

Insights from 1QFY24 GDP data

Corporate investments likely to have declined for the second consecutive quarter

- India's [real GDP](#) grew 7.8% YoY in 1QFY24, in line with the market consensus but slightly lower than the RBI's forecast of 8%. GDP data is the most comprehensive macroeconomic indicator and thus, it is widely covered. It is unfortunate that the quarterly GDP data published in India does not provide much detail. The annual data that gives details is available with a lag of 11 months, which makes it outdated.
- India's GVA data helps to understand the key drivers of economic growth (agriculture, industry and/or services) and GDP data helps to gauge consumption, investment and foreign trade trends. Nonetheless, there are many insights that one can use to understand the data further. In this note, we share seven key insights from 1QFY24 GVA/GDP data:
 - 1.) Although nominal investments grew 8.6% YoY in 1QFY24, they were largely led by the government sector, which rose 54% YoY during the quarter. It suggests that private sector investments (including PSUs) grew only 2.6% YoY in 1QFY24.
 - 2.) After the release of 1QFY24 data, weak manufacturing growth (4.7% vs. estimate of 7-8%) came as a big disappointment. While it was surprising initially, slower growth is compatible with the listed manufacturing companies' data, the primary input in quarterly GDP estimates.
 - 3.) The services sector, on the other hand, posted better growth. Within services, seven-year high double-digit growth in the 'financial, real estate and professional (FR&P)' sector was unexpected. Listed companies' data showed that the non-IT services sector grew at a much faster rate than IT services. It is, thus, likely that the real estate and non-banking financial sectors (such as insurance) led higher growth in the services sector.
 - 4.) GVA/GDP data, along with listed companies' data, gives some idea of a recovery in the unlisted, informal and/or unorganized sector. Unlike in the four quarters of FY23 when it was clear that the listed sector was growing slower than the rest of the economy (RoE), we found mixed signals of that in 1QFY24.
 - 5.) In the absence of the current account deficit (CAD), we use investments and net imports of goods & services to get an idea of gross savings in the economy. With static investments in (vs. 1QFY23) and lower net imports, it is clear that India's savings improved in 1QFY24; however, it was likely led by the non-household sector, possibly the government.
 - 6.) With real GDP growth of 7.8%, nominal GDP growth of 8% probably did not get much attention. Barring a short episode in FY01-03 and FY20-FY21, the Indian economy has not witnessed single-digit nominal GDP growth during the past four decades. Nominal data is important since it affects corporate sales and profits, government tax receipts, exports and imports, and bank credit growth.
 - 7.) The details of the expenditure approach were very unconvincing in 1QFY24. While net imports narrowed in 1QFY24, real net imports dragged down real GDP growth massively during the quarter. Moreover, discrepancies contributed >80% to real GDP growth in 1QFY24, indicating possible upward revisions in consumption and/or investments in the future.
- Overall, although headline GVA/GDP growth was good, the details showed some improvements and some concerns.

Private investments (including PSUs) grew only 2.6% YoY in 1QFY24, marking the slowest growth in three years

- 1) **Government and household investments strong; Corporate investments down for the second successive quarter:** India's nominal investments (defined as the sum of gross fixed capital formation and change in stocks) grew 8.6% YoY in 1QFY24, marking the first single-digit growth in 10 quarters. Based on the official monthly data, [government investments](#) grew 54% YoY during the quarter (led by 45% YoY growth in the Center's capex and 65% YoY by states). Hence, it is clear that private investments (including PSUs) grew only 2.6% YoY in 1QFY24, marking the slowest growth in three years.

Using data on stamp duty & registration fees collected by states, cement production and steel consumption, we have prepared some estimates on household investment. Our calculations suggest that it grew decently by ~13% YoY during the quarter. It means that corporate investments declined 6.2% YoY in 1QFY24, marking the second consecutive fall and the worst contraction in three years (*Exhibit 1*).

Within private sector, corporate investments declined 6.2% YoY in 1QFY24, marking the second consecutive fall

It also suggests that corporate investments fell further to 12.3% of GDP in 1QFY24, the lowest in the first quarter of any year in the past decade. Government investments, on the other hand, were exceptionally high at 5% of GDP and household investments were also strong (*Exhibit 2*).

