NSE

# India's investment cycle: Traversing rough terrain

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# A deep dive into investment

October 12, 2021

## Executive Summary

### India's investment cycle: Traversing rough terrain

In the first edition of the *Investment Report*, we saw how India's investment scenario deteriorated in the aftermath of the Global Financial Crisis (GFC), with the Gross Fixed Capital Formation (GFCF) rising at a CAGR of 11% (in nominal terms) during FY09-20 vs. 16% during FY00-08. This downturn was primarily attributed to a) weakening of global demand; b) aggressive lending during 2004-08, followed by periods of indecisive policy that extended project timelines; c) a sustained macro slowdown since 2012 that weighed on aggregate domestic demand; and d) inflation control that translated into an extended period of positive real rates. While all this led to over-leveraged corporate balance sheets on one hand, financial intermediaries (banks and NBFCs) grappled with asset quality issues on the other. This further added to the investment woes, with measures such as demonetisation and GST implementation having a disproportionate impact on the unorganised sector over the last few years.

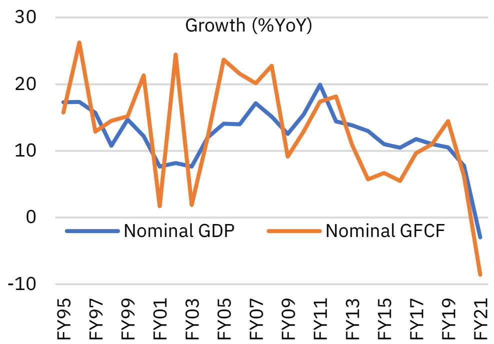
The outbreak of COVID-19 pandemic in early-2020 worsened the situation. With 33m cases and ~441k fatalities — accounting for ~14% and ~9% of global cases and deaths (As on September 28th, 2021), India has been one of the worst affected countries. Stringent lockdown restrictions imposed in India as well as the globe have had unprecedented economic repercussions, primarily emanating from massive supply- and demand-side disruptions. As a result, the nominal GFCF fell by a record high of 8.6% in FY21 to Rs53.5trn—much higher than nominal GDP contraction of 3%.

Several policy measures were undertaken to reduce the COVID-induced economic loss as well as revive the investment climate. The RBI announced a slew of measures including rate cuts, massive liquidity injection through regular/special open market operations (OMOs), long-term repo operations, special credit facilities for weaker segments, moratorium & loan restructuring, and guaranteed G-sec purchases, among others. While the near-term fiscal impulse was more in the form of credit guarantees amidst fiscal constraints, several crucial schemes/reforms were announced to boost investments in the medium-term including the National Infrastructure Pipeline, Production Linked Incentive (PLI) scheme, National Monetisation Plan (NMP), commercial coal mining, and increase in FDI in defence from 49% to 74%.

With this backdrop, we revisit our analysis on India's investment trends to understand how investment scenario has panned out over the last few years, particularly post the COVID outbreak. Our analysis shows that even as economy recovered in the second half of FY21, thanks to gradual unwinding of restrictions, enhanced policy support, and vaccination rollouts, investment climate remained lacklustre as evident from a 71% YoY/12% QoQ drop in new projects announced during this period. Even as new project announcements saw a significant jump in the June quarter (+34% QoQ) despite renewed economic slowdown in the wake of a deadlier second wave, it remains fairly below pre-COVID levels. Our analysis finds that the investment scenario may continue to remain weak over the medium-term before showing signs of a meaningful revival due to several factors, including a) funding constraints amidst low household savings, b) rise in Government dis-savings crowding-out private investment, c) low capacity utilisation, and d) persistent COVID-led business uncertainty. A deterioration in domestic and global consumption demand and ineffective implementation of structural reforms announced over the last few years may further weigh on the investment recovery.

- **Investment slowdown exacerbated in FY21:** In India, investment (in nominal terms), expressed as GFCF, fell by a record 8.6% in FY21—the first decline in last 67 years—to Rs53.5trn, while real investment dropped at a faster rate of 10.8%—the steepest drop ever and the first in last 19 years. While the structural slowdown in investment over the last decade was primarily due to weak demand environment, weak business confidence, low capacity utilisation and tight financial conditions, the sharp drop in FY21 was led the COVID-19 outbreak and attendant stringent containment measures, including complete/partial lockdowns, thereby leading to economic recession and pan global drop in investment.

**Nominal GDP vs. nominal GFCF growth trend**

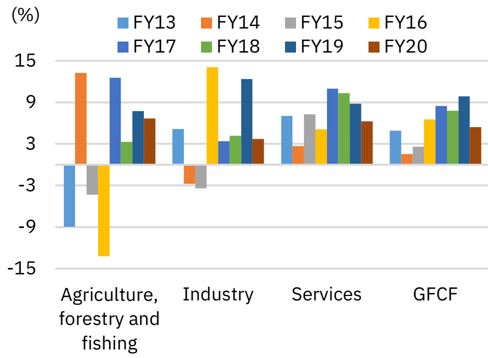



Source: CMIE Economic Outlook, NSE.

- **Policy response:** Several policy measures were undertaken to reduce the COVID-induced economic loss as well as revive the investment climate. The RBI announced a slew of measures including rate cuts (115/135/100bps cut in repo/reverse repo/CRR), massive liquidity injection through regular/special open market operations (OMOs), long-term repo operations, special credit facilities for vulnerable segments of the economy, moratorium & loan restructuring, and guaranteed G-sec purchases, among others. While the near-term fiscal impulse was more in the form of credit guarantees amidst fiscal constraints, several crucial schemes/reforms were announced to boost investments in the medium-term including the National Infrastructure Pipeline, Production Linked Incentive scheme, National Monetisation Plan, agri marketing reforms, commercial coal mining, and increase in FDI in defence from 49% to 74%.

- **Investment rate at multi-decadal lows:** Notwithstanding prompt and aggressive policy support and partial recovery in economic activities including investment over the first half of 2021, India's investment rate declined to record-lows of 27.1% in FY21 as compared to 29% in FY20 and 33% a decade ago.
- **Industry hit more than services:** Following a temporary rise in FY19, investment growth in industry worsened from 12.4% to 3.7% in FY20. This slowdown was mainly due to lower investment in Electricity and Mining. Investment growth in services moderated from 8.8% to 6.3% in FY20 largely due to a fall in investment in Communication services, Hotels & Tourism, and Wholesale & retail trading.
- **Investment is mainly financed by households:** Out of Rs65.5trn total savings in FY20, households contributed around Rs40.0trn i.e., 61% of total savings, followed by private non-financial corporations (33%) and financial corporations (9%). In contrast, Government's contribution remains negative with a dis-savings of Rs3.7trn i.e., 5.7% of total savings in FY20.
- **Low growth of households' savings may have created supply-side bottleneck to investment:** Total household savings in FY20 increased at a slower pace (i.e., 9.4%) than it had in FY19 (10.6%). This was largely due to fall in interest rates and a significant jump in inflation and unemployment rate over the year, which may have created supply-side bottlenecks to investment growth in the country. The situation got deteriorated further with a record decline in foreign savings and rise in government deficit, even as savings by corporations grew at a faster pace over the period.
- **Value of outstanding projects fell in FY21:** According to the CMIE Capex database of large projects, new project investments, completion rate and revival rate fell sharply in FY21 thanks to massive economic/business disruptions caused by the unprecedented COVID-19 pandemic and consequent deterioration in sentiments. A slower pace of vaccinations towards the end of FY21 and emergence of new COVID variants added to the woes. Besides, value of stalled projects shot up due to unfavourable market conditions, lack of promoters' interest and land acquisition bottlenecks. As a result, investment on outstanding projects fell by 0.1% in FY21.

**Sector-wise growth in investments**

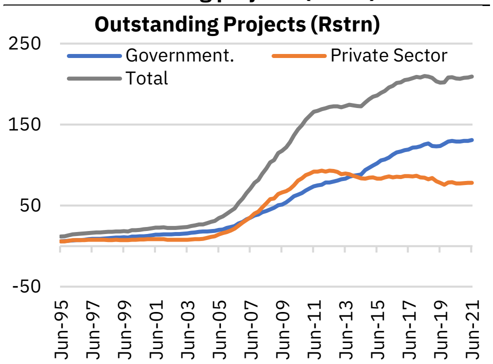



Source: CMIE Economic Outlook, NSE.

**Growth in different sources of GCF financing (%)**

| Sources | FY19 | FY20 |
|---|---|---|
| **Total savings** | **6.6** | **6.1** |
| Foreign savings | 27.3 | (58.2) |
| Domestic savings | 5.4 | 10.5 |
| Non-fin corporations | 2.4 | 6.5 |
| Financial corporations | (7.1) | 61.5 |
| General Government | (24.3) | 150.3 |
| Household sector | 10.6 | 9.4 |

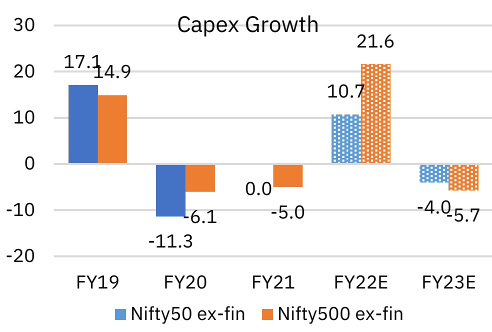
**Value of outstanding projects (Rs trn)**




Source: CMIE Capex, NSE.

- **Green shoots came to fore in Q1FY22…:** Post a slowdown in FY21, investment on outstanding projects recorded 1.2% YoY growth by the end of Q1FY22, largely led by the government projects—up 1.4% YoY vs. a 0.9% increase in investments by the private sector. While the Government had largely invested on Transport Services and Electricity, private sector investments were concentrated in Electricity, Information Technology, Metals and Chemicals.
- **…Even as the capex recovery seems temporary:** After a sharp fall in FY20 and FY21, total capex of Nifty 50 and Nifty 500 non-financial companies is estimated to show a V-shaped recovery in FY22. According to IBES (Institutional Broker's Estimate System) estimates, aggregate capex of Nifty50/Nifty500 companies is pegged to grow by 10.7%/21.6% in FY22, albeit off a low base, possibly factoring in continued recovery in economic activity, sustained drop in COVID infections and casualties, and rapid acceleration in the vaccination coverage. That said, IBES estimates point to a drop in capex in FY23 again, translating into an annualised drop of 1.5% over the preceding five-year period.
- **A credible investment recovery unlike in the medium-term:** Overall, we expect investment scenario to remain weak over the medium-term before showing signs of a meaningful revival due to several factors, including a) funding constraints amidst low household savings, b) rise in Government dis-savings crowding-out private investment, c) low capacity utilisation, and d) persistent COVID-induced business uncertainty. A deterioration in domestic and global consumption demand and ineffective implementation of structural reforms announced over the last couple of years may further weigh on the investment recovery.

**Capex recovery in Nifty 50 and Nifty 500 companies (ex-financials) in FY22 may be temporary**




Source: Refinitiv Datastream, * Estimates as on August 15th, 2021.

## Post-COVID investment landscape: An overview

**The COVID-19 pandemic induced the worst ever global recession:** The Coronavirus has infected more than 236m people and taken over ~4.8m lives as on October 4th, 2021. It's onset in early 2020 and attendant lockdowns and travel/mobility restrictions ignited massive supply chain disruptions, which, in turn, paved way for a great loss of global demand. This led to a significant deterioration in capacity utilisation and business sentiments across major economies. As a result, global GDP plummeted by 3.2% in 2020—the worst recession since the World War II.

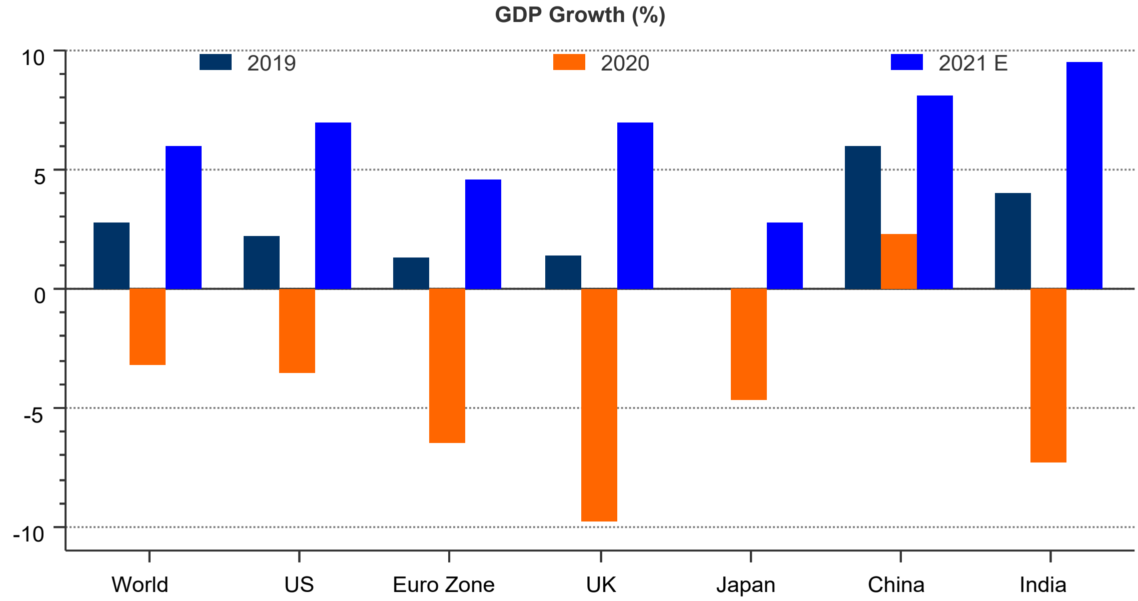
India has been one of the worst affected with ~34m cases and more than 449,000 fatalities till now, accounting for ~14.2% and 9.2% to total cases and deaths globally. Implementation of one of the most stringent lockdowns during early-FY21 led to Indian economy contracting by the record rate of 7.3% in FY21. This unprecedented slowdown is also reflected in several high-frequency indicators such as the PMIs, non-oil imports, industrial production and google mobility indicators, all of which declined to record lows. India's capacity utilisation declined to a mere 47.3 in June 2020 as compared to 69.9% in March 2020, accompanied by a collapse in business and consumers expectations.

**Figure 1: COVID-19 stats in top 10 affected countries in terms of total cases (As on October 4th, 2021)**

| Country | Total cases ('000) | Share in total cases globally (%) | Tot Cases/ 1m population | Total Deaths ('000) | Share in total deaths globally (%) | Case fatality rate (%) | Deaths/1m population | Total Recovered ('000) | Active Cases ('000) | Share in total active cases globally (%) | Recovery rate (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| USA | 44,680 | 18.9 | 133,995 | 722 | 15.0 | 1.6 | 2,166 | 34,155 | 9,803 | 54.1 | 76.4 |
| India | 33,851 | 14.3 | 24,230 | 449 | 9.3 | 1.3 | 322 | 33,143 | 259 | 1.4 | 97.9 |
| Brazil | 21,479 | 9.1 | 100,152 | 598 | 12.4 | 2.8 | 2,789 | 20,462 | 418 | 2.3 | 95.3 |
| UK | 7,935 | 3.4 | 116,119 | 137 | 2.8 | 1.7 | 2,005 | 6,453 | 1,345 | 7.4 | 81.3 |
| Russia | 7,612 | 3.2 | 52,134 | 211 | 4.4 | 2.8 | 1,444 | 6,740 | 661 | 3.6 | 88.5 |
| Turkey | 7,267 | 3.1 | 85,016 | 65 | 1.3 | 0.9 | 759 | 6,719 | 483 | 2.7 | 92.5 |
| France | 7,028 | 3.0 | 107,374 | 117 | 2.4 | 1.7 | 1,785 | 6,801 | 111 | 0.6 | 96.8 |
| Iran | 5,639 | 2.4 | 66,071 | 121 | 2.5 | 2.2 | 1,422 | 5,116 | 402 | 2.2 | 90.7 |
| Argentina | 5,261 | 2.2 | 115,072 | 115 | 2.4 | 2.2 | 2,522 | 5,125 | 21 | 0.1 | 97.4 |
| Spain | 4,965 | 2.1 | 106,149 | 87 | 1.8 | 1.7 | 1,850 | 4,785 | 94 | 0.5 | 96.4 |
| **World** | **236,147** | **100.0** | **30,295** | **4,822** | **100.0** | **2.0** | **619** | **213,202** | **18,123** | **100.0** | **90.3** |

Source: worldometers.info.

**Figure 2: COVID-19 adversely impacted global economic activities across all major economies**




Source: Refinitiv Datastream

**India's investment growth plummeted to the negative territory in FY21 for the first time in 67 years:** Investment (in nominal terms), expressed as GFCF, dropped by a record rate of 8.6% in FY21 to Rs53.5trn. This marked the steepest decline ever and the first in last 67 years. In real terms, GFCF plunged at a faster rate of 10.8%—the first contraction in nearly two decades. Slowdown in India's investment scenario—that began in mid-FY20, thanks to weak consumption demand, low capacity utilisation and tight financial conditions—worsened in FY21 after the COVID-19 outbreak and implementation of stringent containment measures by the Government, including complete lockdown of business activities. This, in turn, plunged the economy into the worst recession ever.

