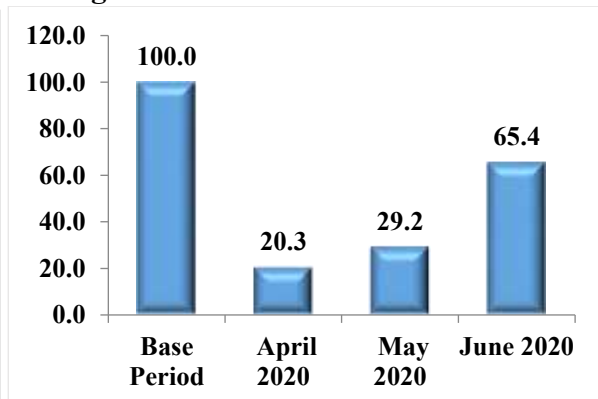
Observation: With gradual relaxation, the State Economic Index for the Month of June 2020 has moderately recovered.