SBI RESEARCH
ECOWRAP

Q1 GDP GROWTH AT 7.8%, SEASONALLY ADJUSTED HIGHEST IN DECADE: POSSIBLE FAULT LINES IN CSO DATA METHODOLOGY REGARDING MANUFACTURING, EXPORTS & SERVICE SECTOR VIS-À-VIS LEADING INDICATORS; "RETHINK & REVISIT" MOMENT IN Q1 DATA INTERPRETATION ?

Issue No. 23, FY24
Date: 31 Aug 2023

The GDP for Q1'24 released today reaffirmed the resurgence in domestic economic momentum, notwithstanding the ascending global shocks and challenges, clocking 7.8%, growth broadly in line with consensus estimates **though somewhat asymmetrical if one looks at the leading indicators in various niche areas, in particular manufacturing where the EBIDTA growth of exBFSI entities, helped with lower input prices, a robust order book and crowding in of private led capex has grown handsomely in last quarter by ~15%, sustaining the positive momentum of FY'23.**

Buoyant growth in services sector (at 10.3% propelled by 28-quarters high growth of 12.2% in 'Financial, Real Estate & Professional service' sector) ensured economy grew by 7.8% while the GVA also grew by 7.8%. Nominal GDP grew by 8%.

Agriculture, the most consistent sector since pandemic, grew by 3.5% in Q1. Construction activity which witnessed boom in Q1 FY23 (16.0%), decelerated to 7.9% in Q1 FY24. Services sector grew by 10.3% due to 28-quarters high growth of 12.2% in 'Financial, Real Estate & Professional service' sector. **The growth of 9.2% in 'Trade, hotels, transport, communication & services related to broadcasting' is really surprising given the fact that all leading indicators related to this sector performed very well in Q1.**

Core GVA registered a growth of 8.7% yoy in Q1 FY24 compared to 7.3% yoy in Q4 FY23 but was lower than 12.5% yoy in Q1 FY23. Further, Nominal GDP growth came at 8.0% yoy in Q1FY24. Growth in GDP deflator further decelerated to 0.2% in Q1 FY24 from a high of 12.9% in Q1 FY23. This is in line with deflation in WPI and easing of CPI inflation.

In q-o-q terms, real GDP always contracts in Q1. The average contraction in Q1 since FY13 comes to -7.6%. Comparing the seasonally adjusted series with unadjusted of real GDP q-o-q growth since FY13, the result shows that the seasonally adjusted GDP growth is higher than the non-seasonally adjusted GDP growth for Q1 for most of the financial years (exception FY13, FY21 and FY22), indicating the first quarter growth is better than what the non-seasonally adjusted figure shows and has a higher seasonal component.

On the expenditure side, all the heads from their registered growth rates in Q1FY23 have seen deceleration. This is the primary factor that has resulted in slowdown in Q1 FY24 growth from the demand side. It is also an indicator that pent up demand for services such as tourism is stabilizing. The final consumption expenditure registered a growth of 4.9%. The private consumption expenditure registered a growth of 6% and the government expenditure has stagnated to -0.7%. There has been a contraction in valuables demand, in fact valuables have declined in absolute in nominal terms.

Most importantly, India's merchandise exports registered contraction for the sixth consecutive month in July 2023, declining by 15.9% (y-o-y) due to negative momentum. **The contraction in exports was broad-based, with more than two-third of the export basket (19 out of 30 major commodities) registering a y-o-y decline. However, commerce ministry data in rupee terms indicate that exports increased by 1.7% in Q1FY24**. The contribution of private consumption to aggregate growth declined dramatically from 65.1% in Q3FY22 to 58.4% in Q4FY23. This decrease was somehow cushioned by an increase in the contribution to growth by government consumption expenditure from a level of 10.2% to 12.1% during the same period.