**Figure 3: Nominal GFCF vs. nominal GDP growth**

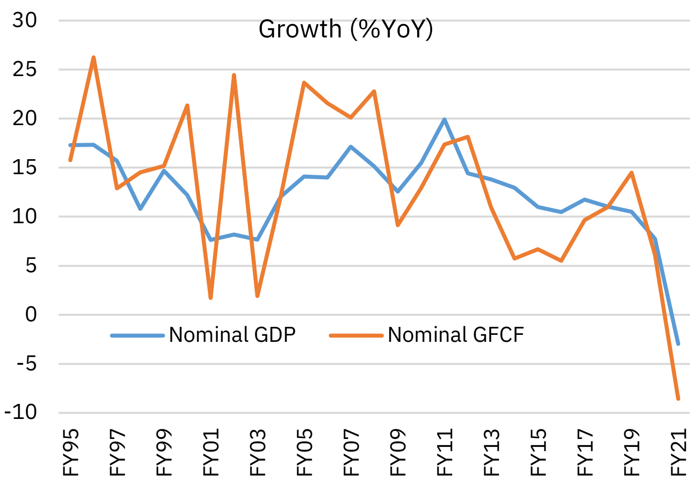
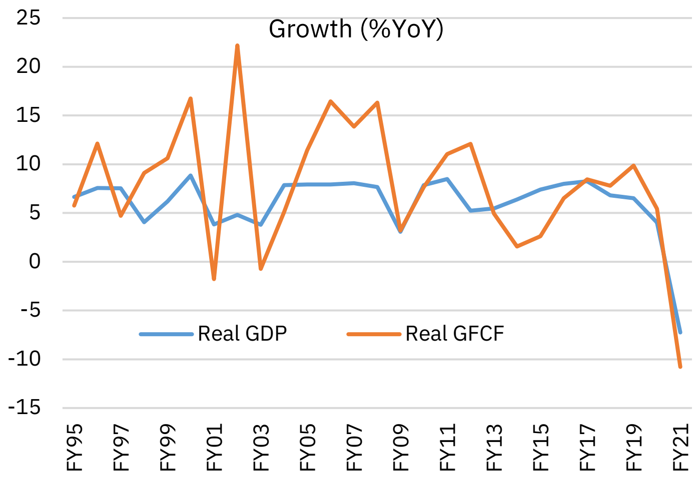


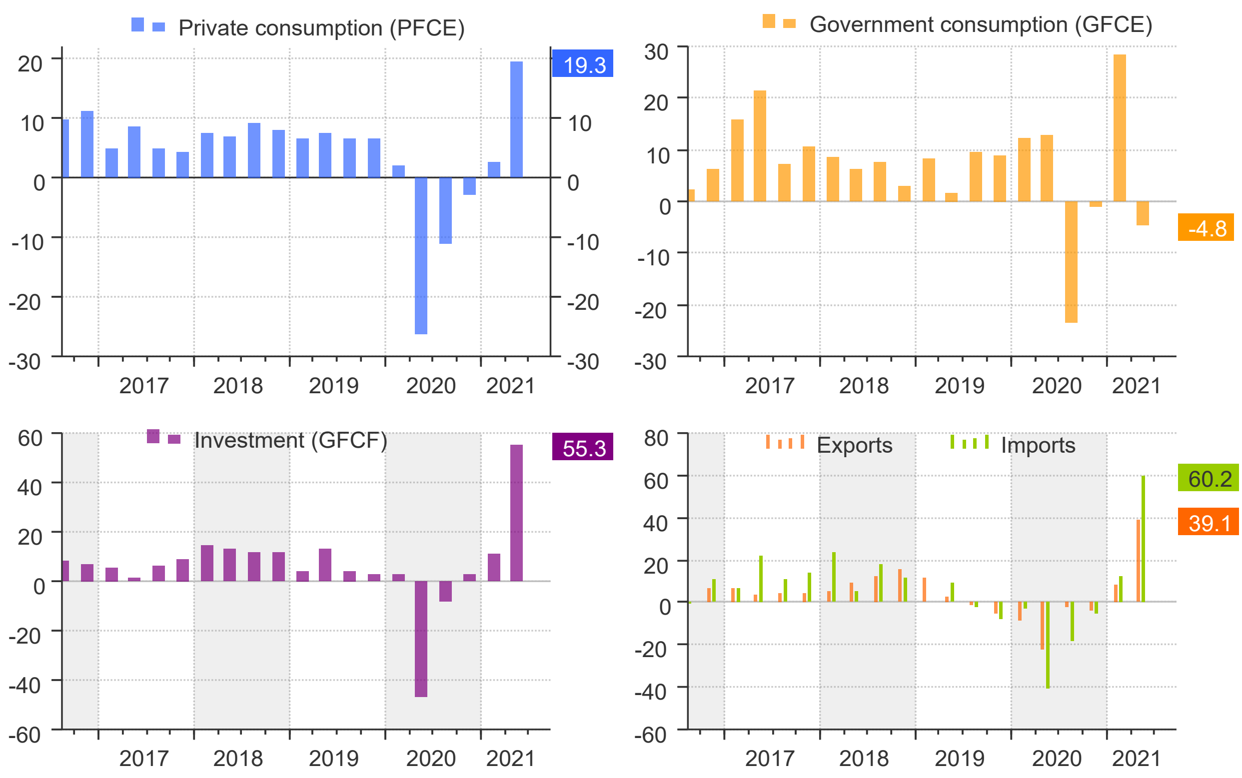

**Figure 4: Real GFCF vs. real GDP growth**




Source: CMIE Economic Outlook, NSE.

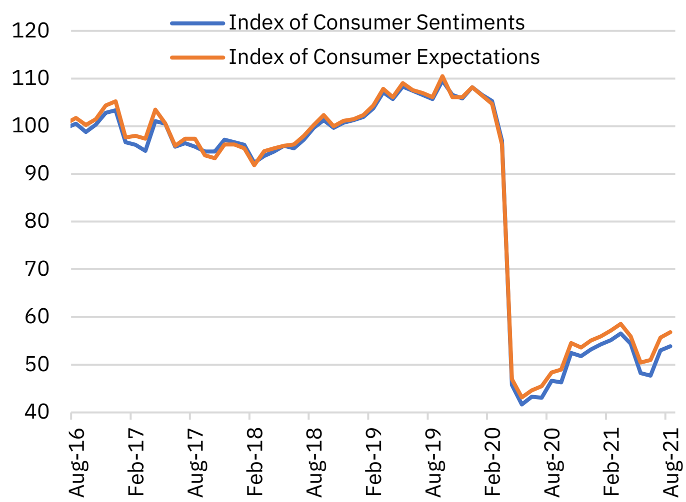
**Weak consumption demand continues to weigh on investments:** What began as a supply-side problem amidst COVID-induced shutdown of economic activities soon paved way for a broad-based slowdown in demand environment, not just in India but across the globe. With several large economies witnessing one of their worst recessions last year, India's export performance deteriorated sharply. Restrictions on business activities and a meaningful deterioration in domestic and global demand led to capacity utilisation falling to all-time low in June'20 before recovering only partially over the subsequent three quarters. Moreover, consumer sentiments and consumer expectations nosedived post the COVID outbreak and have since remained much below their pre-pandemic levels. This, along with persistent COVID uncertainty, has disincentivised companies across all major sectors to undertake fresh investments.

**Figure 5: Quarterly growth trend of investment growth with other GDP components (in real terms)**



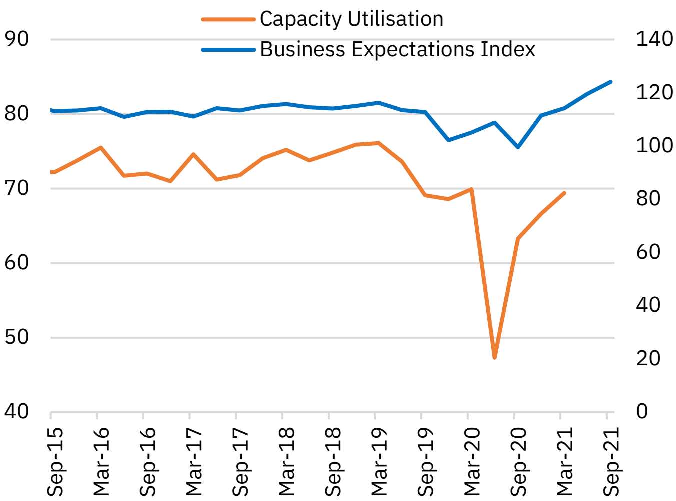

Source: CSO, RBI, NSE.

**Figure 6: Consumers' Sentiments vs. Expectations**




Source: CMIE Economic Outlook

**Figure 7: Capacity Utilisation (%) and Business Expectations Index**

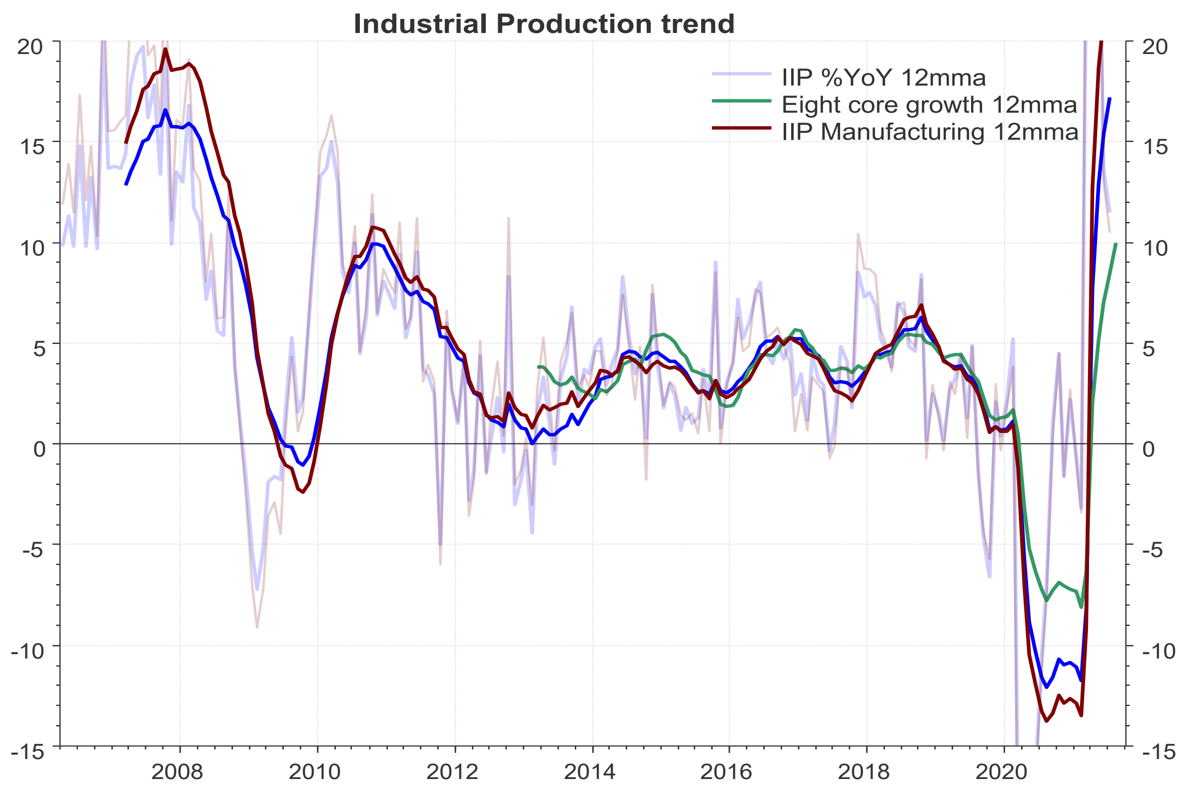



Source: CMIE Economic Outlook

**Economy showing signs of recovery post the downturn:** Several high frequency indicators have recovered from their sharpest fall in April 2020 to reach their respective pre-covid levels by the end of FY21. This was largely led by reopening of economic activities, gradual improvement in the Coronavirus situation, vaccination roll-outs, strong festive season and realisation of pent-up demand during the second half of FY21. As such, following a steep decline in the first half of 2020, industrial production growth rebounded sharply in the second half and further in early 2021, albeit off a depressed base. A meaningful improvement in growth prospects of India's major trading partners, supported by unprecedented and proactive policy support, further aided industrial recovery back home.

The pace of recovery, however, slowed down beginning May'21 post a sudden surge in coronavirus infections and casualties all over the country, while the sluggish pace of vaccination drives and risks of an impending third wave delayed the unlocking process. Nevertheless, the overall economic situation remained somewhat better in Q1FY22 as compared to FY21 given limited and restricted containment measures taken by the Government during the second wave as opposed to a strict nation-wide lockdown implemented during the first wave.

**Figure 8: Indian industrial production (12MMA)**




Source: Refinitiv Datastream, NSE.

**Figure 9: High frequency indicators show early signs of recovery in economic activities over the second half of FY21**

| Indicators | Feb-20 | Mar-20 | Apr-20 | May -20 | Jun-20 | Jul-20 | Aug -20 | Sep-20 | Oct-20 | Nov-20 | Dec-20 | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May -21 | Jun-21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Consumption demand** | | | | | | | | | | | | | | | | | |
| 2-wheeler sales | 100 | 68 | 3 | 23 | 75 | 91 | 113 | 136 | 151 | 120 | 93 | 113 | 112 | 115 | 89 | 44 | 115 |
| 3-wheeler sales | 100 | 64 | 9 | 24 | 43 | 39 | 65 | 73 | 82 | 73 | 73 | 80 | 82 | 86 | 72 | 55 | 86 |
| Tractor sales | 100 | 54 | 19 | 100 | 152 | 109 | 112 | 179 | 191 | 138 | 110 | 135 | 130 | 147 | 111 | 97 | 147 |
| Fertilizer sales | 100 | 101 | 84 | 114 | 135 | 150 | 141 | 143 | 146 | 144 | 134 | 124 | 104 | 95 | 80 | 114 | 163 |
| Average rural wage rates | 100 | 100 | 99 | 103 | 105 | 105 | 104 | 103 | 103 | 103 | 104 | 104 | 105 | 106 | 106 | 105 | |
| Rural unemployment | 100 | 115 | 312 | 288 | 129 | 89 | 104 | 80 | 95 | 85 | 125 | 79 | 93 | 84 | 97 | 145 | 119 |
| Passenger car sales | 100 | 54 | 0 | 10 | 37 | 69 | 84 | 110 | 123 | 101 | 99 | 103 | 104 | 106 | 95 | 28 | 106 |
| Domestic air passenger traffic | 100 | 62 | 0 | 2 | 16 | 17 | 23 | 32 | 43 | 52 | 60 | 63 | 64 | 64 | 46 | 16 | |
| Google mobility (retail & recreation)** | -2 | -75 | -84 | -73 | -55 | -54 | -45 | -39 | -34 | -27 | -18 | -28 | -23 | -22 | -51 | -54 | |
| Naukri Jobspeak Index | 100 | 81 | 39 | 38 | 50 | 52 | 59 | 73 | 100 | 72 | 82 | 80 | 98 | 101 | 86 | 85 | |
| Urban unemployment | 100 | 109 | 288 | 268 | 135 | 108 | 114 | 98 | 100 | 82 | 102 | 94 | 81 | 84 | 113 | 170 | |
| **Industrial Production** | | | | | | | | | | | | | | | | | |
| IIP | 100 | 87 | 40 | 67 | 80 | 88 | 87 | 92 | 97 | 94 | 102 | 102 | 97 | 108 | 94 | 96 | |
| IIP: Manufacturing | 100 | 83 | 31 | 63 | 80 | 88 | 88 | 94 | 98 | 96 | 104 | 102 | 96 | 107 | 93 | 96 | |
| IIP: Capital Goods | 100 | 75 | 7 | 36 | 66 | 73 | 78 | 93 | 94 | 87 | 98 | 96 | 96 | 111 | 85 | 96 | |
| IIP: Const. & Infra. Goods | 100 | 81 | 14 | 61 | 79 | 89 | 90 | 92 | 99 | 95 | 104 | 104 | 96 | 109 | 93 | 95 | |
| IIP: Consumer Durables Goods | 100 | 71 | 5 | 34 | 67 | 85 | 93 | 110 | 114 | 96 | 106 | 106 | 107 | 110 | 96 | 106 | |
| Eight-core sector production | 100 | 100 | 61 | 80 | 87 | 91 | 89 | 91 | 95 | 95 | 102 | 104 | 97 | 111 | 98 | 94 | |
| Steel production | 100 | 87 | 18 | 63 | 80 | 93 | 99 | 98 | 104 | 102 | 112 | 110 | 102 | 111 | 101 | 100 | |
| Steel consumption | 100 | 73 | 13 | 56 | 74 | 90 | 95 | 99 | 110 | 107 | 119 | 117 | 111 | 109 | 100 | 95 | 95 |
| Coal production | 100 | 123 | 61 | 64 | 61 | 59 | 57 | 62 | 72 | 81 | 91 | 94 | 96 | 123 | 66 | 68 | |
| Cement production | 100 | 81 | 14 | 73 | 86 | 79 | 68 | 79 | 88 | 82 | 92 | 96 | 100 | 107 | 96 | 79 | |
| Electricity production | 100 | 96 | 82 | 98 | 102 | 108 | 106 | 108 | 106 | 94 | 103 | 107 | 100 | 117 | 113 | 105 | |
| **Activity** | | | | | | | | | | | | | | | | | |
| Diesel consumption | 100 | 79 | 45 | 77 | 88 | 77 | 68 | 77 | 98 | 98 | 100 | 95 | 92 | 101 | 93 | 77 | 87 |
| Rail freight traffic | 100 | 97 | 61 | 78 | 88 | 89 | 89 | 96 | 102 | 103 | 111 | 112 | 105 | 123 | 105 | 108 | 106 |
| Domestic air cargo | 100 | 73 | 8 | 18 | 53 | 65 | 71 | 90 | 104 | 95 | 101 | 96 | 94 | 103 | 91 | 70 | |
| Daily E-way bills | 100 | 67 | 15 | 42 | 73 | 79 | 81 | 97 | 105 | 98 | 105 | 103 | 116 | 117 | 99 | 65 | 92 |
| GST collections | 100 | 93 | 31 | 59 | 86 | 83 | 82 | 91 | 100 | 100 | 109 | 114 | 107 | 118 | 134 | 97 | 88 |
| New orders (machinery) | 100 | 167 | 1279 | 693 | 5 | 76 | 472 | 185 | 55 | 555 | 1605 | 2807 | 89 | 6301 | 15 | 916 | 505 |
| New orders (Industrial & Infra Const.) | 100 | 75 | 2 | 161 | 66 | 347 | 524 | 315 | 135 | 952 | 297 | 216 | 337 | 466 | 189 | 140 | 267 |
| Daily property sale registrations (MH) | 100 | 74 | 1 | 26 | 73 | 67 | 71 | 107 | 113 | 123 | 222 | 132 | 145 | 185 | 85 | 58 | 130 |
| Google mobility (workplaces)** | 8 | -68 | -61 | -16 | -35 | -34 | -31 | -27 | -17 | -34 | -18 | -2 | -2 | -16 | -43 | -42 | -26 |
| Manufacturing PMI | 100 | 95 | 50 | 57 | 87 | 84 | 95 | 104 | 108 | 103 | 103 | 106 | 106 | 102 | 102 | 93 | 88 |
| Services PMI | 100 | 86 | 9 | 22 | 59 | 59 | 73 | 87 | 94 | 93 | 91 | 92 | 96 | 95 | 94 | 81 | 72 |
| **External** | | | | | | | | | | | | | | | | | |
| Merchandise imports | 100 | 83 | 45 | 60 | 56 | 77 | 82 | 81 | 90 | 89 | 113 | 111 | 107 | 128 | 121 | 102 | 110 |
| Oil imports | 100 | 93 | 43 | 33 | 46 | 61 | 60 | 54 | 56 | 59 | 89 | 87 | 84 | 95 | 101 | 88 | 99 |
| Merchandise exports | 100 | 77 | 37 | 69 | 79 | 86 | 82 | 99 | 90 | 85 | 98 | 99 | 100 | 125 | 111 | 116 | 117 |
| Agri exports | 100 | 90 | 62 | 87 | 94 | 106 | 94 | 109 | 109 | 103 | 115 | 111 | 127 | 152 | 128 | 127 | |
| Services imports | 100 | 100 | 84 | 90 | 90 | 91 | 87 | 92 | 86 | 91 | 104 | 91 | 96 | 113 | 89 | 92 | |
| Services exports | 100 | 102 | 93 | 95 | 96 | 96 | 93 | 98 | 94 | 96 | 106 | 96 | 99 | 115 | 99 | 98 | |