Exhibit 1: Corporate investments are estimated to have declined for the second consecutive quarter in 1QFY24...

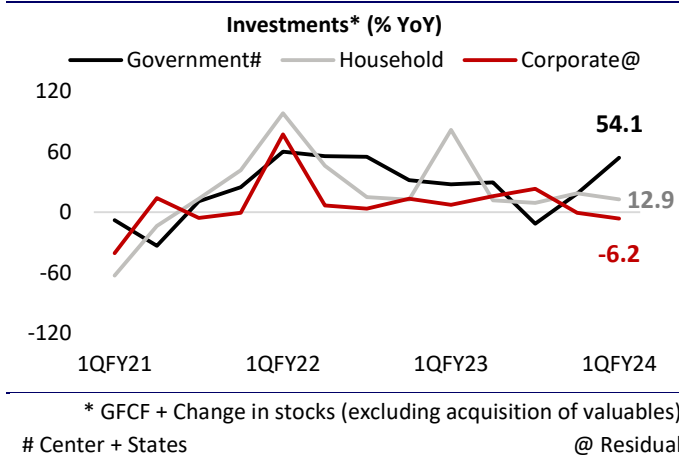
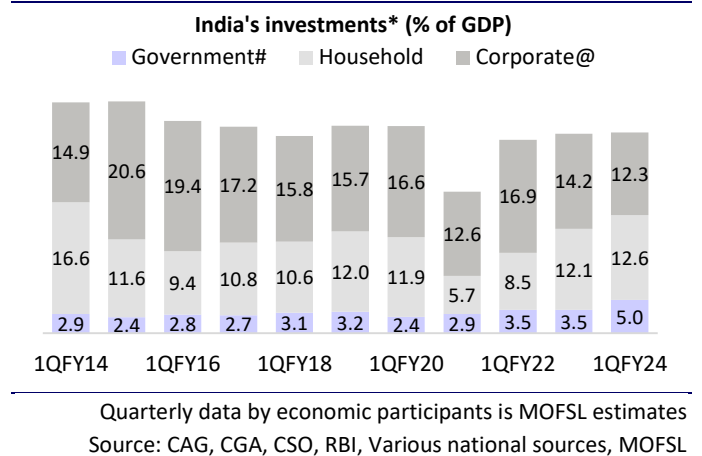


Exhibit 2: ...though government investments were exceptionally high at 5% of GDP during the quarter

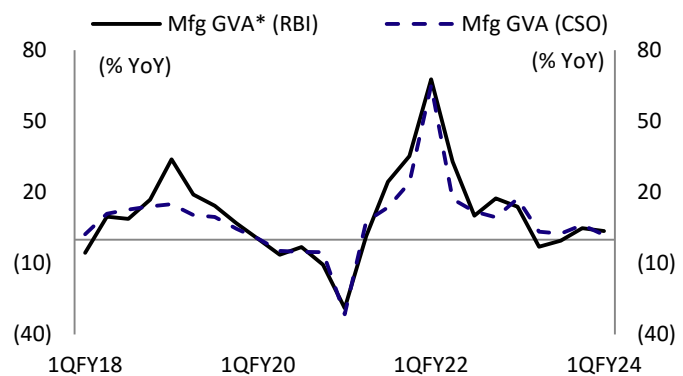


2) Manufacturing GVA growth disappointing but not unexplainable: Although headline real GVA growth was in line with the market consensus, one of the biggest disappointments was weaker-than-expected growth in the manufacturing sector. Against our forecast of 7.5% YoY, real manufacturing activities grew just 4.7% YoY, similar to that in 4QFY23.

