MOTILAL OSWAL

ECOSCOPE
The Economy Observer

Budget 2022 preview: Consolidation to continue

Could budget fiscal deficit ~6% of GDP in FY23E

- **The Government of India (GoI) will present Union Budget 2022–23 on 1st Feb'22. Considering provisional data for the first eight months (Apr-Nov'21), total receipts of the GoI could exceed Budget Estimates (BEs) by INR2.2t in FY22E. So, in order to keep its fiscal deficit unchanged at INR15.1t, the GoI will have to spend INR16.3t in the last trimester of FY22E, slightly higher than INR16t spent during the corresponding period of last year, which was almost double of that spent during the corresponding period in FY20. If so, the Centre's total spending will grow 5.4% in FY22E, better than the budgeted growth of 1%, but still the lowest in 16 years. Also, because of a higher denominator (nominal GDP), the fiscal deficit will be 6.5% of GDP in FY22E v/s the target of 6.8% of GDP.**
- **Revenue spending may grow 2.3% YoY to INR31.6t in FY22E (similar to the target, including supplementary grants), while achieving its FY22 capex target (of INR6.2t, including supplementary grants) seems a tall ask. In order to meet its capex target, the GoI has to spend INR3.5t in the last trimester of FY22, which is similar to its total capex in FY20 and double of INR1.8t in the corresponding period of FY21. We do not see it meeting its FY22 capex target.**
- **Following a robust 30% growth in FY22E, total receipts are expected to grow 13.4% YoY in FY23E, assuming a gross tax buoyancy of 1.1x, similar to that in the pre-COVID period. If total spending rises by 9% in FY23E, the gross fiscal deficit of the Centre would be INR15.4t, or 6% of GDP. This implies gross market borrowings of INR12.5t in FY23E v/s INR10.5t in FY22E, implying net market borrowings of INR8.3t, financing 54% of fiscal deficit.**
- **Besides these all-important macro numbers, we will closely track the upcoming Budget for any announcements in three areas: 1) some self-liquidating temporary personal job/income supporting measures to boost private consumption in the immediate future, 2) some measures to support the rural economy, amid its weakening and the impending state elections, and 3) any measures to revive the Residential Real Estate sector would be welcome.**

The benchmark 10-year bond yield has crossed 6.6% for the first time since Jan'20 (pre-COVID period). This is the context in which Union Budget 2022-23 will be presented in a fortnight on 1st Feb'22. We expect the GoI to keep its FY22E fiscal deficit unchanged at INR15.1t (or 6.5% of GDP because of a higher denominator, nominal GDP), and announce FY23E deficit at INR15.4t, or 6% of GDP. Anything less than 5.8% of GDP for FY23 may help bring down yields and anything over 6.2% could push them higher.

Total GoI receipts could grow 30.2% YoY to INR22t in FY22E and rise to a 11-year high of 9.5% of GDP

What could the FY22 final numbers look like? Before we present our projections for FY23, it is very important to get a handle of FY22 numbers. As of Nov'21, total receipts were 69.8% of BEs, a record high in the past 25 years for which monthly data is available. Tax receipts have been really great in the first eight months of FY22, of which direct taxes – led by corporate income taxes – have performed exceptionally well. Our calculations suggest that gross taxes could exceed BEs by more than INR4t in FY22E, which can more than offset the large shortfall of ~INR1.5t in disinvestments (assuming LIC and BPCL divestment is postponed to FY23). Total receipts of the GoI could grow 30% YoY to INR22t in FY22E and touch an 11-year high of 9.5% of GDP. Total receipts, thus, is expected to exceed BEs by INR2.2t in FY22E *(please refer Exhibit 1)*.

Nikhil Gupta – Research Analyst (Nikhil.Gupta@MotilalOswal.com)
Yaswi Agarwal – Research Analyst (Yaswi.Agarwal@motilaloswal.com)

GoI will have to spend INR37t in FY22E, of which ~56% has already been spent up to Nov'21

In order to keep its fiscal deficit unchanged at INR15.1t, the GoI will have to spend INR37t in FY22E, of which only ~56% (or INR20.7t) has already been spent up to Nov'21. It implies that INR16.3t will be expended in the last trimester of FY22E, slightly higher than INR16t spent during the corresponding period of last year, which was almost double of that spent during the corresponding period in FY20. If so, the Centre's total spending will grow 5.4% in FY22E, better than the budgeted growth of 1%, but still the lowest in 16 years.