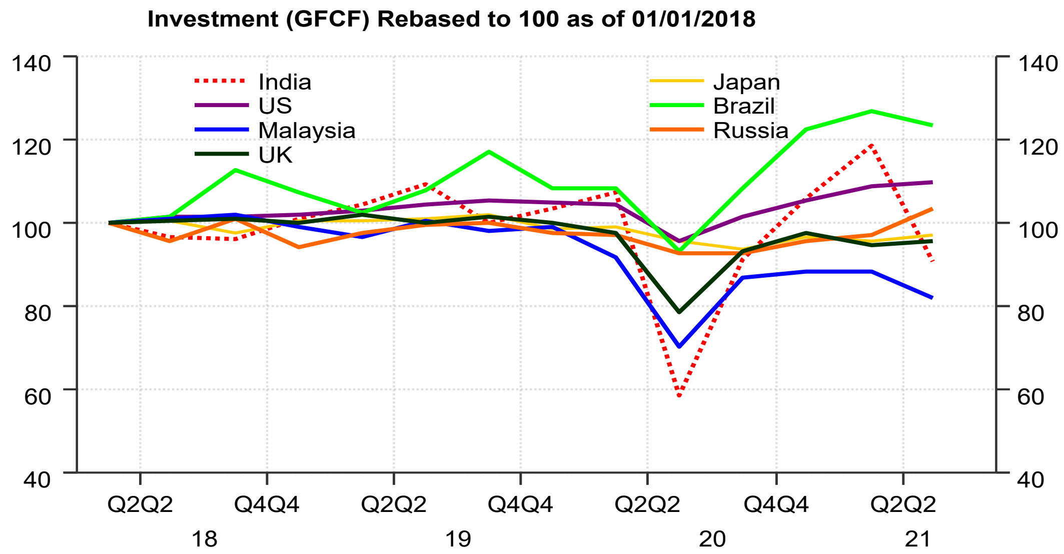
Source: CMIE, Google Mobility Data, IGR Maharashtra,

**Expansionary monetary policies may have helped investment recover faster:** The unconventional monetary policy measures that were undertaken in the aftermath of the GFC of 2007-08, followed by the debt crisis in the European Union in 2012, came to fore again with the COVID-19 pandemic last year, but with a much higher magnitude and coverage. Central banks globally responded promptly and massively using a wide range of unprecedented and unconventional measures to mitigate the adverse economic impact caused by the COVID-19 pandemic and to shore up the financial markets. These include a sharp cut in policy rates, lending and repo operations, special credit facilities, asset purchase programmes, foreign exchange operations, and a clear forward guidance, among others. These unprecedented monetary policy measures and consequent liquidity glut led to a meaningful drop in interest rates across geographies, tenors, ratings and issuer categories last year.

The RBI was no different, and announced a slew of measures, including rate cuts (115bps/135bps in repo/reverse repo rate since Jan'20), surplus liquidity injection through regular and special open market operations (OMOs), long-term repo operations, special credit facilities for vulnerable segments of the economy, and more recently guaranteed purchase of Government securities. This had helped reduce the lending cost for both fresh and outstanding loans through banks as well as NBFCs.

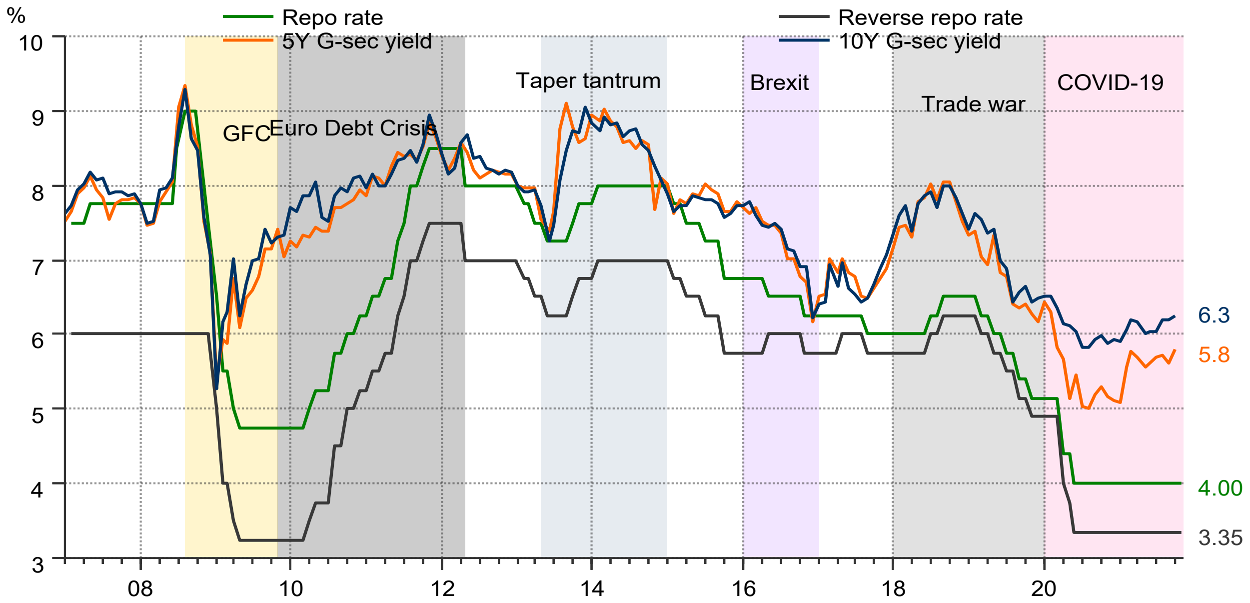
With an aim to ease debt serviceability and reduce financial stress, the RBI undertook additional measures including a) one-time restructuring of eligible COVID-19-related stressed corporate, MSME and personal loans, b) increase in loan-to-value ratio for gold loans to improve credit offtake at low interest rates, and c) moratorium on instalments on term loans and extension in resolution timelines. Lower lending and market rates, along with easier debt serviceability, not only helped households as well as corporates tide over COVID-induced financial stress but also incentivised them to make fresh investments.

**Figure 10: Trend of investment across countries**



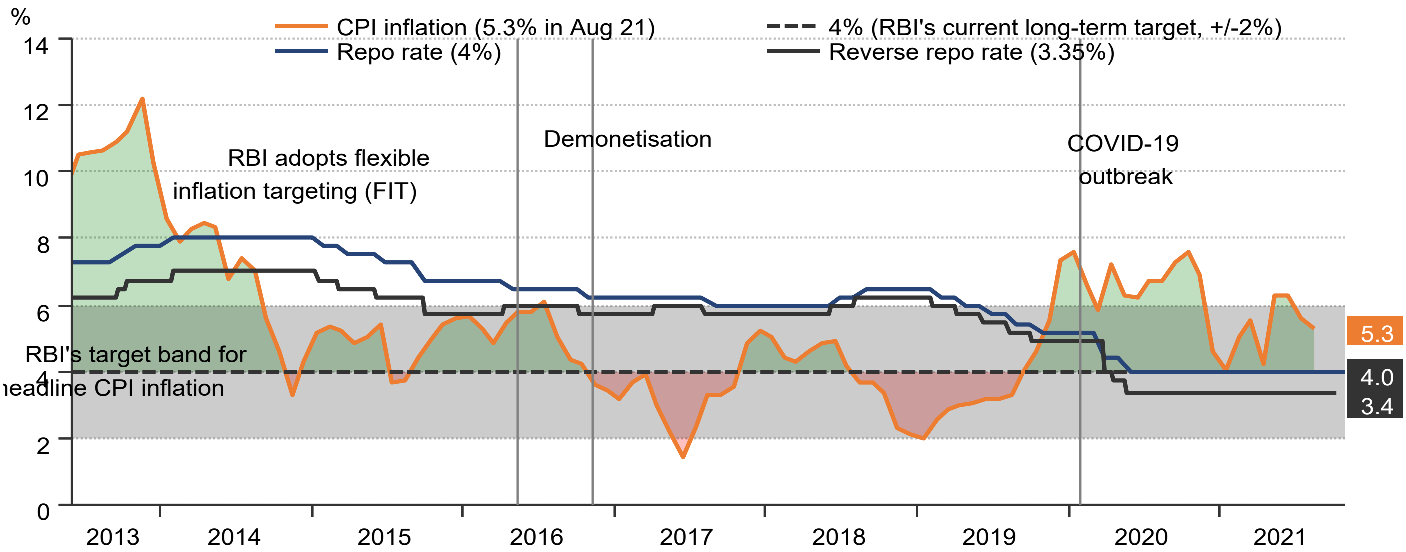

Source: Refinitiv Datastream.

**Figure 11: Movement in policy and market rates**




Source: Refinitiv Datastream.

**Figure 12: Real interest rates have remained negative for more than a year now**




Source: Refinitiv Datastream.

**Government provided a sizeable fiscal boost...:** The monetary measures have come over and above the Rs20trn *'Atmanirbhar Bharat'* package announced by the government in five tranches. Under this package, the government provided a) liquidity support of Rs Rs3.7trn for MSMEs, Rs750bn for NBFCs/HFCs/MFIs, Rs900bn for DISCOMs and Rs500bn through TDS/TCS cut and Provident Fund support of Rs92.5bn in Tranche 1, b) free food grain distribution extended to migrants, relief of Rs65bn for small businesses/street vendors, liquidity support of Rs2.3trn to farmers, extension of credit-linked housing subsidy scheme for middle-income group in Tranche 2, c) setting up an Agriculture Infrastructure Fund worth Rs1trn for funding storage and post-harvest infrastructure at farm-gate/aggregation points, support of Rs100bn for Micro Food Enterprises, Rs200bn for fisheries, Rs155bn for animal husbandry and beekeeping etc., in Tranche 3, d) increased allocation to MGNERGS, enhanced borrowing for states but with conditions and relaxed IBC norms in Tranche 4, and e) increased spending on healthcare and education in Tranche 5.

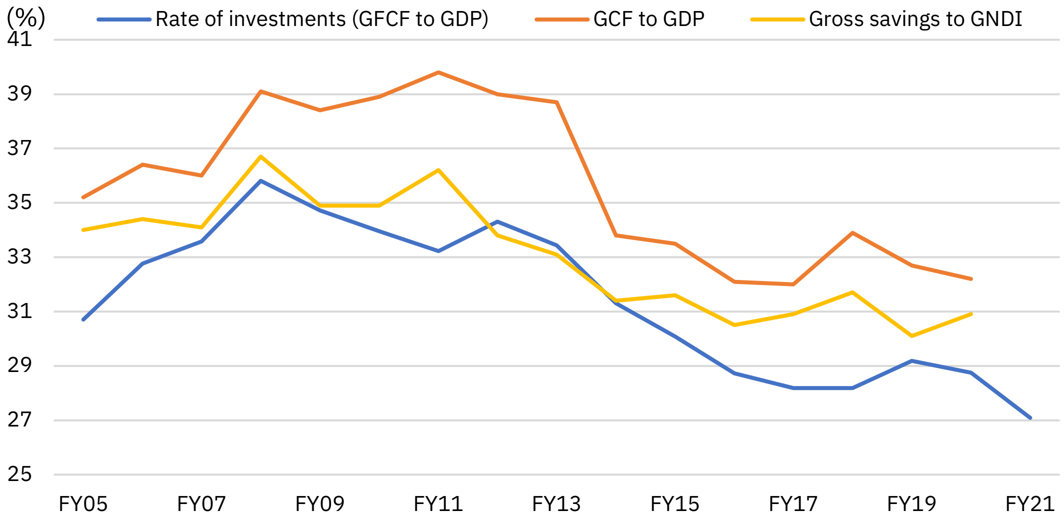
**...and announced structural measures to boost investment:** The Government has taken this opportunity to announce several pending structural measures in Agriculture, Coal, Mining, Defence, Aviation, and Power sectors to push investments in the long-term. In the Agriculture sector, the Government announced a) amendment of Essential Commodities Act, b) formulation of a central law to bring agricultural marketing reforms, and c) creation of a legal framework focusing on risk mitigation, price and quality assurance for farmers. In other sectors, the Government announced some crucial reforms to liberalise the coal sector by introducing commercial mining, extending rebates in revenue share for gasification of coal, building evacuation and transfer infrastructure, among others. It has also increased the FDI limit in Defence sector from 49% to 74% to boost local and private manufacturing, and announced Viability Gap Funding aid for social infrastructure projects up to 30% of the project cost with a total outlay of Rs81bn.

**Besides, government announced National Infrastructure Pipeline (NIP), Production Linked Incentive (PLI) Scheme and National Monetization Plan (NMP)** to improve investment scenario in the country. The government unveiled the Rs105trn NIP to revive economic growth in Jan'20 to draw the investment pipeline on social and economic infrastructure projects over the next five years. They identified investments worth Rs102trn over the next five years, with nearly 60% in development stage or under implementation. The balance Rs3trn worth of projects would be announced later following the confirmation from states. While the Centre and states would fund 39% each, the balance 22% would be funded by the private sector.

Under the PLI scheme, the Government provided incentives for incremental sales from products manufactured in domestic units to encourage foreign companies to set up units in India and local firms to expand or set up domestic manufacturing units, and to make India compliant with WTO norms and be neutral towards Indian firms. The Government has also sketched out the detailed NMP to unlock value in brownfield public sector assets worth Rs6trn over a four-year period and tap long-term patient capital which can be leveraged for further public investments. Under this scheme, Road sector is estimated to have the highest contribution of 27%, followed by Railways (25%), Power transmission (8%) and Power Generation (7%).

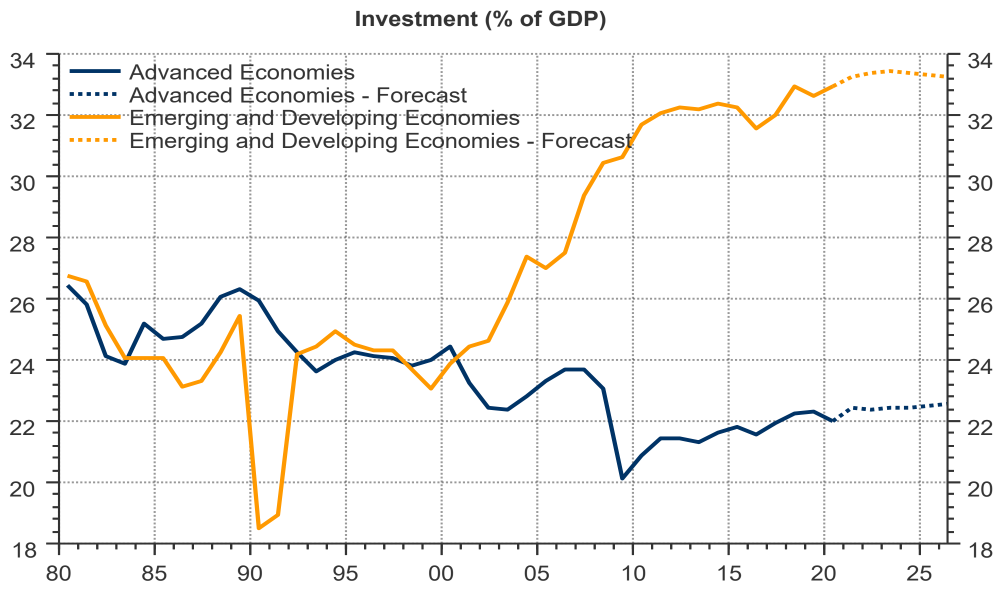
**Still, the investment rate dropped to multi-decadal lows in FY21:** Despite all these policy measures and recovery in economic activities in the latter half of FY21, India's investment rate declined to a record low level of 27.1% in FY21. The rate has been on a downward trajectory since the Global Financial Crisis barring bouts of partial and transitory improvement. Beyond the near-term causes, India's investment scenario deteriorated over the last decade, growing by a CAGR of 10% between FY11 and FY20 as compared to 16% over the previous decade. This downturn was attributed to several factors, including a) the Global Financial Crisis in 2008 that translated into weak global demand; b) aggressive lending during 2004-08, followed by periods of indecisive policy that extended project timelines; b) a sustained macro slowdown since 2012 that weighed on aggregate demand; c) inflation control that led to an extended period of positive real rates, all of which led to d) over-leveraged corporate balance sheets on one hand, and asset quality issues with financial intermediaries like banks and NBFCs. Policy uncertainty like Demonetisation and GST implementation also weighed on an investment revival, with their disproportionate impact on the unorganized sector.