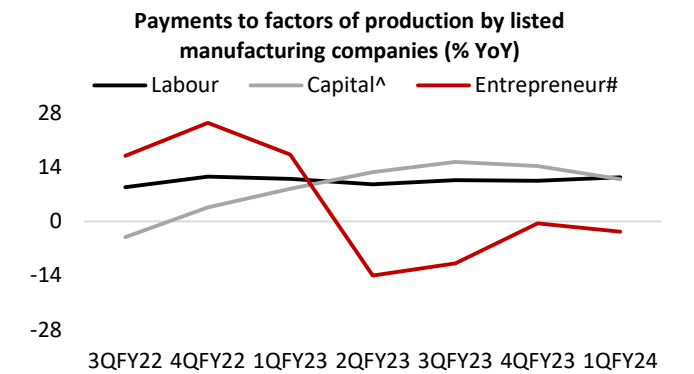
GVA of listed manufacturing companies grew 3.5% YoY in 1QFY24, slower than 4.8%/13.8% in 4Q/1QFY23

For quarterly GVA data, listed corporate data is a crucial input. Just a day prior to the GDP release, the RBI released the data on the performance of the private corporate business sector during 1QFY24. Based on some 1,700 odd non-government manufacturing listed companies, an estimation of gross value addition suggests that it grew just 3.5% YoY in 1QFY24, slower than 4.8%/13.8% in 4Q/1QFY23 (*Exhibit 3*). According to the CSO, nominal growth in manufacturing GVA was just 2% YoY in 1QFY24 vs. 6.1%/17.2% in 4Q/1QFY23.

A look at payments to various factors of production (that together make up GVA) confirms that while remuneration to entrepreneurs (profits after taxes, PAT) declined for the fourth successive quarter and payments to capital (depreciation and interest payments) grew at the slowest pace in four quarters. Only staff costs (remuneration to labor) grew 11.4% YoY in 1QFY24, marking the highest growth in five quarters (*Exhibit 4*). In short, weaker-than-expected growth in the manufacturing sector was disappointing but not unexplainable.

Exhibit 3: Weak manufacturing GVA is in line with weak growth in the listed manufacturing companies

* Estimated using the payments to factors of production

Exhibit 4: Payments to entrepreneurs fell last quarter, while they grew for labor & capital

^ Interest + depreciation

Profits before taxes (PBT)

Source: CSO, RBI, MOFSL

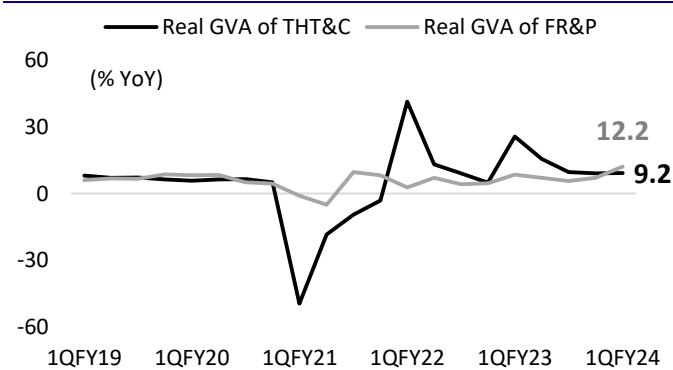
- 3) Services sector, however, grew faster, largely led by listed corporate sector:** In stark contrast to the industrial/manufacturing sector, the services sector posted faster-than-expected growth, helping GVA/GDP growth to match the market consensus. However, just like the manufacturing sector, listed corporate data plays an important input in quarterly services GVA. Importantly, the services sector is more pervasive and thus, listed data is not as closely related to national GVA data, as in the case of the manufacturing sector.

Still, it does give us an idea directionally. Within services, there were two different trends – the real growth in ‘trade, hotels, transport & communication’ (THT&C) was slower than the forecast, while ‘financial, real estate & professional services (FR&P)’ grew at the fastest pace in seven years and marked the first double-digit growth in 27 quarters (*Exhibit 5*).

The RBI’s data on the non-government non-financial (NGNF) listed corporate sector showed that GVA of ‘hotels & restaurants’ grew strongly, while that of ‘wholesale & retail trade’ was weak in 1QFY24.