Exhibit 1: What would the fiscal math look like?

	FY20	FY21	FY22BEs	Apr-Nov'21	FY22F		FY23F	
	INR t	INR t	INR t	% of BEs	INR t	YoY (%)	INR t	YoY (%)
Total receipts	**17.5**	**16.9**	**19.8**	**69.8**	**21.9**	**29.9**	**24.9**	**13.4**
Revenue receipts	16.8	16.3	17.9	75.9	21.5	31.7	23.5	9.3
Net taxes	13.5	14.2	15.5	73.5	18.4	29.0	20.2	10.0
Gross taxes	20.1	20.2	22.2	69.5	26.3	30.1	29.8	13.2
Direct taxes	10.4	9.3	11.1	63.1	13.5	45.8	15.5	14.5
Corporation taxes	5.6	4.6	5.5	64.6	7.3	60.0	8.4	15.0
Income taxes	4.8	4.7	5.6	61.7	6.2	32.0	7.1	14.0
Indirect taxes	9.7	11.0	11.1	75.9	12.8	16.8	14.3	11.8
Goods & Services Tax	6.0	5.5	6.3	72.1	7.0	27.0	7.9	13.0
Excise duties	2.4	3.9	3.4	72.2	3.9	0.0	4.3	10.0
Customs	1.1	1.3	1.4	92.5	1.7	25.0	2.0	12.0
Less: Devolution to states	6.5	6.0	6.7	60.5	7.9	32.9	9.5	20.7
Non-tax revenue	3.3	2.1	2.4	91.8	3.1	50.5	3.3	5.0
Non-debt capital receipts	0.7	0.6	1.9	11.0	0.5	-21.9	1.4	211.1
Disinvestment	0.5	0.3	1.8	5.4	0.3	-24.0	1.2	380.0
Total expenditure	**26.9**	**35.1**	**34.8**	**59.6**	**37.0**	**5.4**	**40.3**	**8.9**
Core expenditure#	18.1	20.9	23.0	65.8	23.8	13.7	27.4	15.4
Revenue expenditure	23.5	30.9	29.3	61.5	31.6	2.3	33.8	7.0
Interest payments	6.1	6.8	8.1	56.9	8.0	18.7	8.9	10.0
Subsidies	2.6	7.4	3.7	68.5	5.2	-30.3	4.0	-22.5
Defense	2.1	2.1	2.1	77.2	2.2	5.5	2.4	10.0
Pensions	1.7	1.9	1.7	66.9	1.7	-10.0	1.9	8.0
Grants to states/UTs	5.3	5.7	6.2	...	6.4	13.9	7.2	12.0
Non-defense pay	2.3	2.0	2.5	...	2.5	20.8	2.8	12.0
Other	3.4	5.0	5.0	...	5.5	10.7	6.6	20.6
Capital expenditure	3.4	4.2	5.5	49.4	5.5	28.3	6.5	20.0
Fiscal deficit (FD)	**9.4**	**18.2**	**15.1**	**46.2**	**15.1**	**...**	**15.4**	**...**
Fiscal deficit (as a percentage of GDP)	**4.6**	**9.2**	**6.8**	**...**	**6.5**	**...**	**6.0**	**...**
Revenue deficit	**6.7**	**14.5**	**11.4**	**38.8**	**10.1**	**...**	**10.3**	**...**
Revenue deficit (as a percentage of GDP)	**3.3**	**7.4**	**5.1**	**...**	**4.4**	**...**	**4.0**	**...**
Gross borrowings*	**7.1**	**12.6**	**12.1**	**...**	**10.5**	**-16.9**	**12.5**	**19.4**
Net market borrowings*	**4.7**	**10.3**	**9.2**	**56.0**	**7.7**	**-25.9**	**8.3**	**7.9**
Net market borrowings (as a percentage of FD)	**50.6**	**56.7**	**61.4**	**77.6**	**50.8**	**...**	**53.6**	**...**
Nominal GDP	**203.5**	**197.5**	**222.9**		**230.5**		**255.1**	

F = Forecast

#Total spending excluding interest payments and major subsidies

* Excluding INR1.59t borrowed y the center on account of 'Loans to States in lieu of GST Compensation shortfall'