**Figure 13: Trend of rate of savings vs. investment**




Source: CMIE Economic Outlook, NSE.

**Figure 14: Rate of investment in advanced and developing countries**

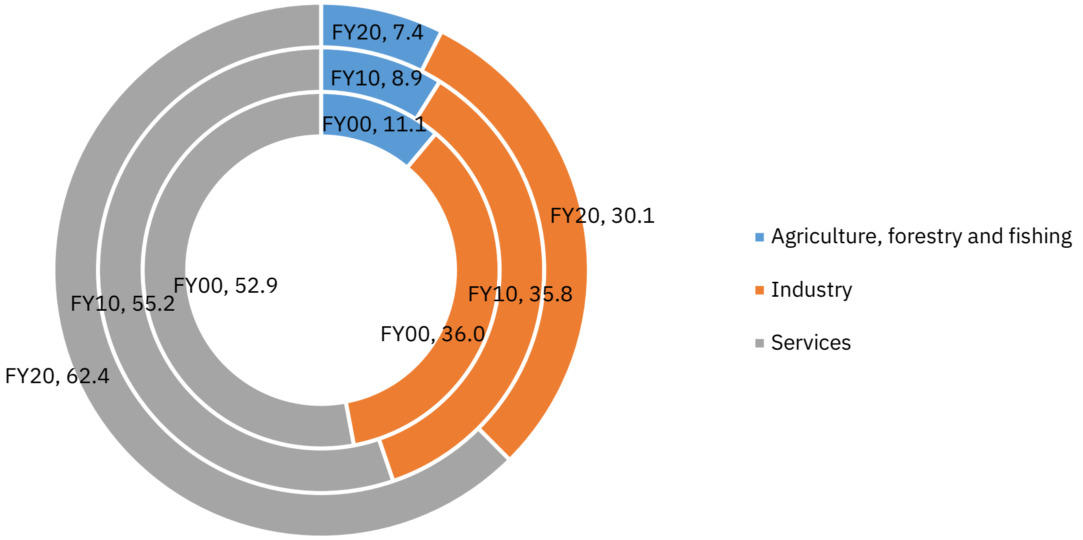



Source: Refinitiv Datastream.

## Sector-wise contribution to total investment

**Share of investment shifted from industry and agriculture to services:** Even as investment grew across all sectors during the last two decades, there was a significant fall in the share of investment in both agriculture and industry from 11.1% and 36.0% in FY2000 to 7.4% and 30.1% in FY20, respectively. The decline was compensated by the services sector with a rise in its share from 52.9% to 62.4% over the same period. The preference towards services was mainly due to its relatively higher rate of return on investment, growth downturn in both agriculture and manufacturing, lack of ease of doing, governance issues and policy paralysis in the country.

**Figure 15: Composition of GFCF across sectors**




Source: CMIE Economic Outlook, NSE.

**Rate of investment remained stagnated across sectors:** The investment rates, i.e., share of investment in total GDP, have either declined or remained stable over the last decade across all sectors. Notably, the rate of investment in industry declined sharply from 12.2% in FY10 to 8.7% in FY20, while the rate reduced slightly in agriculture and services. Overall, investment rate in the country fell by 520bps during the last decade.

**Figure 16: Trend of Nominal GFCF by sectors (Rs trn)**

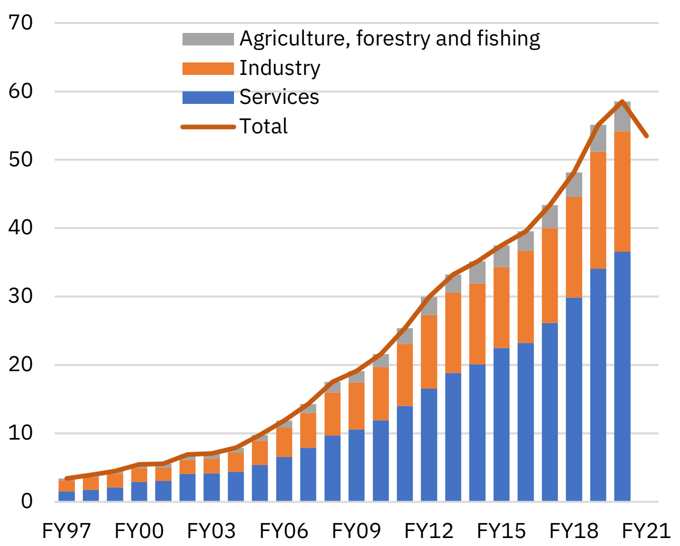
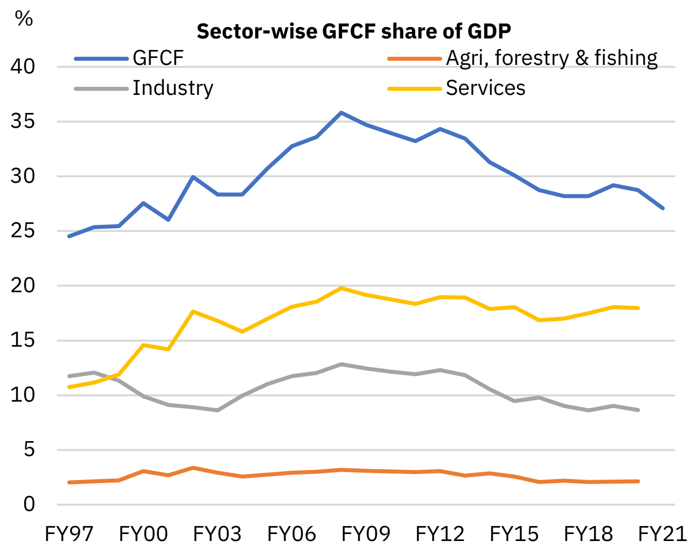


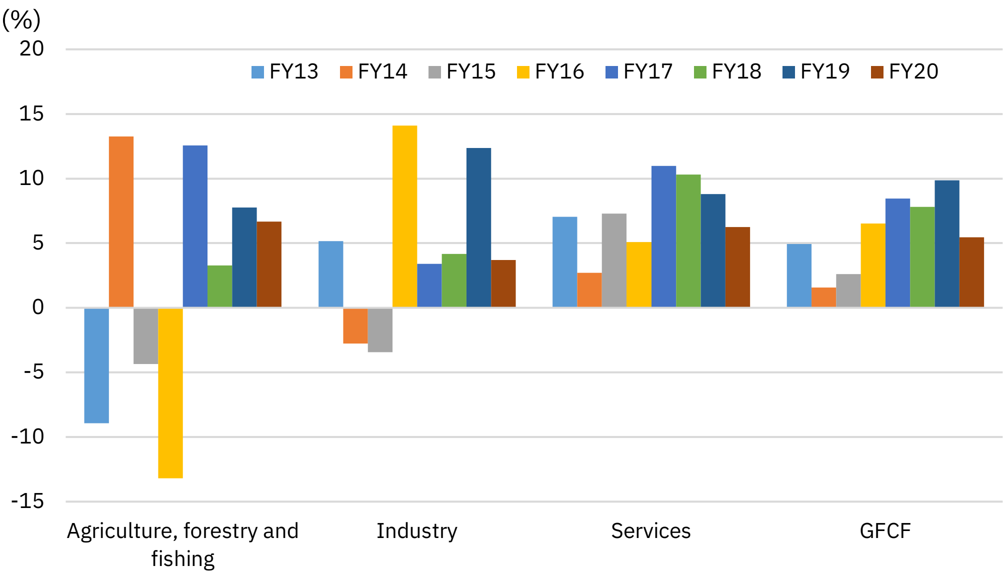

**Figure 17: Share of sector-wise GFCF to GDP (%)**




Source: CMIE Economic Outlook, NSE.

**In FY20, investment growth in industry deteriorated at a faster rate than services:** Post a temporary rise in FY19, investment growth in industry worsened from 12.4% to a mere 3.7% in FY20, primarily led by lower investment in Electricity and Mining. In case of services sector, investment growth moderated from 8.8% to 6.3% in FY20 which was solely due to fall in investment in Communication services, Hotels & Tourism, and Wholesale & retail trading. Investment in Agriculture experienced a roller-coaster ride since FY13, and dropped by 1.08 in FY20 to 6.7%, primarily led by lower investments in crops.

**Figure 18: Annual growth of sector-wise GFCF**




Source: CMIE Economic Outlook, NSE.

**Figure 19: Sub-sector wise contribution to GFCF growth in Agriculture (%YoY)**

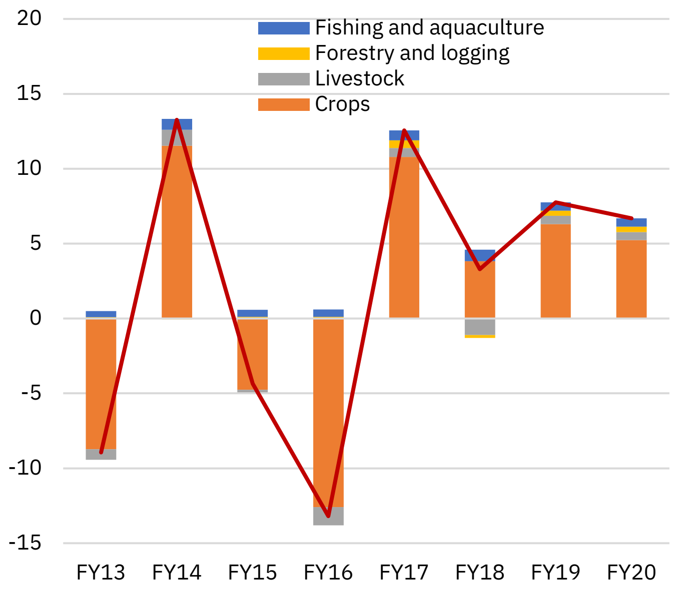
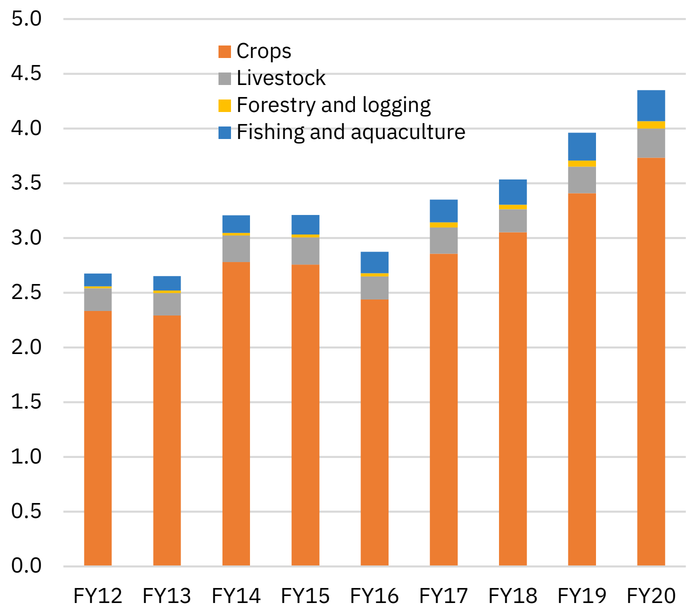
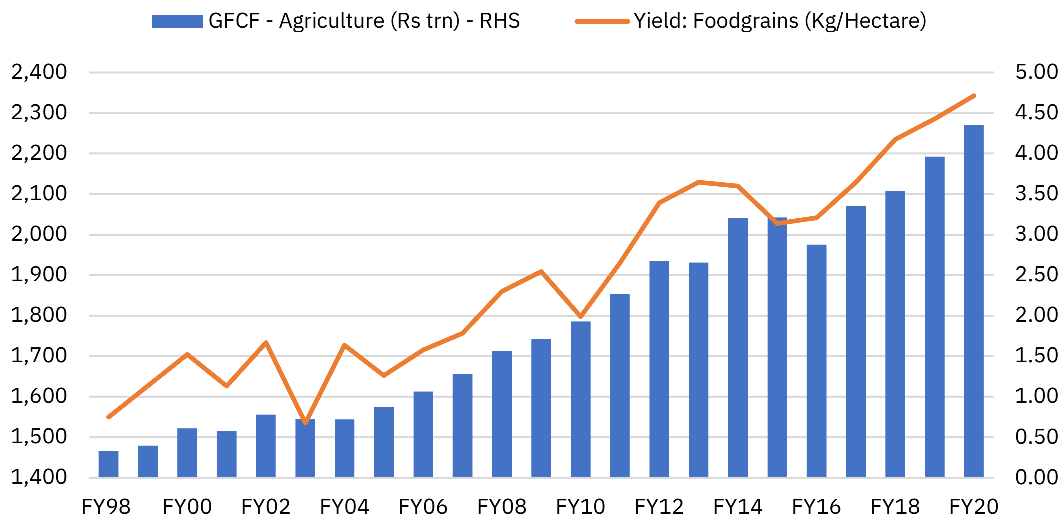



**Figure 20: Composition of GFCF in agriculture (Rs trn)**




Source: CMIE Economic Outlook.

**Figure 21: Investment in agriculture have gradually improved yields of foodgrains**




Source: CMIE-Economic Outlook.

**Slowdown of investment growth in Industry is mainly attributed to low investment in Electricity and Mining:** As seen in Figure 22, growth rate of investment in industrial sector fell from 12.4% in FY19 to 3.7% in FY20. This was largely driven by the sharp fall in investment in Electricity and Mining, while investment in Manufacturing and Construction registered an expansion in FY20.

**Figure 22: Sub-sector wise contribution to growth of GFCF in Industry (%YoY)**

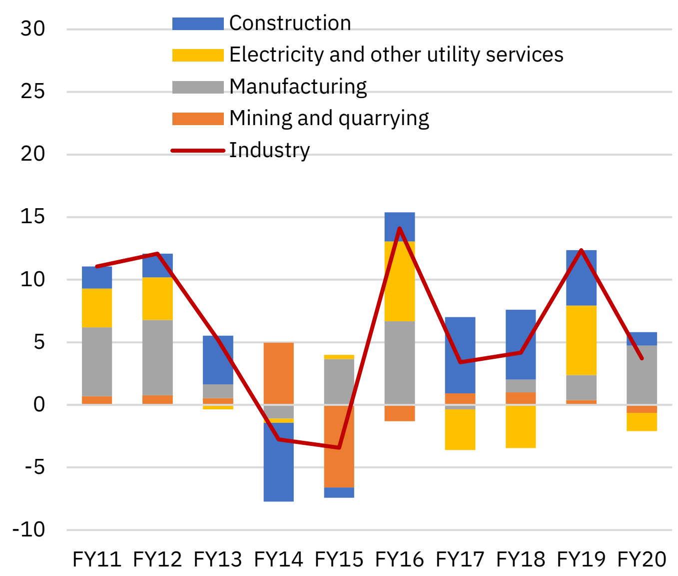
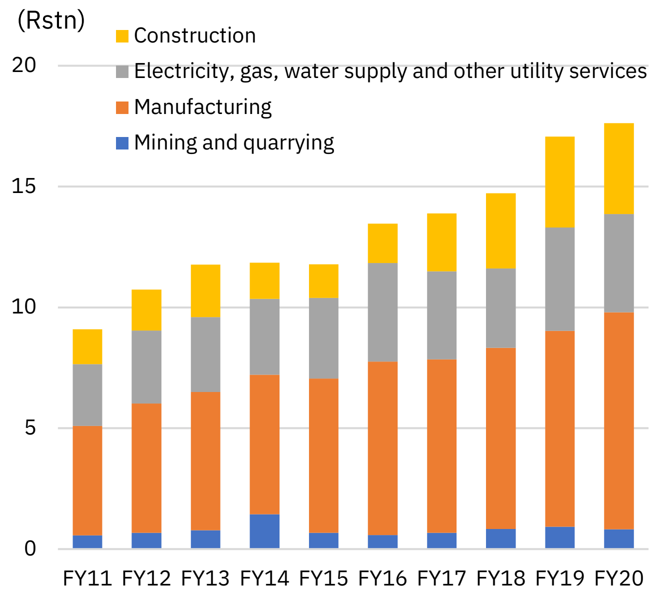



**Figure 23: Sub-sector wise GFCF composition in Industry**




Source: CMIE Economic Outlook.

**In services, investment in trade, hotel, communication, and broadcasting declined sharply in FY20:** Investment growth in service sector moderated in FY20 largely due to decline in investment in trade, hotel, transport, communication, and broadcasting services. This was primarily on the back of COVID-19 outbreak in early 2020, and attendant mobility, and travel restrictions imposed by countries across the globe, including India. Investment growth in financial services, real estate and professional services also moderated in FY20, reflecting tight financial conditions, and increasing business uncertainty. Investment growth in public administration, defence and other services, however, recorded an increase.