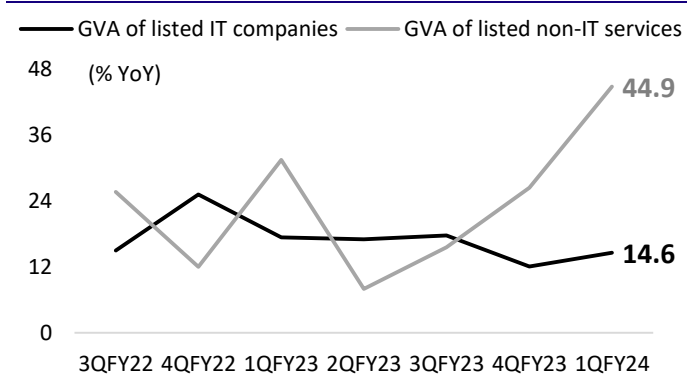
GVA of non-IT services sector surged rapidly in 1QFY24, while IT services posted decent growth during the quarter

Broadly speaking, GVA of the non-IT services sector surged rapidly in 1QFY24, while IT services posted decent growth during the quarter (*Exhibit 6*). If so, it is possible that the real estate sector was the primary contributor to the positive surprise in the FR&P sector. Additionally, due to some announcements in the Union Budget 2023-24, there were some changes in the tax structure of the insurance sector and debt mutual funds, which may have also contributed to better growth in some parts of the financial sector in 1QFY24.

Exhibit 5: Services sector grew much faster than expected in 1QFY24

Decline in GFCE vs. higher growth in PADOS suggests improvement in the informal services sector

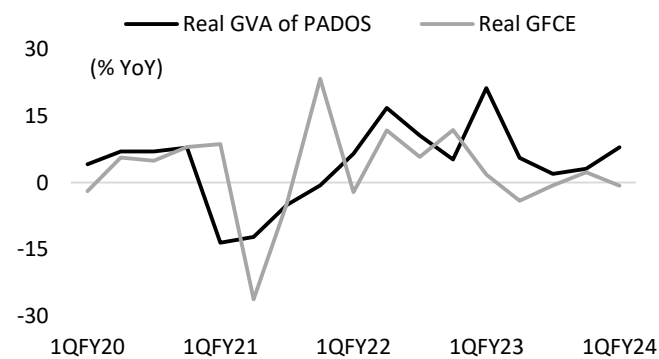
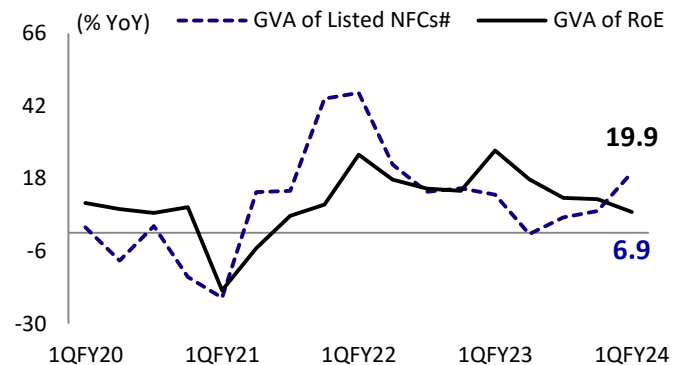
GVA of listed companies grew 20% YoY in 1QFY24 v/s 7% growth in rest of the economy (RoE)

Exhibit 6: Non-IT listed services grew much faster than listed IT services during the quarter

Source: CSO, RBI, MOFSL

- 4) Unlike in FY23, there were mixed signals about whether the informal and/or the unorganized sector did well in 1QFY24:** One of the key themes we have highlighted many times in our previous notes is that the informal/ unorganized and smaller players were disproportionately hurt by the pandemic, and their revival was also not visible as of FY22 end. This, however, reversed in the four quarters of FY23. From GDP data, a look at 'public administration, defence & other services (PADOS)' gives us some idea about growth trends in the informal sector. PADOS includes government spending and other services, such as education, health, and recreation & personal services, which are dominated by the informal sector. Against our forecast of 7%, PADOS grew 7.9% YoY in 1QFY24 and the fact that real government final consumption expenditure (GFCE) contracted 0.7% YoY during the quarter gave us some hope that the improvement in the informal services sector (i.e., other services) might have continued. This, however, was not supported by other evidence (*Exhibit 7*).