Source: Union Budget documents, Controller General of Accounts (CGA), Central Statistics Office (CSO), RBI, MOFSL

To meet its capex target, GoI has to spend INR3.5t in the last trimester of FY22E, same as total capex in FY20 and double of INR1.8t in the corresponding period of FY21

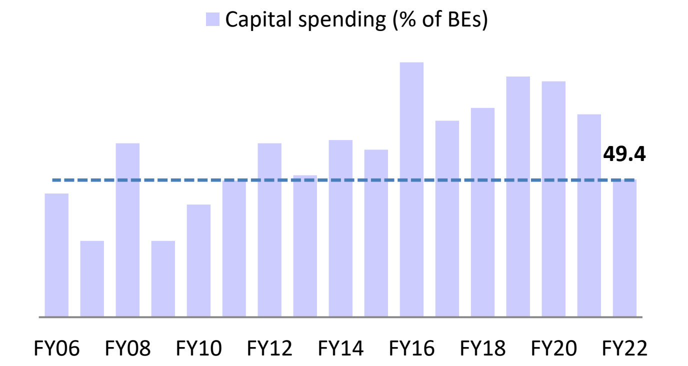
Achieving its FY22 capex target, however, seems a tall ask: Considering buoyant tax collections, lower spending growth in the first eight months of FY22 is puzzling. Within total spending, while revenue spending was 61.5% of BEs, it was less than half for capital spending *(Exhibit 2)* as of Nov'21. The GoI has announced an equity infusion and loans and advances totaling INR647b to Air India and its holding company, implying a capex target of INR6.2t (including supplementary grants). In order to meet its (revised) target, the GoI has to spend INR3.5t (or 56% of target) in the last trimester of FY22E, which is similar to its total capex in FY20 and double of INR1.8t in the corresponding period of FY21. On an average, the GoI has spent ~40% of its annual capital spending in the last trimester for the past many years.

Total capital spending of the Centre has two parts: capital expenditure (capex) and loans and advances (given to states, UTs, and various other agencies for capex purposes). The former counts as the Center's investments and the latter will be counted as the investments (or something else based on its utilization) of the recipient entity. Although the GoI reported a capital spending of INR4.2t in FY21, up 27% YoY to a 13-year high of 2.2% of GDP, capex was up just 6.7% at INR3.1t, or 1.6% of GDP, the same as in previous years. The details were discussed here.

Growth in capex will have to be 172% YoY in the Dec'21-Mar'22 period, which is why meeting the FY22 target is a tall ask, though not impossible

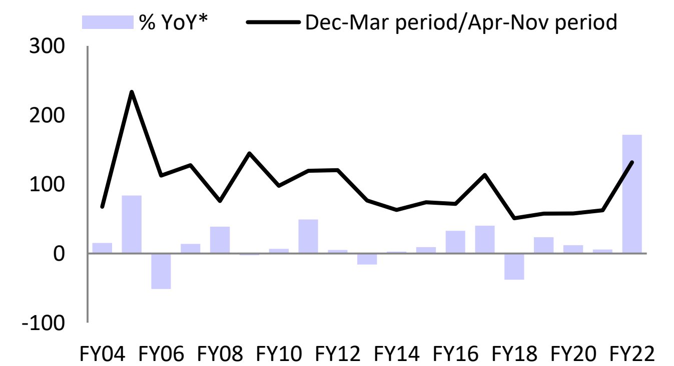
For FY22, the GoI budgeted a growth of 30%/63% in capital spending/capex, but has spent less than 50% each as of Nov'21. If achieved, capex will rise sharply to 2.3% of GDP. However, it implies that growth in capex will have to be 172% YoY in the Dec'21-Mar'22 period as compared to the highest growth of 40% witnessed in the corresponding period of the past decade *(Exhibit 3)*. This is why meeting its FY22 capex target seems like a really tall ask. We believe there could be a shortfall of INR800b in its FY22E capex target.

Exhibit 2: The government has spent only 49% of budgeted capital spending in the first eight months of FY22…



Data for the April-November period for all the years

Exhibit 3: …which makes achieving its FY22 capex (revised) target a really tall ask



*Based on data for the December-March period for all the years

Source: CGA, Union Budget documents, CEIC, MOFSL

What could FY23BEs look like?