With overall deficiency of around 35%, the 'driest August' since 1902 has affected the rain pattern, the overall monsoon should be in the range of -18% to -3% of LPA (the Sep-23 rainfall is estimated by our model in the range of -40% to 40% of LPA). Another silver lining would be spatial distribution. "SBI Monsoon Impact Index / MI" incorporating four parameters from 15 major food grains producing states, viz. their share in total food grains production, rainfall deviation from normal, irrigation status, and overall skewness in rainfall among states. On a scale of 0-100, values closer to 100 indicate lesser impact of distribution of rainfall on economy. The current MI Index, with present value of 86.5 fares much better than 2022 full season MI Index at 60.2.

With Corporate EBIDTA and order book giving momentum to capex, we say omen to better, if interesting times, ahead.

GDP EXPANDS BY 7.8% IN Q1 FY24

- India's economy grew by 7.8% in Q1 FY23 on the back of buoyant growth in services sector (at 10.3%). The GVA also grew by 7.8%. Nominal GDP grew by 8% in Q1.
- Agriculture, the most consistent sector since pandemic, grew by 3.5% in Q1. Construction activity which witnessed boom in Q1 FY23 (16.0%), decelerated sharply to 7.9% in Q1 FY24.
- Services sector grew by 10.3% due to 28-quarters high growth of 12.2% in 'Financial, real estate & professional service' sector.
- Core GVA registered a growth of 8.7% yoy in Q1 FY24 compared to 7.3% yoy in Q4 FY23 but was lower than 12.5% yoy in Q1 FY23.

GDP DEFLATOR

- Nominal GDP growth came at 8.0% yoy in Q1FY24. Growth in GDP deflator further decelerated to 0.2% in Q1 FY24 from a high of 12.9% in Q1 FY23. This is in line with deflation in WPI and easing of CPI inflation.
- Growth in GDP deflator for agriculture and services eased to 0.8% yoy compared to 4.6% yoy and 4.0% yoy respectively in Q4 FY23. For industry deflator registered negative growth of -1.3% in Q1 mainly on account of mining and quarrying.

SEASONALLY ADJUSTED SERIES

- In q-o-q terms, real GDP always contracts in Q1. The average contraction in Q1 since FY13 comes to -7.6%.
- We compared the seasonally adjusted series with unadjusted of real GDP q-o-q growth since FY13. The result shows that the seasonally adjusted GDP growth is higher than the non-seasonally adjusted GDP growth for Q1 for most of the financial year (exception FY13, fY21 and FY22), indicating the first quarter growth is better than what the non-seasonally adjusted figure shows and has a higher seasonal component.

IMPACT OF EXPORT & CONSUMPTION ON GDP

- India's merchandise exports registered contraction for the sixth consecutive month in July 2023, declining by 15.9% (y-o-y) due to negative momentum. The contraction in exports was broad-based, with more than two-third of the export basket (19 out of 30 major commodities) registering a y-o-y decline. While, domestic drivers such as private consumption and fixed investment are offsetting the drag from the contraction in exports.

GVA at Basic Price by Economic Activity (%)

Sectors	FY23				FY24
	Q1	Q2	Q3	Q4	Q1
Agriculture	2.4	2.5	4.7	5.5	3.5
Industry	9.4	-0.5	2.3	6.3	5.5
Mining & quarrying	9.5	-0.1	4.1	4.3	5.8
Manufacturing	6.1	-3.8	-1.4	4.5	4.7
Electricity, gas, water supply & other utility services	14.9	6.0	8.2	6.9	2.9
Construction	16.0	5.7	8.3	10.4	7.9
Services	16.3	9.4	6.1	6.9	10.3
Trade, hotels, transport, communication & services related to broadcasting	25.7	15.6	9.6	9.1	9.2
Financial, real estate & professional service	8.5	7.1	5.7	7.1	12.2
Public administration, defence and Other Services	21.3	5.6	2.0	3.1	7.9
Total GVA at Basic Price	11.9	5.4	4.7	6.5	7.8
GDP	**13.1**	**6.2**	**4.5**	**6.1**	**7.8**