Using the RBI's data on the NGNF listed corporate sector and including non-financial government enterprises within BSE500, we prepare some estimates of the non-financial listed sector. Based on our calculations, GVA of listed companies grew at a seven-quarter high rate of 20% YoY during the quarter, primarily led by the services sector. If so, 8% nominal GVA growth implies that the rest of the economy posted a meagre growth of 7%, the lowest in 10 quarters. In other words, the trend of faster growth in the rest of the economy relative to the listed sector in the four quarters of FY23 appears to have reversed in 1QFY24 (*Exhibit 8*). This provides mixed signals about whether the large informal sector in India continued its improvement in 1QFY24.

Exhibit 7: Combination of strong growth in PADOS and fall in GFCE suggest better growth in the informal sector...**Exhibit 8: ...although faster growth in listed companies hints the opposite**

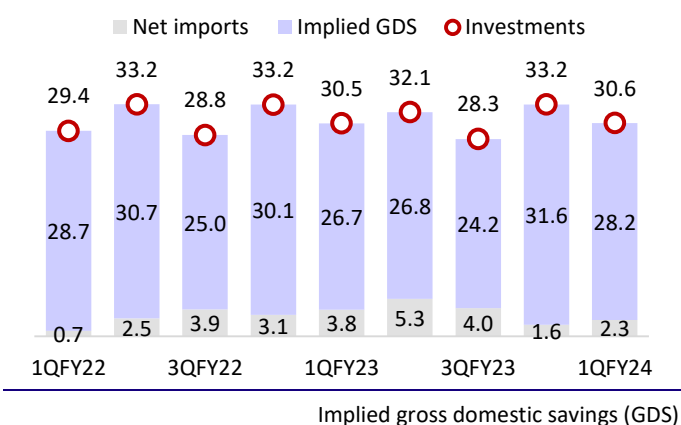
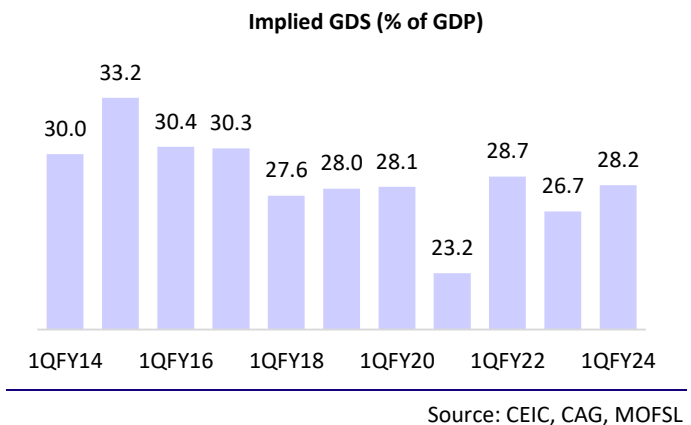
Based on the payments to factors of production
RoE = Rest of the economy
Source: CSO, RBI, MOFSL

India's implied gross domestic savings are estimated at 28.2% of GDP in 1QFY24, compared to 26.7% of GDP a year ago

5) India's domestic savings improved in 1QFY24; maybe led by non-household

sector: India's investment rate (including acquisition of valuables) was 30.6% of GDP in 1QFY24, broadly unchanged from 30.5% a year ago in 1QFY23. At the same time, India's net imports (of goods & services) narrowed to 2.3% of GDP from 3.8% of GDP. If so, India's implied gross domestic savings (GDS) are estimated at 28.2% of GDP in 1QFY24, compared to 26.7% of GDP a year ago (*Exhibit 9*). Please note that ideally we should adjust total investments with the current account balance, data for which is not yet available.

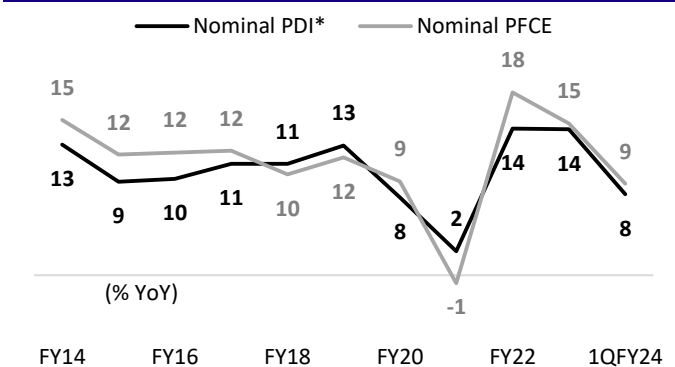
A comparison of India's gross savings in the first quarter of the past 10 years confirms that barring 1QFY22 (just coming out of the pandemic), an estimated gross savings of 28.2% of GDP in 1QFY24 were the highest in the past seven years (*Exhibit 10*).