Following a robust 30% growth in FY22E, total receipts are expected to grow 13.4% YoY in FY23E, assuming a gross tax buoyancy of 1.1x, similar to that in the pre-COVID period. If total spending rises by 9% in FY23E, the gross fiscal deficit of the Centre would be INR15.4t, or 6% of GDP. This implies gross market borrowings of INR12.5t in FY23E v/s INR10.5t in FY22E. Net borrowings will remain unchanged at INR8.3t, financing 54% of the FY23 fiscal deficit.

If total spending rises by 9% in FY23E, the gross fiscal deficit of the Centre would be INR15.4t, or 6% of GDP, implying gross market borrowings of INR13.5t in FY23E v/s INR12t in FY22E

The capex target for FY23 will be based on how well the same was achieved in FY22. If the FY22 (revised) target is met, the capex growth target for FY23E could be 10%, or 2.6% of GDP. In contrast, if there is a shortfall of INR800b in FY22E, as per our expectations, the FY23E capex growth target could 20%. In any case, as **noted** earlier, the Center's capex is ~7% of total investments in the country, reflecting its limited role in reviving the investment cycle in the economy.

Besides these all important macro numbers, we would closely track the upcoming Budget for any announcements in three areas:

1) Some self-liquidating temporary personal job/income supporting measures to boost private consumption in the immediate future:

India's **household sector** has suffered immensely due to the COVID-19 pandemic. As a result, private consumption growth has been anemic in the past two years. Prior to the COVID-19 outbreak, private consumption, along with government spending, was the primary driver of GDP growth in the economy. In contrast to most rich nations, due to the strict physical lockdowns and limited fiscal stimulus, there are no **excess household savings** in India, just like Indonesia. While cumulative excess household savings amounted to anywhere between 10% and 20% of income, it was largely absent in India and Indonesia for the period ending Sep'21 *(Exhibit 4)*. Due to high cumulative excess savings in advanced economies, consumption growth there is very strong, pushing real GDP growth higher, along with inflationary fears. In contrast, the lack of excess savings is critical to understand the weak financial position of the Indian household sector, which raises serious doubts over the consumption-driven growth in the post-COVID era.

Any scheme to support jobs and/or the income prospects of the self-employed and/or the casual workforce would be highly appreciated

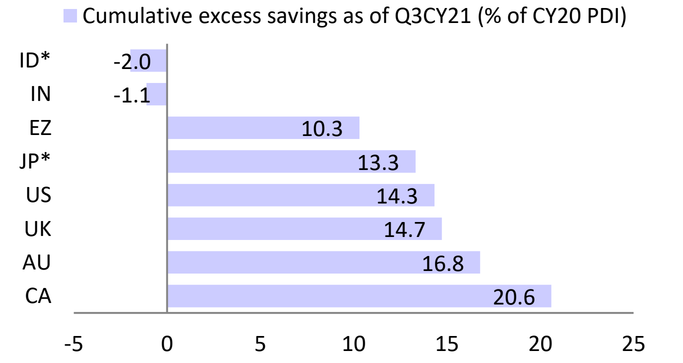
With this background, we would welcome some self-liquidating temporary measures to boost household income of the lower section of the pyramid. These measures do not have to be related to tax exemptions/relaxations. Instead, any scheme to support jobs and/or the income prospects of the self-employed and/or the casual workforce would be highly appreciated. According to the most recently available data, ~23% of India's workforce earns a regular wage or has a salaried job, while the remaining is classified as 'vulnerable employment' *(Exhibit 5)*.

One may argue that it is too late for such schemes. Demand for work under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) remains strong. The share of agricultural activity in India's workforce has increased, as per the recently available Periodic Labor Force Survey (PLFS) for the period ending Jun'20. This confirms that India's labor market was severely hit during the pandemic and remains stressed even now. The absence of any such measures during the past two years raises serious doubts over their relevance from the government's point of view. However, continued weak consumption growth may nudge the leaders to finally do something about it.