Source: NSO,SBI Research

Growth in Sectoral Deflator (%)

Sectors	FY23				FY24
	Q1	Q2	Q3	Q4	Q1
Agriculture	13.6	10.9	4.9	4.6	0.8
Industry	16.1	12.2	7.6	3.9	-1.3
Mining & quarrying	55.2	41.3	24.7	11.5	-5.3
Manufacturing	10.5	7.5	3.9	1.6	-2.7
Electricity, gas, water supply & other utility services	22.0	28.5	22.7	18.3	9.7
Construction	14.3	8.5	3.3	1.3	-1.4
Services	10.7	8.8	5.6	4.0	0.8
Trade, hotels, transport, communication & services related to broadcasting	14.7	11.4	6.2	3.1	-1.4
Financial, real estate & professional service	10.7	8.8	5.3	3.7	-0.1
Public administration, defence and Other Services	5.6	6.4	5.8	6.2	5.3
Total GVA at Basic Price	12.5	10.1	6.0	4.0	0.2
GDP	**12.9**	**10.3**	**6.6**	**4.1**	**0.2**

Source: NSO,SBI Research

GDP growth qoq (%)

Quarter	Real GDP	Real GDP sa
Q1FY13	-6.8%	-1.1%
Q1FY14	-4.9%	0.6%
Q1FY15	-2.4%	2.6%
Q1FY16	-2.0%	2.6%
Q1FY17	-2.4%	2.3%
Q1FY18	-2.5%	2.5%
Q1FY19	-3.8%	2.5%
Q1FY20	-4.4%	4.4%
Q1FY21	-28.8%	-20.2%
Q1FY22	-16.3%	-4.3%
Q1FY23	-9.0%	4.3%
Q1 FY24	-7.4%	5.7%

Source: MOSPI, SBI Research

- The most important contribution to demand growth is the consumption expenditure. The contribution of private consumption to aggregate growth declined dramatically from 65.1% in Q3FY22 to 58.4% in Q4FY23. This decrease was somehow cushioned by an increase in the contribution to growth by government consumption expenditure from a level of 10.2% to 12.1% during the same period. However, the overall consumption expenditure has been declined from 71.4% in Q2FY22 to 70.5% in Q4FY23.
- The share of PFCE and exports in GDP indicate inverse relationship, with correlation of –0.43.
- With the withdrawal of ₹2000 banknotes of ₹3.56 lakh crore as at the close of business on May 19, 2023, people has increased spending on good and services. PFCE share has increased to 59.7% in Q1 compared to 58.4% in Q4FY23. It is expected that the PFCE will increase further in Q2FY24.