Exhibit 9: India's gross savings estimated at 28.2% of GDP in 1QFY24...**Exhibit 10: ...marking the highest level in 1Q during the past seven years (except 1QFY22)**

Another interesting feature is that it appears that the surge in gross savings is led by the non-household sector, probably driven by the government sector. Compared to the nominal GDP growth of 8% YoY, private final consumption expenditure (PFCE) increased 9.1% YoY in 1QFY24, indicating that household total savings may have fallen during the quarter (*Exhibit 11*). It is possible that the very low fiscal deficit in the first quarter helped push India's savings higher, with or without the help of the

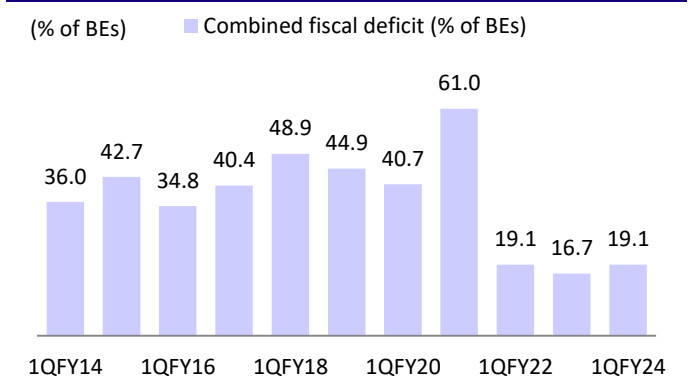
corporate sector (*Exhibit 12*). As a corollary, since we know that household investments grew decently in 1QFY24, it implies that household net financial savings (NFS) fell during the quarter. It must be noted that one should not give too much attention to quarterly numbers, especially in savings and investments, due to seasonality and other issues. Annual numbers are better suited to drawing robust conclusions.

Exhibit 11: Higher growth in PFCE vs. GDP/PDI suggests that household savings may have weakened in 1QFY24...



* MOFSL estimates for FY23 and same as GDP growth in 1QFY24

Exhibit 12: ...though lower fiscal deficit may have supported higher gross savings during the quarter



Source: CEIC, CAG, MOFSL

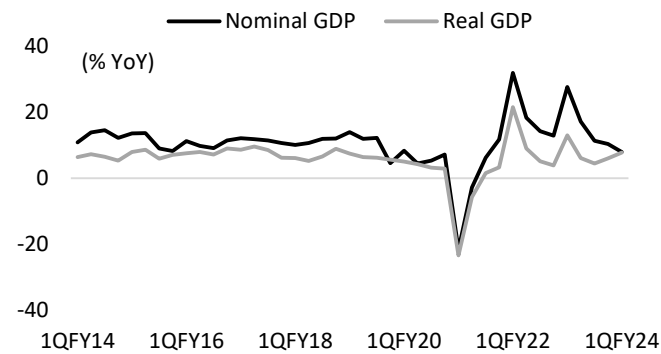
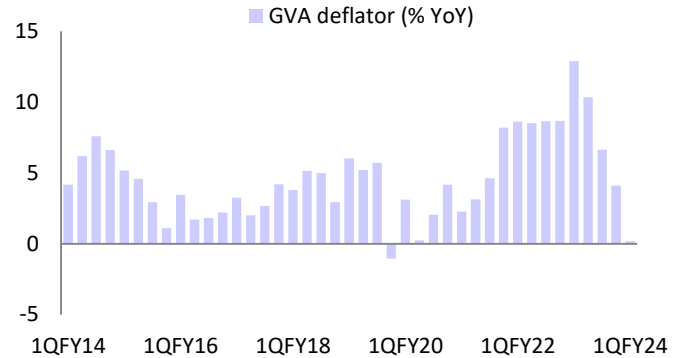
6) Not too different from real GDP growth, nominal GDP grew 8% YoY in 1QFY24:

India's real GDP grew 7.8% YoY in 1QFY24, similar to the market consensus but slightly lower than the RBI's forecast of 8%. At the same time, nominal GDP increased only 8% YoY during the quarter, which probably did not garner as much attention (*Exhibit 13*). Barring a short episode in FY01-03 and FY20-FY21, the Indian economy has not witnessed single-digit nominal GDP growth for the past four decades.