**Figure 24: Sub-sector wise contribution in Services to GFCF growth (%YoY)**

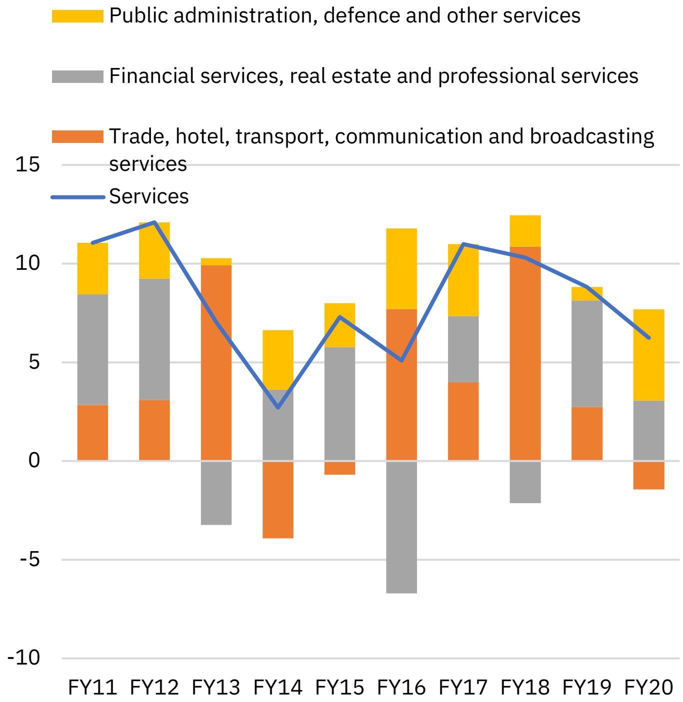
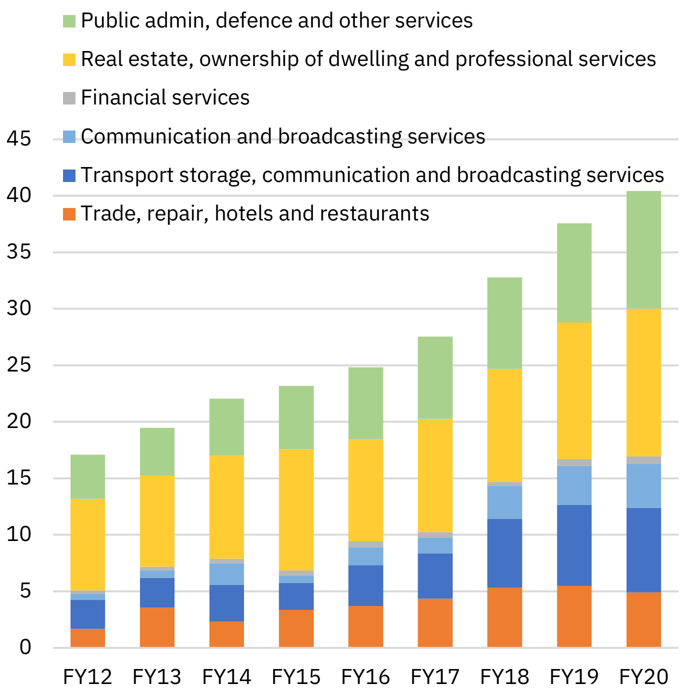



**Figure 25: Sub-sector wise GFCF composition in Services (Rs trn)**




Source: CMIE Economic Outlook.

## Investment pattern across institutions

**Households and private corporations contributed the most to total investment in FY20:** Except FY16 and FY17, households accounted for the highest share in investment made over the past decade, followed by the private corporations. Among others, investment by public corporations and Government remained low. While the growth in investment varied quite vividly, Government maintained a somewhat stable growth over the period. In FY20, investment growth was largely driven by the Government, while others recorded a slowdown in their investment growth. Notably, investment by public corporations contracted in FY20 largely due to weak domestic and external demand, while major corporates were deleveraging their balance sheet. Investment growth declined for households and private corporations as well due to rise in uncertainty and a stringent nation-wide lockdown announced by the Government in March 2020.

**Figure 26: Investment by institutions (Rs trn)**

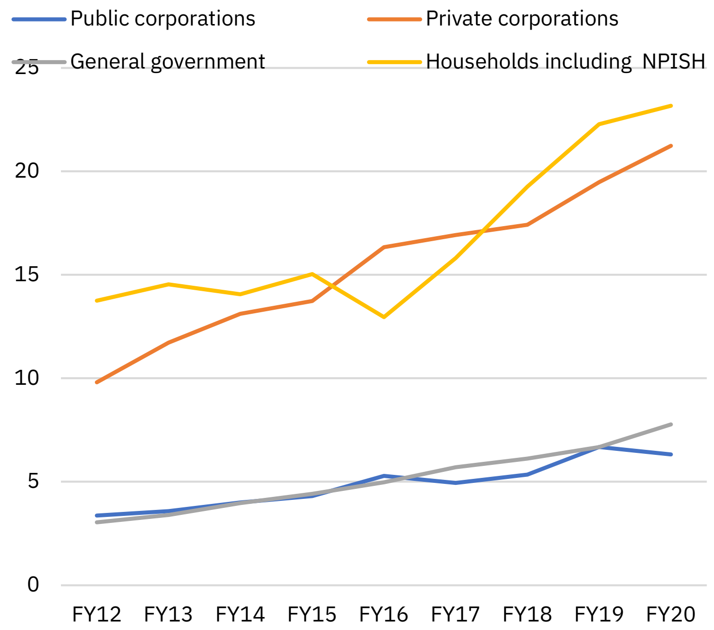
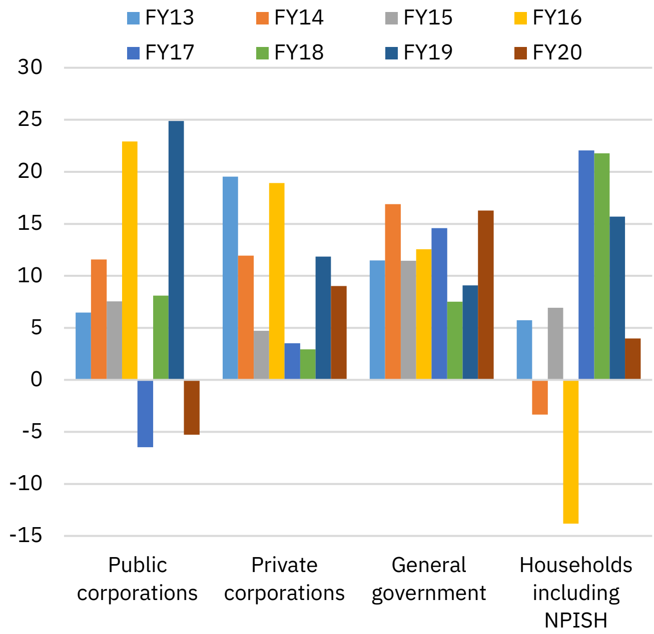


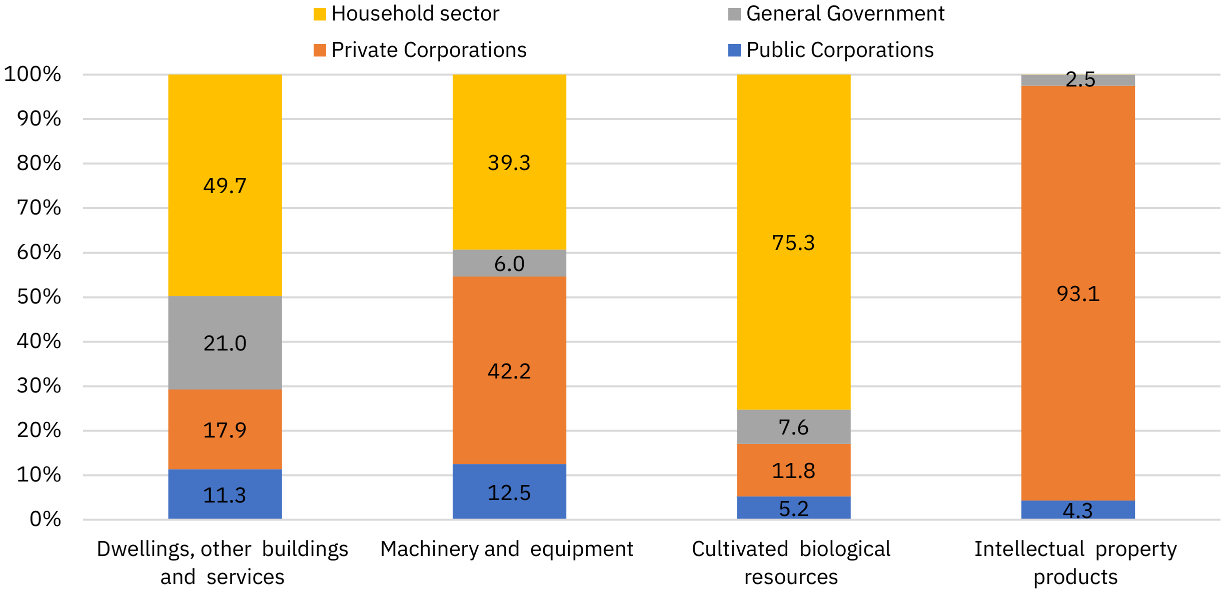

**Figure 27: Growth in investment by ownership (%YoY)**




Source: CMIE Economic Outlook. * NPISH-Non-profit institutions serving households.

**Investment pattern varies quite significantly across asset classes:** In dwelling, other buildings & services, share of household investments was the highest at 50%, followed by 21% by the Government and 18% by private corporations. Households are leaders in cultivated biological resources as well, with a 75% share in total investments made in this asset class, while they are the second largest investors in machinery and equipment. Among others, private corporates are leading investors in intellectual property products with a 93% share of total investments made to this category, followed by machinery & equipment which had 42% of total investments made by private corporations. Share of public corporations and government has been fairly low across asset classes.

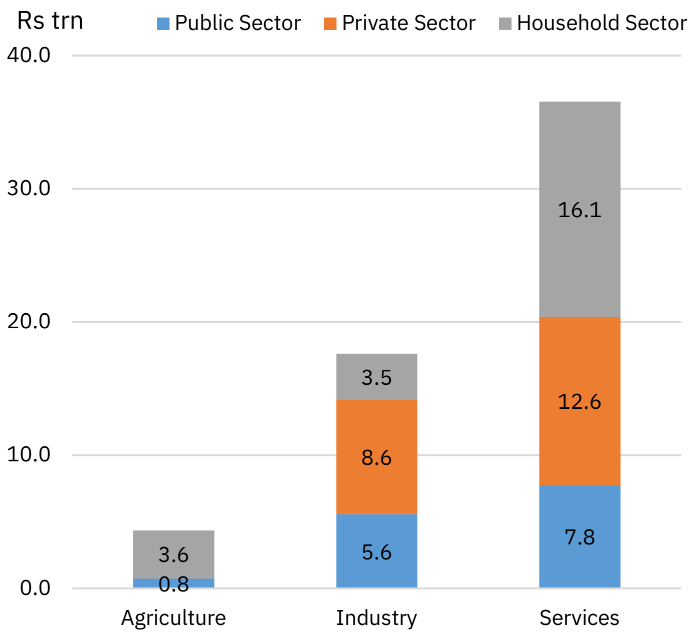
**Figure 28: Investment by institutions across different asset classes in FY20**

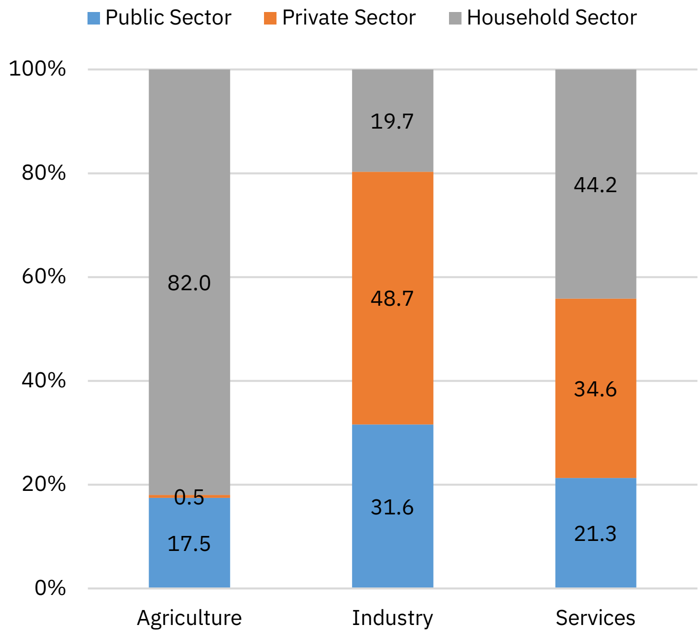



Source: CMIE Economic Outlook.

**Across sectors, households are the leading investors in services and agriculture:** Out of total investment in services, households contributed more than 44% in FY20, followed by private enterprises (35%) and public sector (21.3%). Households contributed a significant share in agriculture as well (~82%), while public sector invested merely 17.5% and private sector's contribution was negligible over the fiscal year. The situation is quite different in case of industry, with private enterprises contributing ~49% of total industrial investments in FY20, followed by 32% by the public sector and 20% by households.

**Figure 29: GFCF composition across sectors by ownership in FY20**



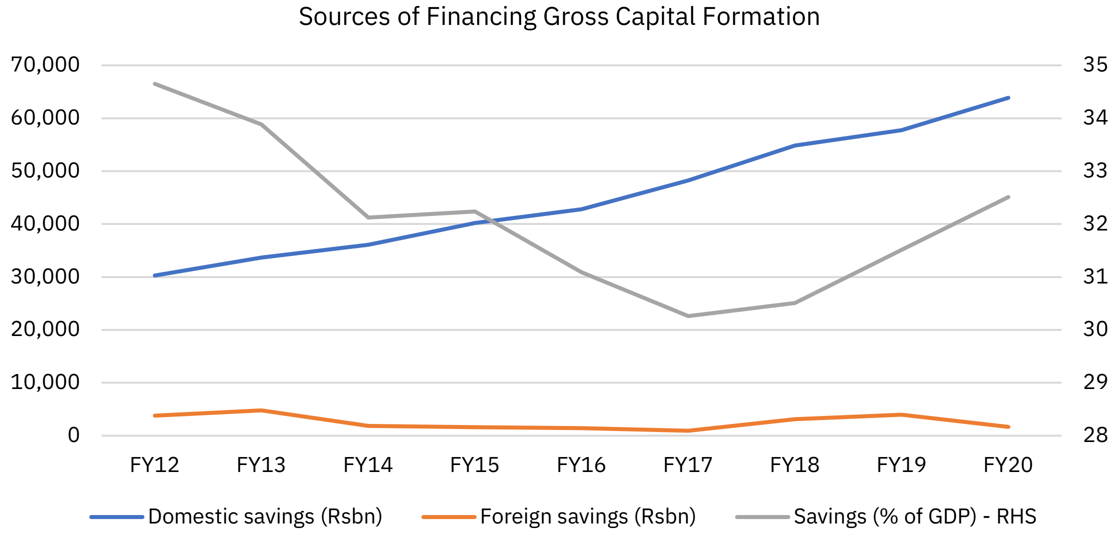




Source: CMIE Economic Outlook.

## Sources of financing investment – A supply-side view

**In India, investment is mainly financed through domestic savings...:** India's investment is largely financed through domestic savings, which has increased at a CAGR of 10% over the last decade from Rs30.3trn in FY12 to Rs63.9trn in FY20. Total foreign savings, i.e., net capital inflows from rest of the world, on the other hand, declined at a CAGR of 10% from Rs3.8trn to Rs1.7trn, primarily attributed to increase in current account deficit. In total, gross savings rose by 10% CAGR from Rs34.0trn to Rs65.5trn over the period. The savings rate, however, declined from 35% in FY12 to 30% in FY17, followed by a partial improvement to 33% in FY20 as growth in total savings could not match up to the level of growth in nominal GDP.

**Figure 30**: **Sources of financing investment and savings rate**




Source: CMIE Economic Outlook.

**...while domestic savings was largely driven by households:** Households are the major source of total savings in India. In FY20, households saved nearly Rs40.0trn which is around 62% to total domestic savings and 61% of total savings in India. Among others, private non-financial corporations are the second largest source of gross savings with 29% share, followed by other financial and non-financial corporations with a share of around 4.4% in FY20. In contrast, Government's contribution remained negative through the last decade with dis-savings of Rs3.7trn i.e. 5.7% of total savings in FY20.

**Figure 31: Share of different sources of financing GCF since FY13**

| Sources of Financing Gross Capital Formation | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 |
|---|---|---|---|---|---|---|---|---|
| **Total savings** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **100** |
| Net capital inflow from rest of the world | 12.4 | 4.9 | 3.8 | 3.2 | 1.9 | 5.4 | 6.4 | 2.5 |
| **Domestic savings** | **87.6** | **95.1** | **96.2** | **96.8** | **98.1** | **94.6** | **93.6** | **97.5** |
| Non-financial corporations | 25.8 | 31.7 | 33.9 | 37.9 | 36.8 | 34.6 | 33.3 | 33.4 |
| Public non-financial corporations | 3.2 | 3.3 | 3.1 | 3.5 | 3.5 | 4.2 | 4.2 | 4.4 |
| Private non-financial corporations | 22.6 | 28.4 | 30.8 | 34.4 | 33.3 | 31.6 | 29.2 | 29.0 |
| Financial corporations | 7.8 | 7.7 | 8.1 | 6.6 | 7.1 | 6.7 | 5.8 | 8.9 |
| Public financial corporations | 4.5 | 4.3 | 4.1 | 4.0 | 4.4 | 4.1 | 2.9 | 4.7 |
| Private financial corporations | 3.3 | 3.4 | 4.0 | 2.6 | 2.7 | 2.6 | 2.9 | 4.1 |
| General Government (Dis-savings) | (4.1) | (4.6) | (4.2) | (3.7) | (2.5) | (3.4) | (2.4) | (5.7) |
| Household sector | 58.1 | 60.2 | 58.4 | 56.0 | 56.7 | 56.9 | 59.1 | 60.9 |

Source: CMIE Economic Outlook.