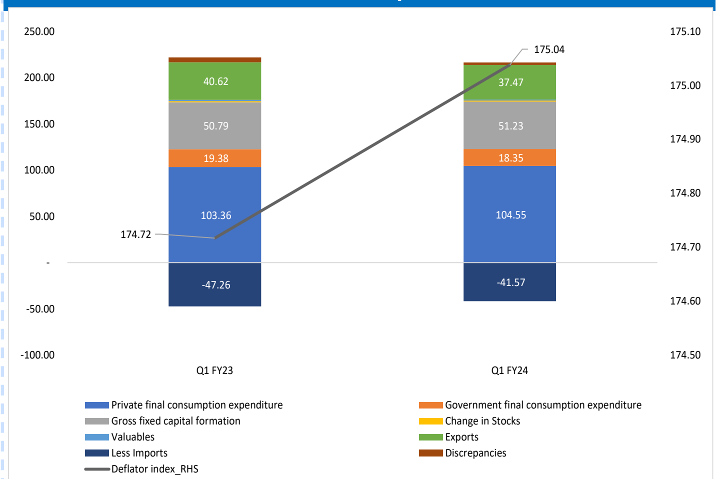
EXPENDITURE SIDE GDP

- From the expenditure side, all the heads from their registered growth rates in Q1FY23 have seen deceleration. This is the primary factor that has resulted in slowdown in Q1 FY24 growth from the demand side. It is also an indicator that pent up demand for services such as tourism is stabilizing.
- The final consumption expenditure registered a growth of 4.9%. The private consumption expenditure registered a growth of 6% and the government expenditure has stagnated to -0.7%.
- There has been a sharp contraction in valuables demand, in fact valuables have declined in absolute in nominal terms.
- The investment component perhaps has the best run among all heads in Q1, and the growth kept the sequential momentum for the last three quarters.
- Degrowth in exports in Q1FY24 indicate that negative impact of high interest rate on global demand is visible in Q1 FY24.
- On expenditure side, exports contracted by 0.5%, while the commerce ministry data in rupee terms indicate that exports increased by 1.7% in Q1FY24. So, it is underestimating nominal GDP by 49 bps.
- **If we look the earlier data, it indicate that expenditure side of GDP is being consistently underestimated by exports from Q2FY23.**

DEFLATOR MOVEMENT ON EXPENDITURE SIDE

- The decomposition of the deflator from the expenditure side shows that implicit inflation was positive in private expenditure sun-component and was declining in all others.
- The general correction in international crude prices, prices of valuables and its pass through to domestic prices and also fall in export demand the resultant fall in export prices have decided the trajectory of price deflator in Q1FY24.

GDP Deflator form Expenditure Side



Source: SBI Research

Export Data Mis-leading

Source: SBI Research

GAP BETWEEN GDP AND GNI

- Data from different economies indicate that the gap between GDP and GDI (officially known as "the statistical discrepancy") is typically about 1%. However, recently it come to notice that this discrepancy has been much larger in the case of various economies (e.g. US). We here analyse that what is the case with India regarding this discrepancy and what it indicate?. Here we don't have GDI but NSO provides data on GNI. As per Economics 101, GDP is the total market value of all finished goods and services produced within a country in a set time period while GNI is the total income received by the country from its residents and businesses regardless of whether they are located in the country or abroad.
- A gap in GDP & GNI indicate that the country is net receivable or net payable. An average gap between GDP & GNI was around 1.1% during FY12 to FY20. However, this gap increased marginally to 1.3% in FY21 & then significantly to 2.0% in both FY22 & FY23.

MONSOON 2023

- El Nino has significantly impacted the core monsoon month of August. While the India as a whole received 9% deficit rainfall, the August month has an overall deficiency of about 35% and it may be dubbed as the 'driest August' since 1901. With the dismal performance of August, we have analysed the probability of monsoon 2023 being listed as a 'drought year' using different scenario. As per our analysis, with the Sep-23 rainfall in the range of -40% to 40% of LPA, the overall monsoon will be in the range of -18% to -3% of LPA. This indicate that there are very little chances of drought this year as according to the IMD, drought is a condition that occurs in any area when the mean annual rainfall is less than 25% of the average rainfall.
- Another silver lining would be spatial distribution. "SBI Monsoon Impact Index / MI" incorporating four parameters from 15 major food grains producing states, viz. their share in total food grains production, rainfall deviation from normal, irrigation status, and overall skewness in rainfall among states. On a scale of 0-100, values closer to 100 indicate lesser impact of distribution of rainfall on economy. **The current MI Index, with present value of 86.5 fares much better than 2022 full season MI Index at 60.2.**

Gap between Nominal GDP and GNI (Amount in Rs lakh crore)

FY	GDP	GNI	GDP-GNI	(GDP-GNI)/GDP
FY12	87.4	86.6	0.8	0.9%
FY13	99.4	98.3	1.2	1.2%
FY14	112.3	110.9	1.4	1.2%
FY15	124.7	123.2	1.5	1.2%
FY16	137.7	136.1	1.6	1.2%
FY17	153.9	152.2	1.8	1.1%
FY18	170.9	169.1	1.8	1.1%
FY19	189.0	187.0	2.0	1.1%
FY20	201.0	199.1	1.9	1.0%
FY21	198.3	195.6	2.7	1.3%
FY22	234.7	230.0	4.7	2.0%
FY23	272.4	267.0	5.5	2.0%