Consensus on WPI-inflation has come down from as high as 2.6% in Apr'23 to as low as 0% in Aug'23

While we have forecast single-digit nominal GDP growth in FY24, the market consensus seems to be adjusting and falling in line with our expectations. One of the reasons for such weak nominal growth is low inflation measured by the wholesale price index (WPI). While we had expected 0.6% growth in WPI, the consensus, as per the RBI Survey of professional forecasts, has come down from as high as 2.6% in the Apr'23 edition (81st round) to as low as 0% in the Aug'23 edition (83rd round). With CPI inflation expected to be 5-5.5% this year, GDP deflator is likely to be ~2%, implying ~8% nominal growth with ~6% real growth.

Although real growth matters, nominal growth is also important since it affects a number of other indicators such as corporate sales and profits, government tax receipts, exports and imports, and bank credit growth. We had been [highlighting](#) this risk since the end of 2022 and had [discussed](#) the likely implications of slower nominal growth.

Exhibit 13: Nominal GDP grew just 8% YoY in 1QFY24...**Exhibit 14: ...as GDP deflator was only 0.2% YoY**

Source: CSO, CEIC, MOFSL

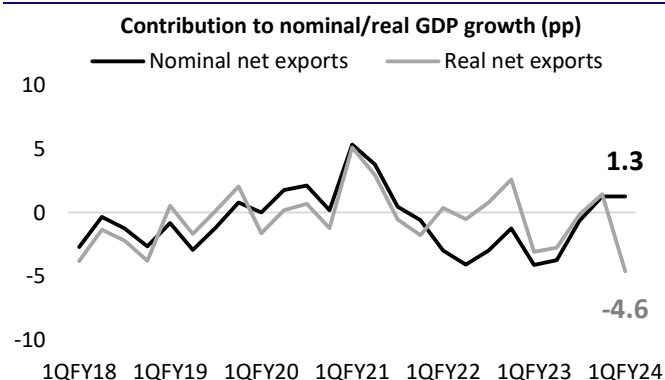
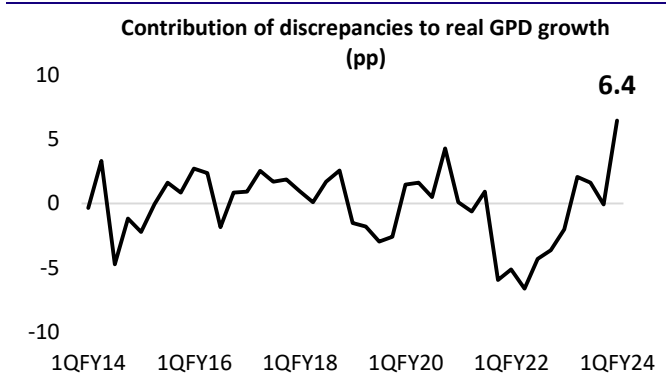
Despite narrowing nominal net imports, real net imports deducted as much as 4.6pp from real GDP growth in 1QFY24, the highest drag on record since FY13

7) Expenditure details very unconvincing; net imports posted highest drag on GDP growth since the series began in FY12 and discrepancies added >6pp to real GDP growth: A look at expenditure details of India's 1QFY24 GDP highlights some trends, which are very hard to make sense of. There are two trends in particular. First, notwithstanding the fall in nominal net imports to 2.3% of GDP in 1QFY24 from 3.8% in 1QFY23, real net imports worsened materially. We have already highlighted this fact in our earlier analysis, wherein we found that the improvement in real external trade was not as strong as the nominal data suggested. However, the extent of deterioration in real net imports suggested by GDP data was shocking.