We recommend some self-liquidating support for the lower strata of the society

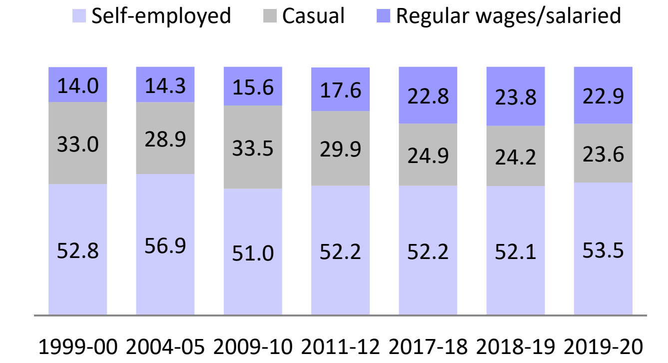
It is widely recognized that just like large, organized, and listed companies have performed much better than the unlisted corporate sector, the household sector has also witnessed a similar K-shaped recovery. The top layer of the consumer segment has weathered the pandemic much better than the bottom sections. Hence, we recommend some self-liquidating support for the lower strata of the society. We are also cognizant about the likely distortion of such measures if they sustain for long, and so recommend that such measures remain temporary and come with an expiry date.

Exhibit 4: Cumulative excess savings amounted to 10-20% of PDI in rich nations, though it is absent in India



*Data as of 2QCY21

Exhibit 5: Regular wages/salaried workers account for less than a quarter of the total workforce (%)



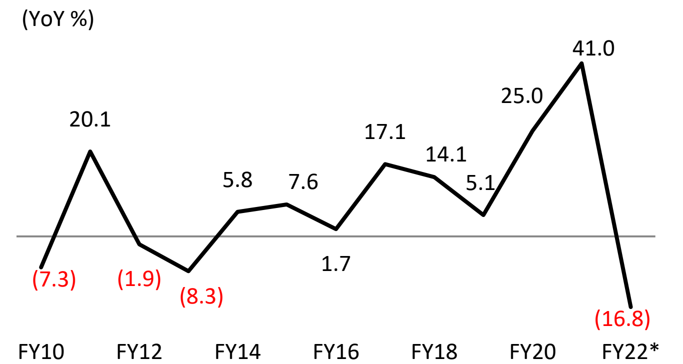
Source: RBI, various national sources, GoI, CEIC, MOFSL

The government's spending on the rural sector has declined by 17% YoY in Apr-Nov'21 due to which its share fell to 11.9% during the period

2) GoI may announce some measures to support the rural economy amid its weakening and impending state elections:

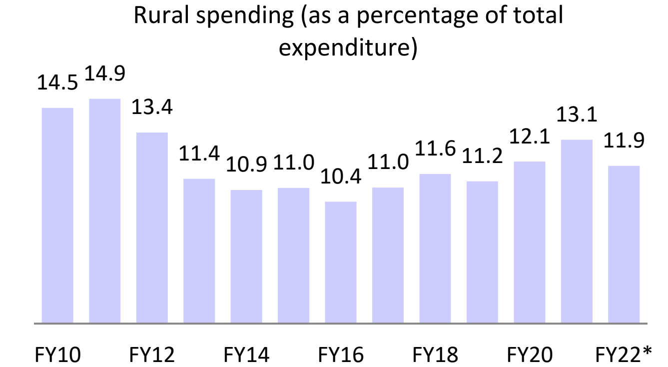
In the last two years, the Centre's spending on the rural sector (comprising the Ministry of Agriculture and Farmers' Welfare, Department of Fertilizers, Department of Drinking Water and Sanitation, Ministry of Panchayati Raj, and Ministry of Rural Development) has increased strongly, taking the share of rural spending to 13.1% of total expenditure in FY21 from 11.2% in FY19. In comparison, the government's spending on the rural sector has declined by 17% YoY in Apr-Nov'21 due to which its share fell to 11.9% during the period *(Exhibits 6 and 7)*. The allocation under MGNREGA scheme has been increased twice in FY22 (to INR730b in Jul'21 and then to INR950b in Dec'21) from the BEs of INR615b announced in Feb'21. The Center has released INR796b as of 18th Jan'22.