Source: NSO; SBI Research; GNI=GDP+Primary income receivable from ROW (net)

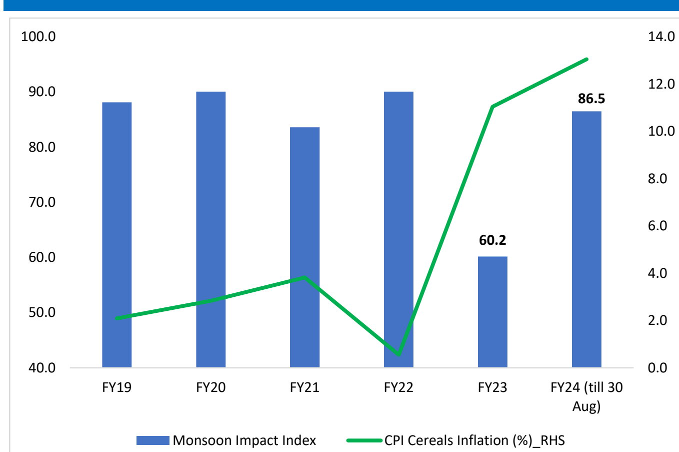
Monsoon 2023: Scenario Analysis (% Deviation from Normal)

Jun-23	Jul-23	Aug-23	Sep-23 Scenarios	Jun-Sep (Total)
			40	-2.6
			30	-4.6
			20	-6.5
			10	-8.5
-10.0	13.5	-34.8	0	-10.4
			-10	-12.4
			-20	-14.3
			-30	-16.2
			-40	-18.2

Most probable scenario in El Nino Year

Source: SBI Research

SBI Monsoon Impact Index



Source: SBI Research

COMBINED IMPACT OF EL NINO/LA NINA AND INDIAN OCEAN DIPOLE ON AGRICULTURE OUTPUT AND FOOD INFLATION

- When ENSO (El Nino– Southern Oscillation) index is positive, it is El-Nino phenomenon which creates Rain in USA and drought in India. Likewise, when ENSO index is negative, it is La-Nina event which creates rain in India and Drought in USA. While El Nino impact on USA is isolated but La-Nina impact on India is further moderated by Indian Ocean Dipole.
- Federal Reserve Boards International Finance Discussion paper had estimated that one s.d surprise in El Nino raises world real commodity price inflation by 3.5% to 4%.
- El Nino typically occurs at three to seven years interval and last about two years. Due to the Serial Correlation of the ENSO event, we have used Prais Winsten Regression.
- For the ENSO event, we have used ENSO 1+2 index. Further, we have used a categorization dummy, wherein ENSO >0.5 is considered as El Nino Event, -0.5<ENSO<0.5 is considered as Neutral, and ENSO<-0.5 is considered as La Nina Event.
- Indian Ocean Dipole (IOD) is important for Indian Ocean weather conditions. We have used IOD Index. Further, IOD dummy has been used for IOD>0 as supportive conditions in Indian Ocean and vice versa.
- **We estimate that in case of prevailing El Nino conditions but supportive conditions in Indian ocean (IOD>0), there is no impact on real agriculture GVA. However, in the same scenario, when quarterly average of ENSO increases by 1 point from already higher base of 0.5 points, it increases food inflation by 3.2%.**
- In La Nina Scenario (ENSO<-0.5) along with supportive Indian Ocean conditions (IOD>0), increase in IOD index leads to 1.36% increase in real Agriculture GVA. Impact of same weather conditions on Food Inflation is however is not been ascertained due to lesser number of observations and collinearity problem.