According to CSO, real exports contracted 7.7% YoY in 1QFY24, while real imports grew 10.1% during the quarter. Consequently, real net imports deducted as much as 4.6pp from real GDP growth, the highest drag on record since FY13 (*Exhibit 15*).

Discrepancies added as much as 6.4pp to real GDP growth in 1QFY24

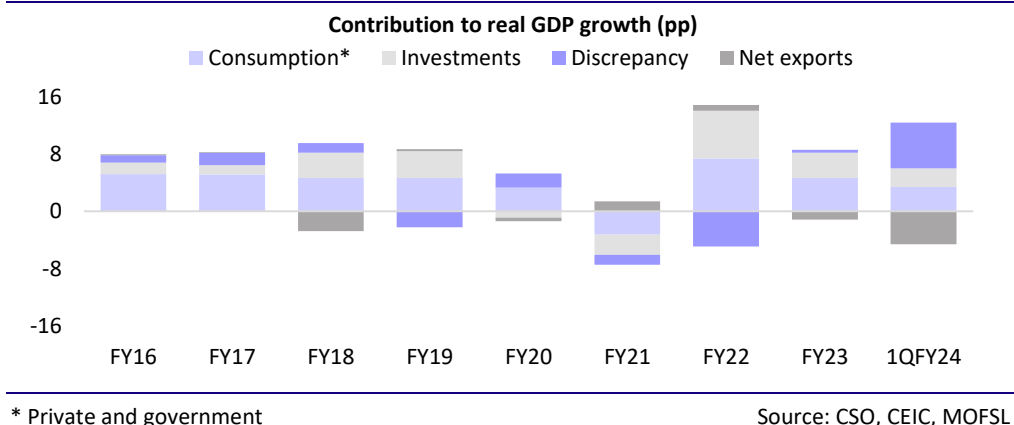
Second, discrepancies, which are simply a residual of nominal GDP (estimated from robust GVA estimation and net indirect taxes) and its major components (consumption, investments and external trade) estimated, added as much as 6.4pp to real GDP growth in 1QFY24 (*Exhibit 16*). This was the highest positive contribution from discrepancies to real GDP growth since the series began in FY13.

Exhibit 15: Nominal net imports narrowed but real net imports were a huge drag on India's real GDP growth**Exhibit 16: Discrepancies added 6.4pp to real GDP growth in 1QFY24, the highest contribution on record**

Source: CSO, CEIC, MOFSL

It is important to remember that higher (or lower) discrepancies do not raise doubts over the credibility of GDP estimates because the headline GDP numbers are derived from the robust headline GVA and net indirect taxes. However, it reflects a difficult (or poor) estimation of consumption and investments in the economy. Notably, the share of discrepancies has increased sharply in the post-pandemic period, especially in FY22. Therefore, a higher contribution from discrepancies suggests that there could be upward revision in either consumption or investments in the future, rather than lower GDP growth (*Exhibit 17*).

Exhibit 17: High discrepancies indicate upward revisions in consumption/investments in the future



Overall, although headline GVA/GDP growth was great, details showed some improvements and some concerns.

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	> - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures:

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf>

Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

MOFSL, its associates, Research Analyst or their relatives may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst or their relatives may have actual beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance. MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may have any other potential conflict of interests at the time of publication of the research report or at the time of public appearance, however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

In the past 12 months, MOFSL or any of its associates may have:

- received any compensation/other benefits from the subject company of this report
- managed or co-managed public offering of securities from subject company of this research report,
- received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
- received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.

- MOFSL and its associates have not received any compensation or other benefits from the subject company or third party in connection with the research report.
- Subject Company may have been a client of MOFSL or its associates during twelve months preceding the date of distribution of the research report.
- Research Analyst may have served as director/officer/employee in the subject company.
- MOFSL and research analyst may engage in market making activity for the subject company.

MOFSL and its associate company(ies), and Research Analyst and their relatives from time to time may have:

a) a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein.

(b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

To enhance transparency, MOFSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the report. MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Disclosure of Interest Statement

Analyst ownership of the stock

No

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Financial Services Limited (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

MOTILAL Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore, as per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dp@motilaloswal.com.