Exhibit 6: Government's spending on the rural sector weakens in FY22* after two strong years…



*Data for Apr-Nov'21

Exhibit 7: …due to which its share has fallen to 12% of total expenditure from 13%

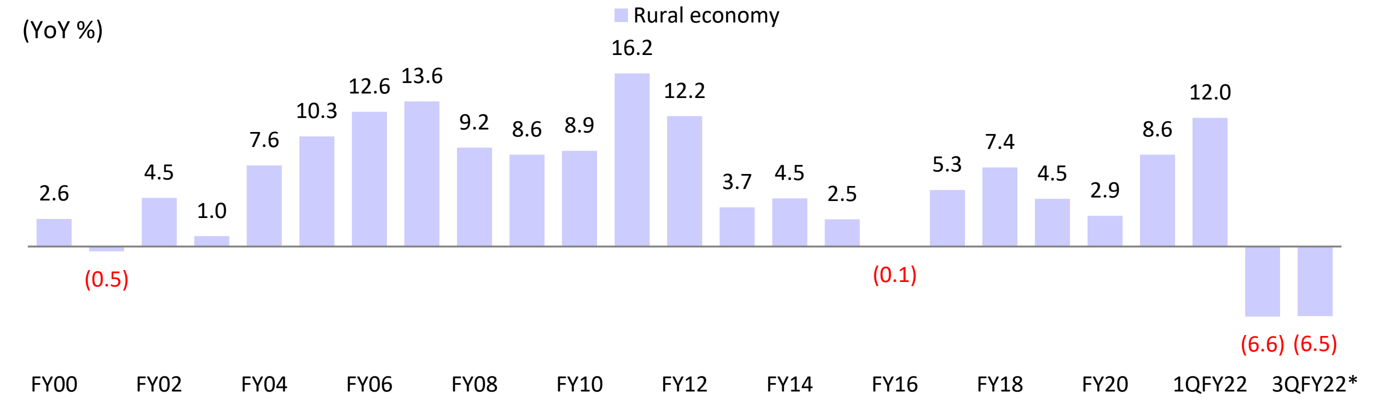


Source: Various national sources, CEIC, MOFSL

Recent data suggest that the deterioration continued in Oct-Nov'21, for which recent data on these indicators are available

Although the government's rural spending has declined, natural factors such as monsoons and water reservoir levels have been comfortable due to which the Rabi sowing has been very good in FY22. Nevertheless, the terms of trade for the agriculture sector has deteriorated to the worst seen since the mid-1990s due to rising input costs and slower price inflation in farm output. It is not surprising then that a compilation of various indicators suggests a sharp decline in the rural economy since mid-CY21 *(Exhibit 8)*. We had highlighted rural weakness in our recently released **note** in Nov'21. Recent data suggest that the deterioration continued in Oct-Nov'21, for which recent data on these indicators are available.

Exhibit 8: Rural economy weakens significantly since mid-CY21



List of indicators: Agricultural wages, rural non-farm wages, two-wheeler sales, farm terms of trade, tractor sales, agricultural exports, fertilizer sales, agricultural credit, IIP: food products, water reservoir level, Central government's rural spending

*As of Nov'21

Source: Various national sources, CEIC, MOFSL

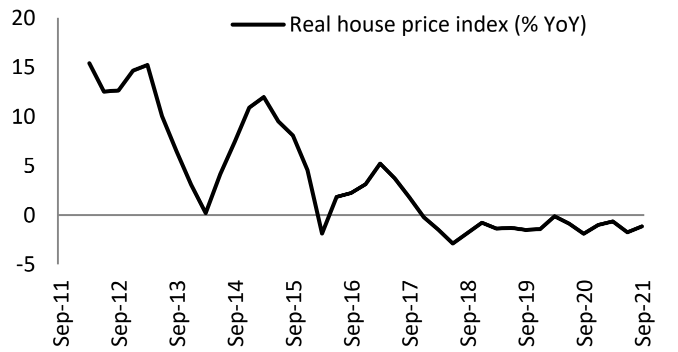
Although a part of this weakness is certainly due to the base effect, the upcoming assembly elections in five states, including Uttar Pradesh and Punjab, suggest that the government may be tempted to support the frail rural economy. Therefore, we would keenly monitor government initiatives toward the rural sector in Union Budget CY22-23.

3) Any measures to revive the Residential Real Estate sector would be welcome: It is well acknowledged that the Residential Construction sector is extremely important for the Indian economy and was at the core of India's economic slowdown. With the outbreak of COVID-19, it was anticipated that the Construction sector would remain one of the laggards. However, recovery in the sector has been much better than anticipated in 2HFY21. The same has continued in FY22 as well.