**Moreover, the growth in total savings has slowed down since FY19:** After a significant rise in FY18, growth in total savings declined sharply from 17.8% in FY18 to merely 6.1% in FY20. This was largely due to a sharp fall in the growth rate of households' savings from 18.3% to 9.4% during the period, decline in foreign savings by 58% and increase in Government's dis-savings by 150% in FY20, offsetting a significant rise in investment growth by financial and non-financial corporations.

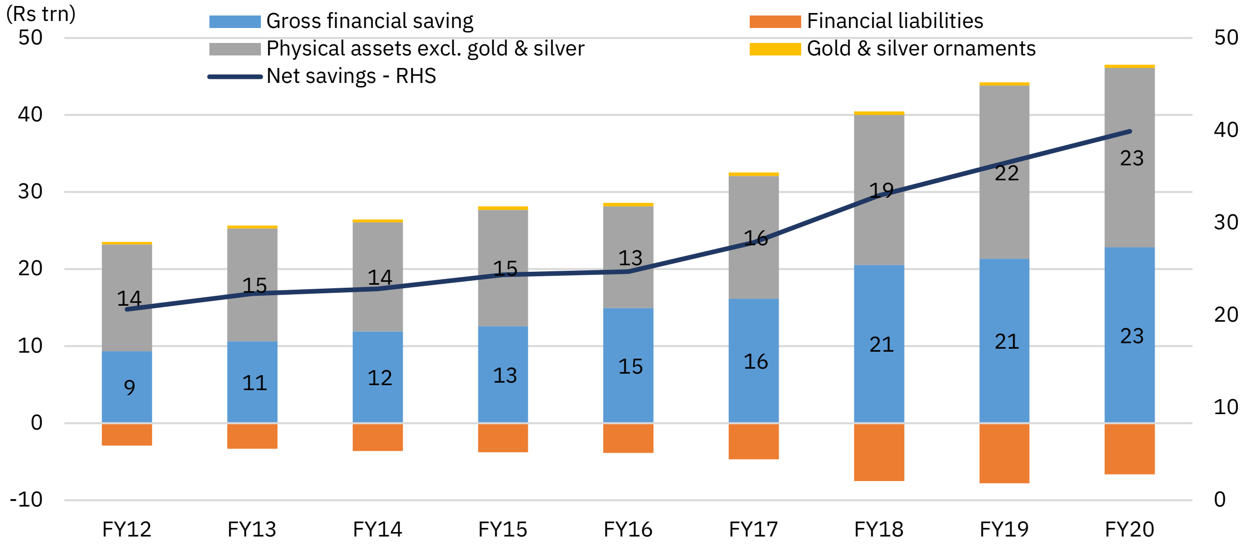
**Figure 32: Growth in different sources of financing GCF since FY13**

| Sources of Financing Gross Capital Formation | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 |
|---|---|---|---|---|---|---|---|---|
| **Total savings** | **13.1** | **(1.4)** | **10.2** | **5.8** | **11.2** | **17.8** | **6.6** | **6.1** |
| Net capital inflow from rest of the world | 27.0 | (61.1) | (14.0) | (12.2) | (33.8) | 234.4 | 27.3 | (58.2) |
| Domestic savings | 11.3 | 7.1 | 11.4 | 6.5 | 12.7 | 13.6 | 5.4 | 10.5 |
| Non-financial corporations | 17.1 | 21.3 | 17.7 | 18.4 | 8.0 | 10.7 | 2.4 | 6.5 |
| Public non-financial corporations | 0.2 | 1.8 | 2.3 | 19.3 | 11.8 | 40.1 | 6.2 | 11.9 |
| Private non-financial corporations | 20.0 | 24.1 | 19.6 | 18.3 | 7.6 | 11.6 | (1.3) | 5.3 |
| Financial corporations | 10.4 | (2.5) | 15.7 | (14.0) | 19.5 | 11.1 | (7.1) | 61.5 |
| Public financial corporations | 3.5 | (6.7) | 4.1 | 3.9 | 22.0 | 10.3 | (25.4) | 75.1 |
| Private financial corporations | 21.6 | 3.3 | 30.2 | (31.9) | 15.7 | 12.7 | 18.0 | 53.0 |
| General Government (Dis-savings) | 0.4 | 9.3 | 0.9 | (7.8) | (24.8) | 61.3 | (24.3) | 150.3 |
| Household sector | 8.2 | 2.2 | 6.7 | 1.5 | 12.6 | 18.3 | 10.6 | 9.4 |
| Net financial saving | 14.2 | 13.4 | 5.8 | 26.2 | 3.2 | 13.9 | 3.8 | 19.5 |
| Gross financial saving | 14.1 | 11.9 | 5.6 | 19.0 | 7.9 | 27.4 | 3.8 | 7.1 |
| Financial liabilities | 13.9 | 8.6 | 5.1 | 2.3 | 21.6 | 60.2 | 3.7 | (14.7) |
| Saving in physical assets | 5.4 | (3.3) | 6.8 | (12.9) | 21.0 | 21.9 | 15.6 | 3.5 |
| Saving in the form of gold & silver ornaments | 9.0 | 0.4 | 23.9 | 2.0 | 0.1 | 0.3 | (8.6) | 1.1 |

Source: CMIE Economic Outlook.

**Households prefer physical assets and financial savings over gold and silver ornaments:** Out of Rs39.9trn savings, households saved around Rs23.3trn in physical assets and RS22.8trn as financial savings in FY20. Notably, there is a significant shift in savings behaviour of households from physical assets to financial savings over the last decade. While gross financial savings rose at a CAGR of 11.9% between FY12 and FY20, savings in physical assets increased by 6.7%. At the same time, their financial liability has also increased over the period at a CAGR of 10.9%. As a result, the share of savings in physical assets fell sharply from 67% to 58%, while the share of gross financial savings and financial liabilities increased from 45% to 57% and 14% to 17%, respectively. This was mainly due to jump in investment of dwellings and other buildings which was mostly financed by taking additional loans from banks and NBFCs.

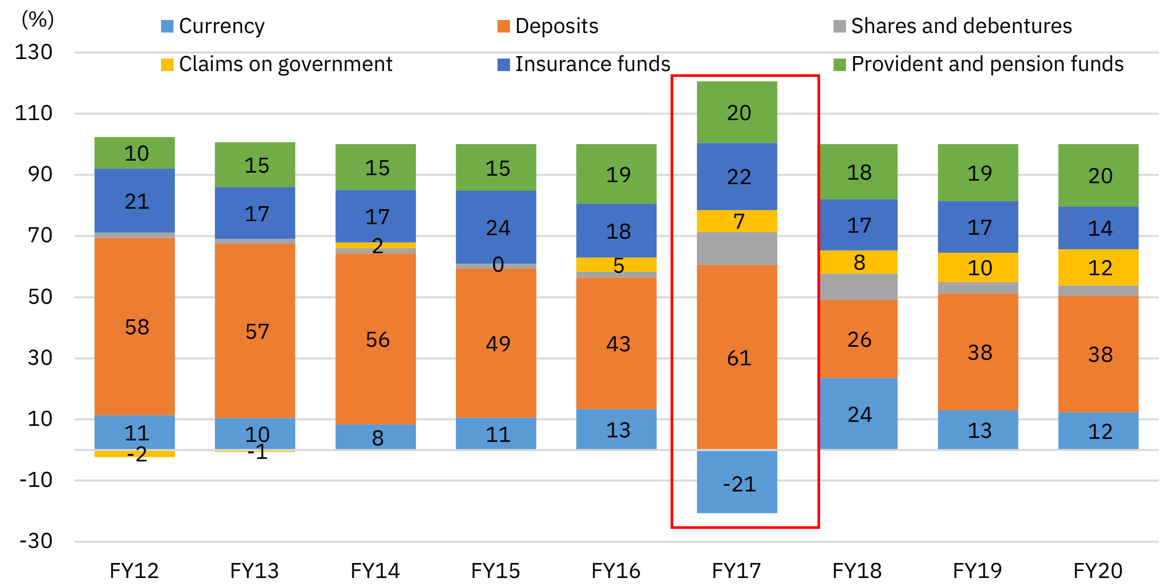
**Figure 33: Composition of household savings**




Source: CMIE Economic Outlook.

**The composition of gross financial savings by households also changed considerably over the period:** Demonetisation had a significant impact on total savings in FY17, as 86% of all currencies circulated in the economy were demonetised on November 8th, 2016. Total savings in currency accounted for almost 13% of gross financial savings in FY16 which turned negative in FY17 post demonetisation announcement, which was partly replaced by a sudden 50% jump in bank deposits. Overall, demonetisation had a significant but transitory impact on the instrument used for mobilizing surplus by households, and savings in the form of currency has again risen to Rs5trn in FY18 (vs. Rs2trn in FY16), while bank deposit declined by 17% over the period (reached at Rs5trn in FY18 similar to the level seen in FY12). Besides, households' preference towards insurance, provident and pension funds remained intact over the years. In FY20, the distributional pattern remained broadly steady across major components. However, there was an increase in the share of claims on government from 10% in FY19 to 12% in FY20, while the share of insurance funds declined from 17% to 14% over the year.

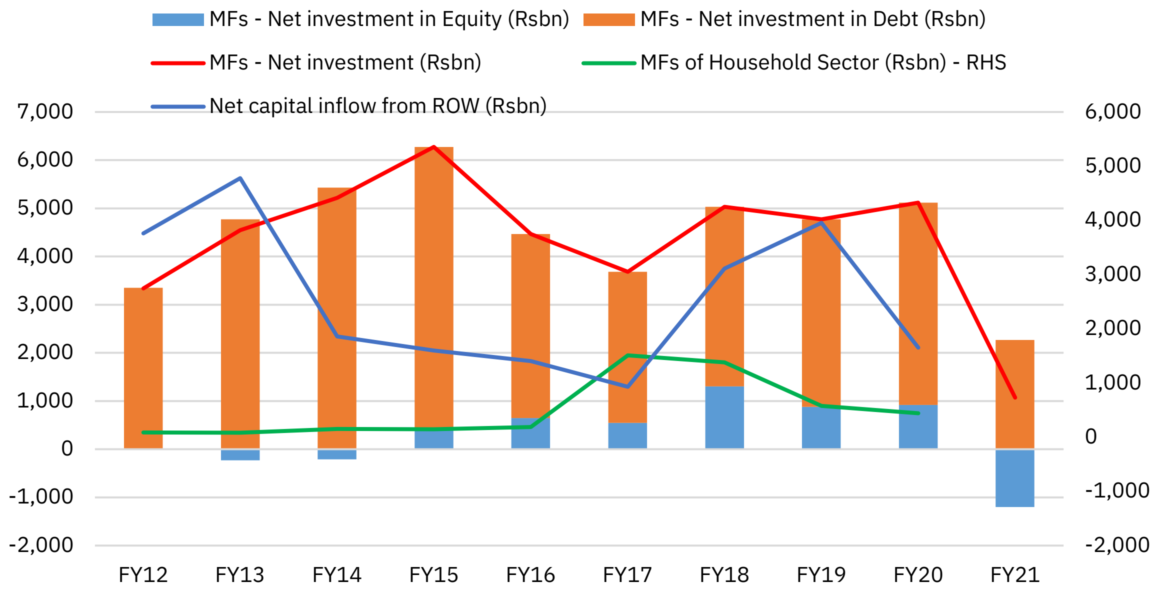
**Figure 34: Composition of gross financial savings of household sector**




Source: CMIE Economic Outlook.

**Post demonetisation, there was a temporary rise in the share of households' savings through mutual funds:** Post-demonetisation, households' savings in shares and debentures increased exponentially from Rs284bn in FY16 to Rs1.7trn in both FY17 and FY18 each, followed by a significant fall to reach Rs774bn in FY20. On an average, household savings grew at a CAGR of 29% over the last five-year period which is significantly higher than the average growth seen over the previous five years. This was largely driven by a sudden rise in net investment in mutual funds as an alternative way of savings post demonetisation. However, net investment in mutual funds declined since FY19 as rate of return has declined significantly during the period.

**Figure 35: Trend of net capital inflow from rest of the world and Mutual funds**




Source: CMIE Economic Outlook.
Note: Net capital inflows from rest of the world and mutual funds of households are not available for FY19.

**In FY21, households started investing directly in the market:** The drop in net household investments in mutual funds in since FY19 was accompanied by a commensurate increase in direct investment by households in the equity market, and more so post the COVID-19 outbreak. This was partly due to a sharp recovery in the equity prices globally after a nosedive in April'20, and ample amount of liquidity available in the economy thanks to prompt monetary and fiscal policies. As a result, the share of total turnover in capital market by individual investors has grown from 39% in FY20 to 45% in FY21 at NSE.

**Figure 36: Annual trend of new investor account additions with depositories**

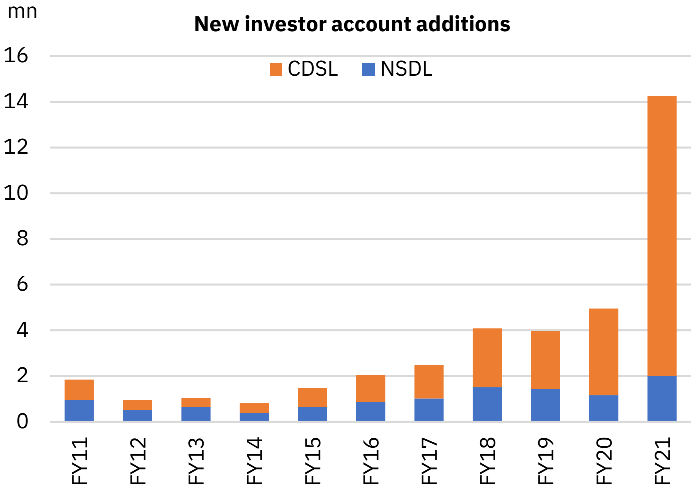
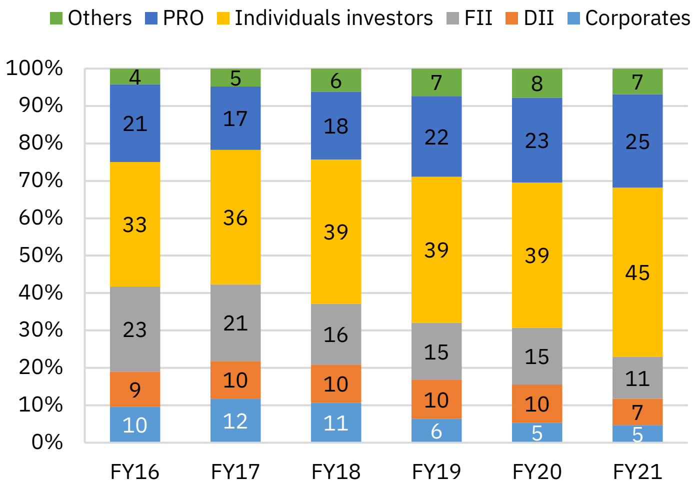



**Figure 37: Share of client participation in Capital Market at NSE (%)**




Source: CMIE Prowess, NSE.

**Foreign savings remained volatile over the last few years:** Post a sharp rise during FY18 and FY19, foreign savings, i.e., net capital inflow from rest of the world, registered a sharp decline from Rs4.0trn in FY19 to merely Rs1.7trn in FY20 amid a slowdown in Indian economy and COVID-induced increase in economic uncertainty post Q4FY20.

**Government dis-savings rose sharply over the last two fiscal years:** Government savings remained negative throughout the years which are mainly financed through the bond market. Total government dis-savings increased by a staggering 150% from Rs1.5trn in FY19 to Rs3.7trn in FY20 due to shortfall in revenues post the cut in corporate tax rate in September 2019 and lower disinvestment receipts, with COVID-19 outbreak later in the year adding to the woes. The trend continued in FY21 as well, as stringent lockdown restrictions to curtail the spread of COVID-19 pandemic weighed on economic activity and therefore tax collections. The Centre's fiscal deficit, therefore, doubled from 4.6% of GDP in FY20 to 9.2% in FY21, a large part of which was funded by market borrowings. This, along with a significant jump in borrowings by state governments during last couple of years, resulted in crowding-out of private investments.

**High-frequency indicators shows early signs of improvement in equity issuances and credit to several categories in 2021**: The figure below shows how equity issuances, debt issuances and total credit outstanding across different categories fell sharply in 2020 due to economic recession and containment measures taken by the government after the outbreak of Coronavirus pandemic and a sharp fall in demand across sectors. The situation, however, has improved in 2021 as these indicators increased well above the pre-pandemic level. A few of these indicators, such as debt issuances and credit card outstanding, however, have deteriorated again since April'21 due to COVID resurgence and consequent reimposition of lockdown restrictions.