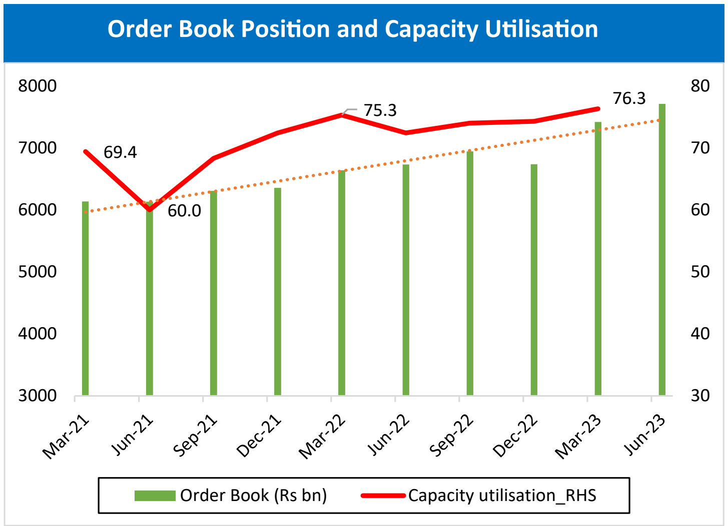
HIGHER CAPACITY UTILISATION, STRONG ORDER BOOK LEADS TO HEALTHY INVESTMENT ANNOUNCEMENTS

- As per the latest RBI number, **capacity utilisation, in manufacturing space, touched ten years high at 76.3% as of March'2023** (highest since March'2013) which was 74.3% in Dec'2022 and 75.3% in March'2022.

Prais Winsten Regression			
Dependent Variable : Log of real Agriculture GVA Time period: 2011Q2 to 2023Q1			
Scenario: ENSO >=0.5 (El NINO) & IOD >0			
Independent Variable	Coefficient	Std Error	P value
ENSO Index	-0.158	0.145	0.39
IOD Index	-0.401	1.22	0.774
Constant	13.349	0.551	0.002***
Scenario: ENSO<-0.5 (LA NINA) & IOD >0			
Independent Variable	Coefficient	Std Error	P value
ENSO Index	0.339	0.152	0.113
IOD Index	1.36	0.202	0.007***
Constant	13.79	0.159	0.000***
Source: SBI Research			

Prais Winsten Regression			
Dependent Variable : Food Inflation Time period: 2011Q2 to 2023Q1			
Scenario: ENSO >=0.5 (El NINO) & IOD >0			
Independent Variable	Coefficient	Std Error	P value
ENSO Index	3.294	0.544	0.026**
IOD Index	9.0005	4.238	0.168
Constant	-5.469	1.949	0.107
Scenario: ENSO<-0.5 (LA NINA) & IOD >0			
collinearity problem			
Source: SBI Research			

- Moreover, order book position improved by around 15% to Rs 7710 billion (for the select set) as of June'2023 as compared to Rs 6731 billion as of June'2022. **Some of the big players in the capital goods/construction space reported order book position of up to 5x of annual revenue which reflects strong demand pipeline ahead.**
- Corporate, led by private sectors, already shown capex intentions with all time high new investment announcements of Rs 37 lakh crore in FY23, as compared to Rs 20 lakh crore in FY22. **With higher capacity utilisation and strong order book in pipeline, in Q1FY24 also, the investment momentum continues with announcements exceeds Rs 7 lakh crore, 15% higher than the same period previous year.**
- In Q1FY24 India Inc., ex BFSI listed entities, reported improvement in **EBIDTA margin by 274 bps to 15.81% in Q1FY24 as compared to 12.60% in Q1FY23, contributed by lower input prices**, reflects robust performance in first quarter of the current year.



Source: SBI Research; RBI; Company reports

*****

Contact Details:
Dr. Soumya Kanti Ghosh
Group Chief Economic Adviser
State Bank of India, Corporate Centre
M C Road, Nariman Point, Mumbai - 400021
Email: soumya.ghosh@sbi.co.in, gcea.erd@sbi.co.in
Phone:022-22742440
: kantisoumya