Stamp duty and registration charges collected by states continued to grow strongly, as suggested by the recent available data up to Nov'21

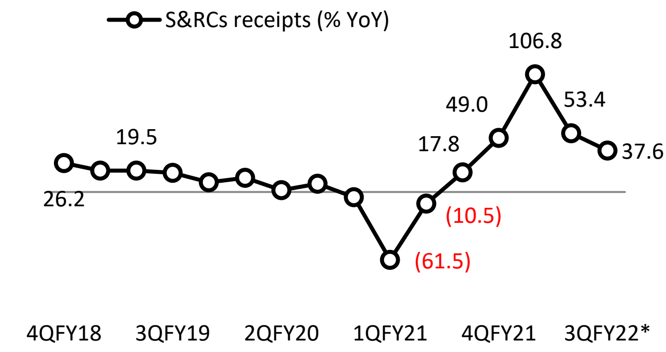
Several factors have supported such a strong pick-up in the Residential Real Estate sector. In particular, a) a massive reduction in interest rates to a record low of 6.5% by some Banks, b) relatively least adverse effects on regular salaried workers, c) falling real house prices *(Exhibit 9)*, and d) the various incentives provided by Centre/state governments. The recovery in the Construction sector has been one of the highlights after the lifting of COVID-related lockdown restrictions. Stamp duty and registration charges collected by states continued to grow strongly, as suggested by the recent available data up to Nov'21 *(Exhibit 10)*.

Exhibit 9: Real house prices continue to decline for the past four successive years…



Based on transaction-level data from housing registration authorities in 10 major cities, deflated by CPI-Housing

Exhibit 10: …which must have helped buoyant stamp and registration charges (S&RCs) collected by the states



*Based on 28 states up to Nov'21

Source: CAG, CEIC, MOFSL

Residential Real Estate construction has been weak for years, and a few months of recovery, especially after a sudden halt in mid-CY20, hardly changes the overall story significantly

Similarly, steel consumption and cement production – the primary raw materials for construction – have also grown strongly in FY22. After declining by 6% in FY21, finished steel consumption grew 16% YoY in Apr-Dec'21, and cement production rose 28% YoY in Apr-Nov'21, following a sharp contraction of 11% YoY in FY21.

Notwithstanding the recent strong trends in stamp duty and registration charges (SD&RCs), it still continues to remain weak as compared to pre-COVID trends. The average monthly SD&RCs collected by 28 states stood at INR124b in the first eight months of FY22, which was still slower than INR128b suggested by the pre-COVID growth trend. Considering the strong forward and backward linkages of the Construction sector and the fact that it is the second largest employer in India, any additional measures to boost the Residential Real Estate sector would be highly welcome. It could be either to grant it 'Infrastructure sector' status or to relax GST on under-construction properties or to reduce the GST on key raw materials or a higher interest exemption for homebuyers from the current limit of INR0.2m.

Fiscal deficit could be 6.5% of GDP in FY22E and may be pegged at 6% of GDP in FY23E

Fiscal deficit is expected to remain unchanged at INR15.1t in FY22E and is likely to be set at INR15.4t for FY23E. Due to higher-than-anticipated denominator (nominal GDP), it implies that fiscal deficit could be 6.5% of GDP in FY22E and may be pegged at 6% of GDP in FY23E. Anything less than 5.8% of GDP may help bring down yields and anything over 6.2% could push them higher.

Besides these all-important macro numbers, we will closely track the upcoming Budget for any announcements in three areas: 1) some self-liquidating temporary personal job/income supporting measures to boost private consumption in the immediate future, 2) some measures to support the rural economy, amid its weakening and the impending state elections, and 3) any measures to revive the Residential Real Estate sector would be welcome.

NOTES

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, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). 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 Limited 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, it's associates, Research Analyst or their relative may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst may have actual/beneficial ownership of 1% or more securities in the subject company in the past 12 months. MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have 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. Research Analyst may have served as director/officer, etc. in the subject company in the past 12 months. MOFSL and/or its associates may have received any compensation from the subject company in the past 12 months.

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

a. managed or co-managed public offering of securities from subject company of this research report,
b. received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
c. received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.
d. Subject Company may have been a client of MOFSL or its associates in the past 12 months.

MOFSL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report. 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. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. 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. 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.

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	Companies where there is interest
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.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com.
CIN No.: L67190MH2005PLC153397.Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.
Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579 ;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs,Insurance Products and IPOs.Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.