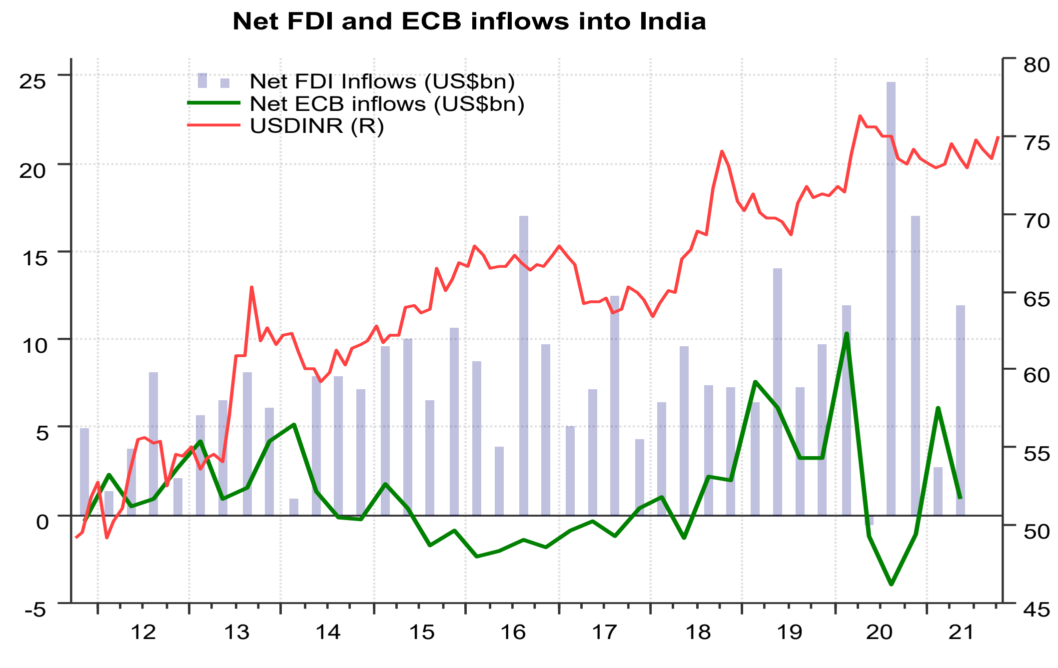
**Figure 38: Access to capital in India across different categories**

| Indicators | Feb-20 | Mar-20 | Apr-20 | May-20 | Jun-20 | Jul-20 | Aug-20 | Sep-20 | Oct-20 | Nov-20 | Dec-20 | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equity issuances | 100 | 166 | 0 | 54 | 380 | 127 | 327 | 85 | 38 | 57 | 123 | 73 | 49 | 227 | 58 | 119 | 148 |
| Debt issuances | 100 | 102 | 96 | 93 | 90 | 64 | 68 | 104 | 77 | 59 | 98 | 83 | 66 | 161 | 44 | 41 | 39 |
| Agri credit (O/S) | 100 | 100 | 100 | 101 | 100 | 101 | 101 | 103 | 105 | 106 | 108 | 110 | 110 | 112 | 112 | 111 | |
| Industry credit (O/S) | 100 | 104 | 103 | 102 | 103 | 101 | 99 | 99 | 98 | 99 | 99 | 100 | 100 | 104 | 104 | 103 | |
| Services credit (O/S) | 100 | 107 | 105 | 104 | 104 | 105 | 105 | 106 | 106 | 106 | 106 | 108 | 109 | 108 | 107 | 106 | |
| Consumer durable loans (O/S) | 100 | 143 | 137 | 134 | 136 | 141 | 139 | 103 | 106 | 107 | 109 | 114 | 112 | 113 | 112 | 109 | |
| Credit card outstanding (O/S) | 100 | 97 | 87 | 84 | 88 | 91 | 94 | 95 | 99 | 103 | 99 | 105 | 105 | 105 | 102 | 94 | |
| Vehicle loans (O/S) | 100 | 100 | 98 | 97 | 97 | 98 | 99 | 100 | 101 | 103 | 104 | 107 | 108 | 109 | 110 | 109 | |
| Housing loans (O/S) | 100 | 101 | 101 | 100 | 101 | 101 | 102 | 102 | 103 | 104 | 105 | 107 | 108 | 110 | 110 | 110 | |

Source: CMIE Economic Outlook.

**Net FDI and ECB inflows are additional sources of financing in India:** Out of all financing sources, Indian investors depend on FDI and ECB inflows as well. While both recorded a sharp decline after the outbreak of the pandemic, net FDI increased significantly over the second half of 2020, while net external borrowings showed some recovery in the beginning of 2021. Overall, net FDI and ECB inflows remained quite fragile given the rise in domestic and global growth uncertainty in the wake of emergence of multiple variants of coronavirus.

**Figure 39: Net FDI and ECB inflows in India**




Source: Refinitiv.

## Nature of investment in large projects

Using investment data from the CMIE Capex database, we have shown how investment in large projects has evolved in India over the last five (fiscal) years across their project status, *viz*. new projects announced, projects outstanding, under implementation, revived projects, stalled due to several reasons and projects those are completed. Here, CMIE only provides data on investment projects that involve setting up of new capacities and entail a capital expenditure of Rs10m or more. This has also helped us to understand the sector-wise distribution to total investment for all investment projects taken across government and private sector.

**Barring FY20, investment on new projects fell sharply over the last five years:** Investment in new projects remained on a declining trajectory between FY17 and FY19 amid economic slowdown, rise in uncertainty over the revival of consumption demand and unfavourable financial conditions. It recovered temporarily to 8.8% in FY20, aided by a favourable base and gradual improvement in economic activity, only to fall by a steep 66% in FY21, thanks to an unprecedented economic contraction caused by severe containment measures taken after the outbreak of the Coronavirus pandemic. As a result, investment in new projects dropped by a CAGR of 26% from Rs 19.1trn in FY17 to just Rs5.7trn in FY21.

**Similar trend was observed for completed and revived projects as well**: While investment declined by an 18% CAGR on completed projects from Rs6.5trn in FY17 to Rs3trn in FY21, it dropped by a 16% CAGR for revived projects during the same period from Rs2.6trn to Rs1.3trn. At the same time, projects worth Rs21.1trn were dropped in FY21 which was significantly higher than FY17. Investment on projects under implementation, however, remained stable over the period largely due to variation in cost, even as total number of projects have fallen sharply. Moreover, the rate of implementation has improved from 52% in FY17 to ~59% in FY21.

**Investment outlook may remain subdued in FY22** as investments under fresh announcements, completed and revived projects declined, while investments in stalled projects jumped in Q1FY22. This was largely driven by weak economic recovery, slow pace of vaccinations, and weak consumer sentiments and consumer expectations. Besides, the spike in inflation trajectory, and persistent COVID-induced economic and business uncertainty may keep investment demand muted, particularly in the wake of fading monetary policy support and inadequate direct fiscal impetus.

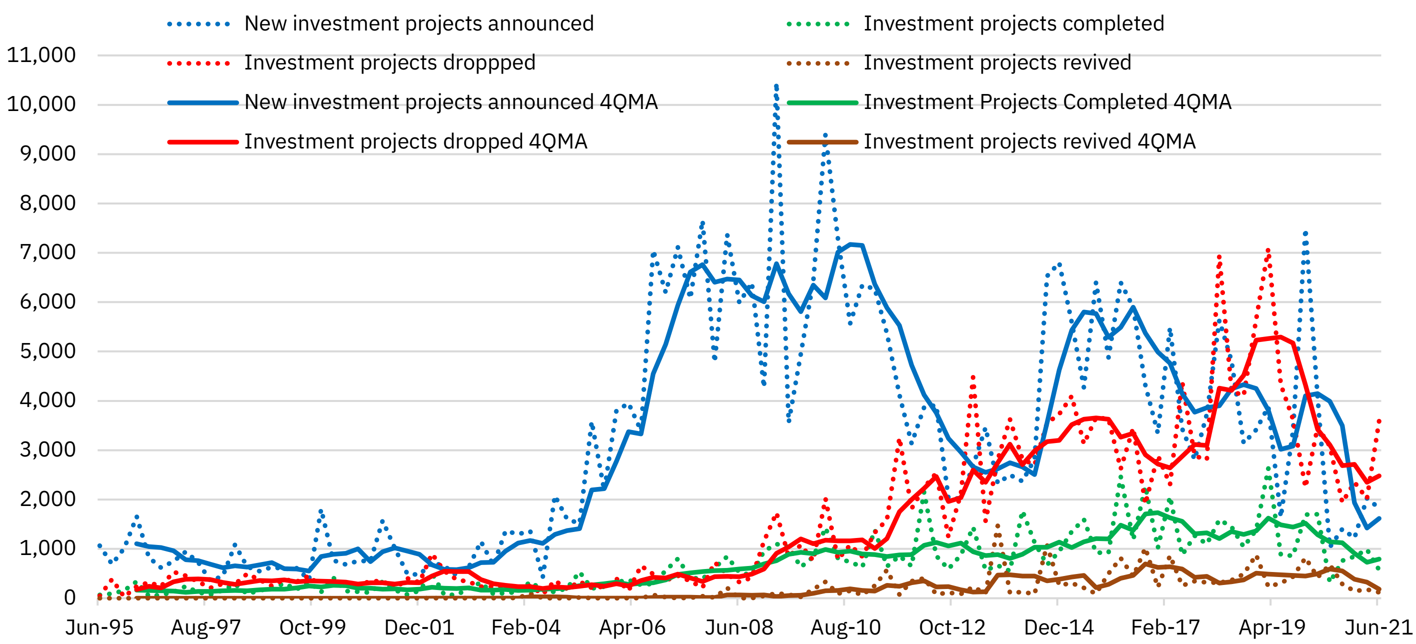
**Figure 40: Annual growth of investment by project status in India**

India's investment scenario deteriorated sharply in FY21 with a fall in new project announcements, drop in project completion, and lacklustre project revival, while there was a rise in the total value of dropped projects over the year. On the positive side, rate of implementation improved over the year.

| Project Status | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| New investment projects announced (%YoY) | 1.5 | -13.6 | -18.0 | -2.4 | 8.8 | -65.6 |
| Investment projects completed (%YoY) | 43.8 | 10.4 | -26.0 | 34.6 | -21.0 | -41.9 |
| Investment projects dropped (%YoY) | 2.5 | 20.7 | 4.8 | 2.9 | 21.0 | 23.6 |
| Investment projects revived (%YoY) | -6.4 | 57.5 | -51.9 | 59.8 | 1.0 | -34.5 |
| Investment Projects Outstanding (%YoY) | 6.2 | 4.7 | 1.5 | -2.2 | 2.5 | -0.1 |
| Investment Projects under implementation (%YoY) | 6.1 | 5.2 | 4.1 | 5.4 | -5.6 | 10.2 |
| Projects under implementation (% of outstanding) | 52.3 | 52.5 | 53.9 | 58.0 | 53.4 | 58.9 |

Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 41: Trend of investment by project status (Rs bn)**




Source: CMIE – Capex. * Data extracted on July 08, 2021.

**New announcements declined drastically for both government and private sectors:** During 2017-21, investment in new projects by the Government declined at a faster pace (34% CAGR) than the private sector (18%). This was primarily on account of lack of funds, rise in government deficits, sudden surge in COVID-related health expenditure, while total government revenue declined due to the strict containment measures. In case of private sector, the major constraints were tight financial conditions triggered by the NPA woes in the banking sector and weak demand environment.

In Q1FY22, fresh investments by the Government declined further due to containment measures and lack of funds as government deficit increased to a record high level along with an exponential rise in total expenditure, particularly in the health sector. In contrast, investment in new projects by the private sector has improved partially led by a few major projects in Energy, Chemicals, and Metals.

**The overall situation worsened in terms of stalled projects:** Over the last five (fiscal) years, there has been a significant rise in total stalled projects for both the government and private sectors. Investment in stalled projects increased by a 15% CAGR from Rs4.5trn in FY17 to Rs7.8trn in FY21 in the Government sector. This has largely happened in FY20 due to containment measures taken by the government. Similar trend can be observed for the private sector as well with a 12% CAGR in investment in stalled project from Rs8.6trn in FY17 to Rs13.3trn in FY21. The situation deteriorated further in the private sector in Q1FY22 due to weak economic recovery, muted consumer expectations and increasing threat of an impending third wave of COVID-19.

**There is a fall in project completion…:** Completed projects in value terms declined at a CAGR of 28% for the private sector over the last five fiscal years—significantly higher than the annualised contraction of 8% for the Government sector. While the government sector was hit the most in FY20 with a 43% decline, completed projects in the private sector declined by 66% in FY21.

**...along with a sharp rise in dropped projects and slowdown in revival rate**: The sharp decline in completion rate was accompanied with a surge in dropped projects and slowdown in revival rates. This was largely driven by the sudden outbreak of the Coronavirus pandemic, economic recession, and weak consumer expectations in the near-term. As a result, investment of private sector was impacted significantly with a 12% (CAGR) rise in dropped projects and 29% (CAGR) decline in revived projects, while the government sector recorded a 15% (CAGR) rise in dropped projects and 8% (CAGR) fall in revived projects between FY17 and FY21.

**Share of investment on projects under implementation remained low over the period for both the sectors:** By the end of FY21, only 49% of all outstanding projects were under implementation in the private sector. The rate is somewhat better at 56% in the Government sector, mainly on account of increase in dropped rate, and fall in completion rate, new announcements, and revival rate during the last five-year period.

**Figure 42: Annual growth of investment by project status in Government Sector (%)**

Even though the Government sector has seen a sharp drop in new project announcements over the last 5 years barring FY20 along with a fall in project completion and rise in dropped projects, there was a significant rise in projects under implementation, particularly in FY21.

| Project Status | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| New investment projects announced (%YoY) | -3.8 | -8.2 | -32.8 | -8.1 | 22.1 | -75.2 |
| Investment projects completed (%YoY) | 129.8 | -17.3 | -0.1 | 34.7 | -42.9 | -5.1 |
| Investment projects dropped (%YoY) | -28.8 | 32.9 | 21.6 | -23.6 | 81.2 | 3.1 |
| Investment projects revived (%YoY) | -27.5 | 57.5 | -48.4 | 39.4 | -17.0 | 20.0 |
| Investment Projects Outstanding (%YoY) | 9.9 | 8.1 | 4.1 | 0.0 | 5.3 | 0.3 |
| Investment Projects under implementation (%YoY) | 13.2 | 11.6 | 10.4 | 8.3 | -6.4 | 16.3 |
| Projects under implementation (% of outstanding) | 51.8 | 53.3 | 55.1 | 58.5 | 63.3 | 56.2 |

Source: CMIE – Capex. * Data extracted on July 08th, 2021.

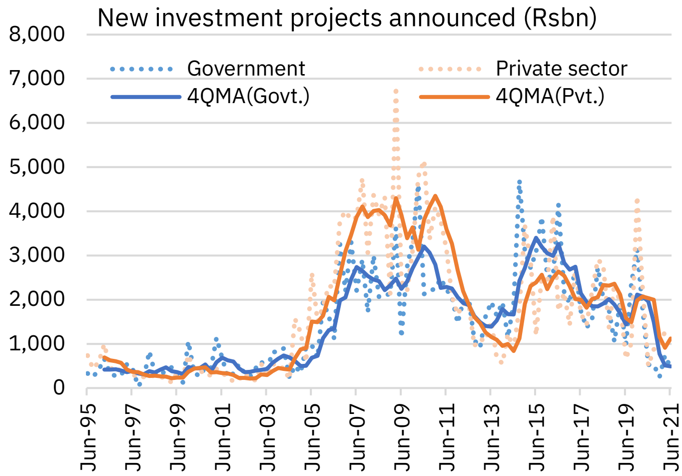
**Figure 43: Annual growth of investment by project status in Private sector (%)**

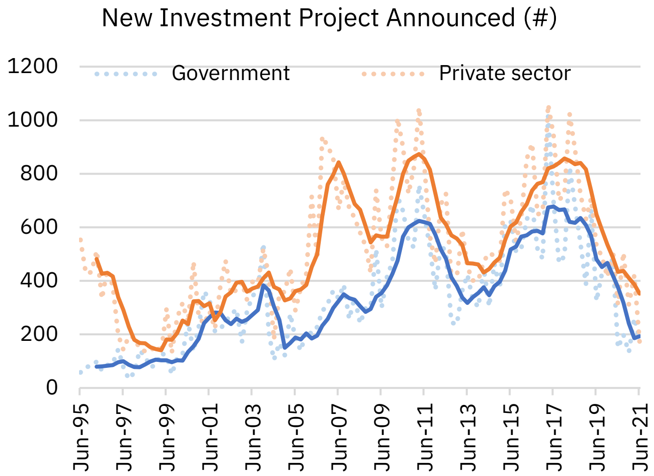
Private sector has been underperforming across all project status. While it has seen a meaningful drop in new project announcements, its revival and completion rates have declined with a rise in stalled projects largely due to tight financial conditions triggered by the NPA woes in the banking sector and weak demand environment. The situation worsened since FY20 after the sudden outbreak of the Coronavirus pandemic.

| Project Status | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| New investment projects announced (%YoY) | 8.6 | -20.0 | 2.1 | 2.7 | -1.9 | -56.0 |
| Investment projects completed (%YoY) | -0.6 | 43.5 | -43.8 | 34.5 | 6.0 | -66.1 |
| Investment projects dropped (%YoY) | 27.8 | 15.1 | -4.0 | 20.4 | -4.3 | 40.0 |
| Investment projects revived (%YoY) | 47.1 | 57.6 | -56.2 | 89.7 | 20.5 | -75.1 |
| Investment Projects Outstanding (%YoY) | 1.9 | 0.5 | -2.0 | -5.4 | -1.8 | -0.7 |
| Investment Projects under implementation (%YoY) | -1.9 | -3.3 | -5.5 | 0.1 | -4.1 | -1.2 |
| Projects under implementation (% of outstanding) | 52.9 | 50.9 | 49.0 | 47.3 | 50.0 | 48.8 |

Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 44: New projects announced — Government vs. Private sector**

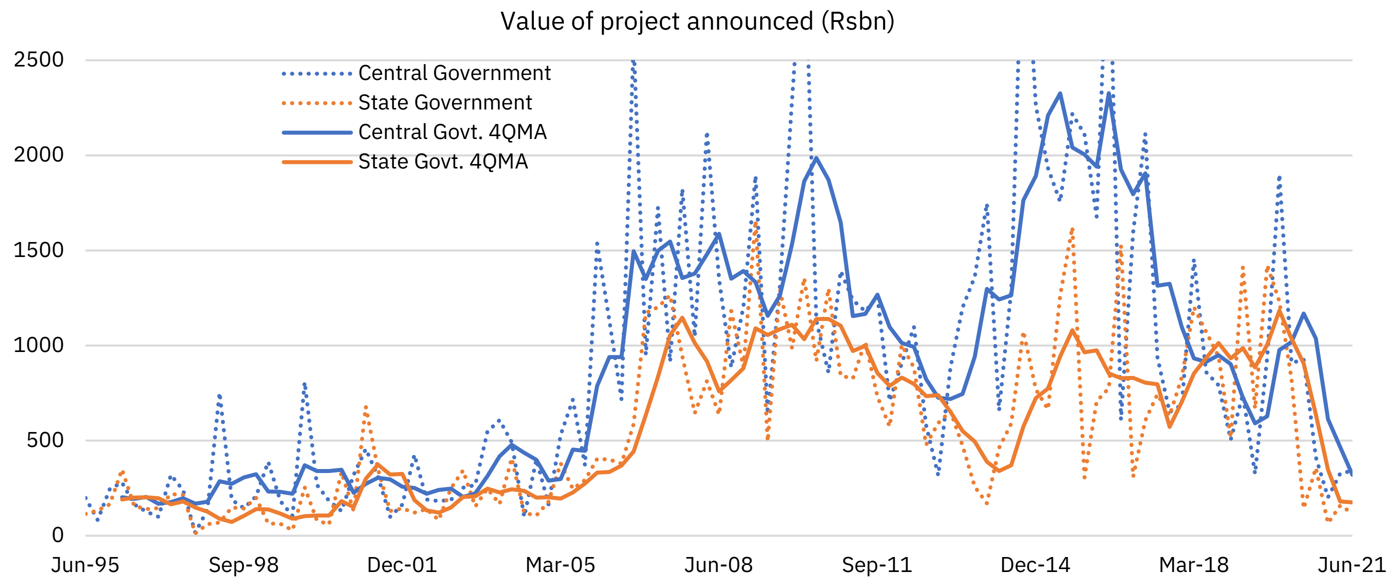



Source: CMIE – Capex. * Data extracted on July 08th, 2021

**Figure 45: New announcements —Central Government vs. State Government**

Barring a few months in 2018 and 2019, new announcements by Centre has almost always exceeded the State Government.




Source: CMIE – Economic Outlook. * Data extracted on July 08th, 2021.

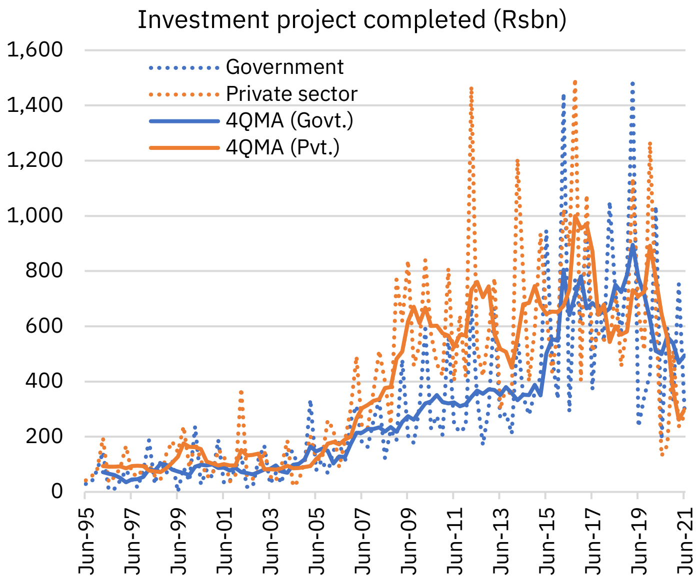
**Figure 46: Top five new projects announced in major sectors in FY21**

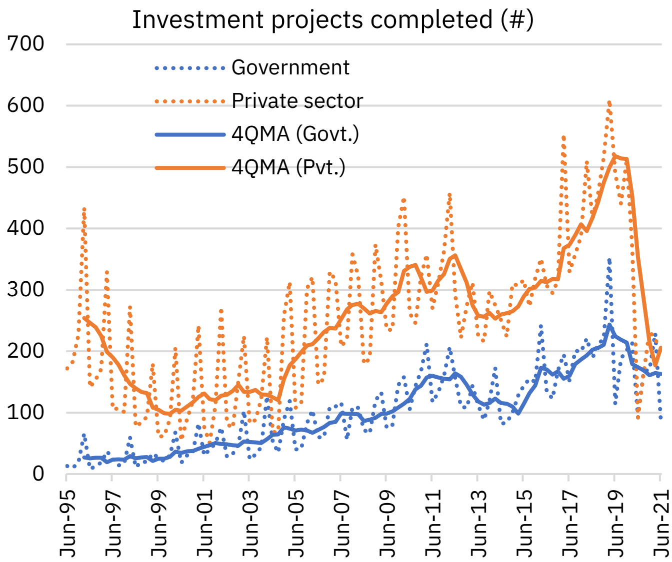
| Industry | Project Name | Cost (Rsbn) | Ownership |
|---|---|---|---|
| **Transport Services** | | | |
| Road transport | Akkalkot (Near Rampur Village) (NH-150E) - KN/TS Border (Near Singnodi Village) Four/Six Lane Greenfield Highway Project | 46.2 | Central Govt. - Statutory Bodies |
| Transport logistics | Maharashtra Logistics Park Project | 43.1 | Private (Indian) |
| Shipping transport | Tuticorin Conversion of Berths No.1, 2, 3 & 4 into Container Terminals Project | 27.0 | Central Govt. - Statutory Bodies |
| Road transport | KN/TS Border near Nandinne village-Kurnool Six Lane Greenfield Highway Project | 19.5 | Central Govt. - Statutory Bodies |
| Road transport | Uni-Directional Tunnel (Sudhmahadev-Daranga section on NH-244) Project (Package 1) | 19.0 | Central Govt. - Statutory Bodies |
| **Chemicals & Chemical products** | | | |
| Fertilisers | Gopalpur Fertilizer and Petrochemical Industries Plant Project | 20.0 | Private (Indian) |
| Drugs & pharmaceuticals | Bhatinda Pharmaceutical Park Project | 18.0 | State Government |
| Drugs & pharmaceuticals | Jhagadia Greenfield Synthetic Organic Chemicals Plant Project | 14.1 | Alchemie Group |
| Synthetic rubber | Panipat Poly Butadiene Rubber Plant Project | 12.0 | Central Govt. - Commercial Enterprises |
| Refinery | Paradip Needle Coker Unit Project | 11.7 | Central Govt. - Commercial Enterprises |
| **Electricity** | | | |
| Conventional electricity | Veeraballi Pumped Storage Power Project | 127.9 | Private (Indian) |
| Renewable electricity | West Bengal & Jharkhand Floating Solar Power Project | 117.0 | Central Govt. - Commercial Enterprises |
| Renewable electricity | Rajasthan Grid-Connected Solar PV Power Project (Tranche 4) | 116.0 | Central Govt. - Commercial Enterprises |
| Renewable electricity | 1,200 MW ISTS Connected Wind Power Projects (Tranche 10) | 72.0 | Central Govt. - Commercial Enterprises |
| Renewable electricity | Rajasthan 1,070 MW Grid-Connected Solar PV Power Project (Tranche 3) | 69.6 | Central Govt. - Commercial Enterprises |

Source: CMIE – Capex. *Data extracted on June 29, 2020.

**Figure 47: Completed projects —Government vs. Private sector**

Unlike previous years, Government has now been more focused on completing the ongoing projects over the last two years.

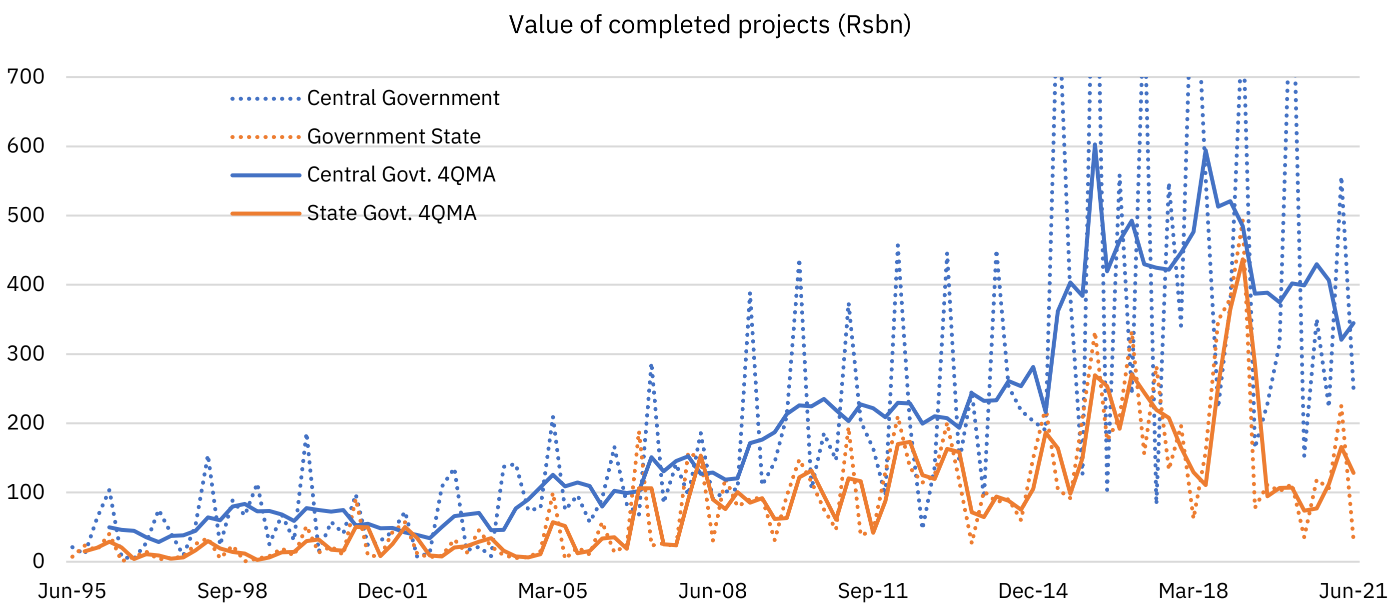



Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 48: Projects Completed —Central Government vs. State Government**

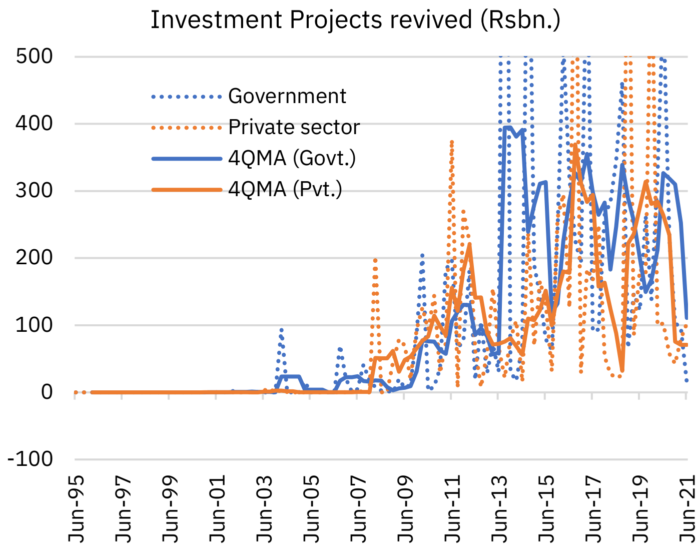
Centre exceeded State Government in terms of total value of projects completed throughout the period.

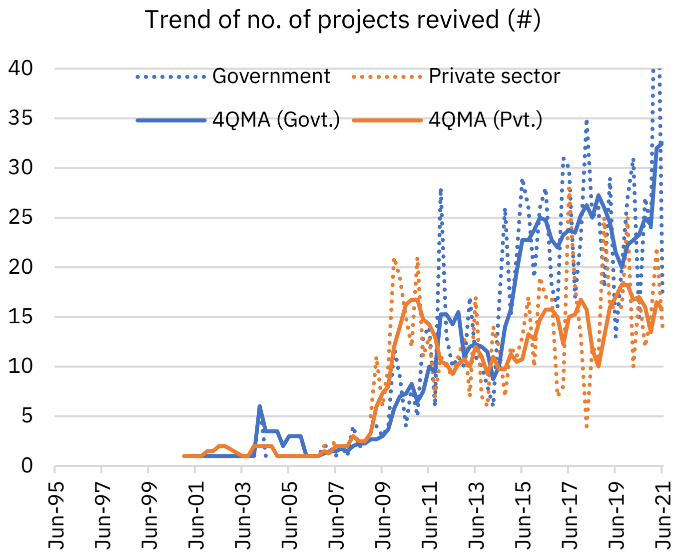



Source: CMIE – Economic Outlook. Data extracted on July 08, 2021

**Figure 49: Revived projects —Government vs. Private sector**

The number of projects getting revived since 2011 has been higher in the government sector. But, in terms of total value of revived projects, the scenario is not quite clear.

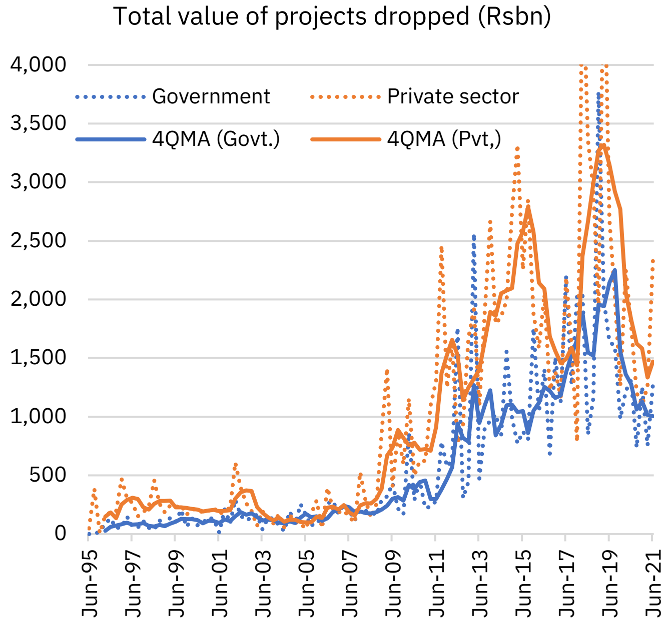


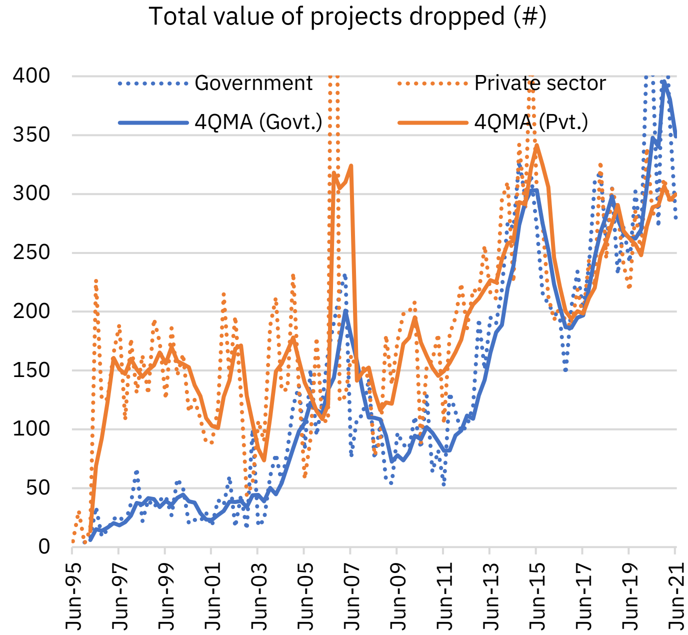




Source: CMIE – Capex. * Data extracted on July 08, 2021

**Figure 50: Dropped projects —Government vs. Private sector**

There is a significant rise in the number of dropped projects in both Government as well as private sector over the last few years, thanks to tight liquidity conditions and weak demand environment. Notably, the number of projects getting stalled or shelved has been higher in the government sector, even as the situation contrasts in value terms.

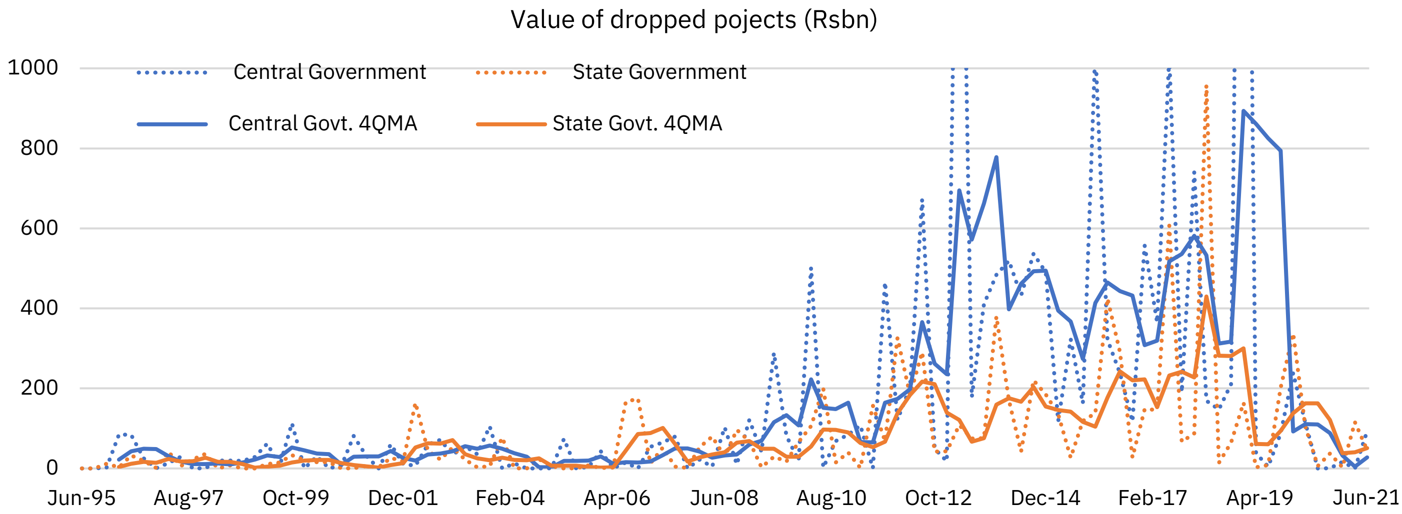



Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 51: Projects dropped —Central Government vs. State Government**

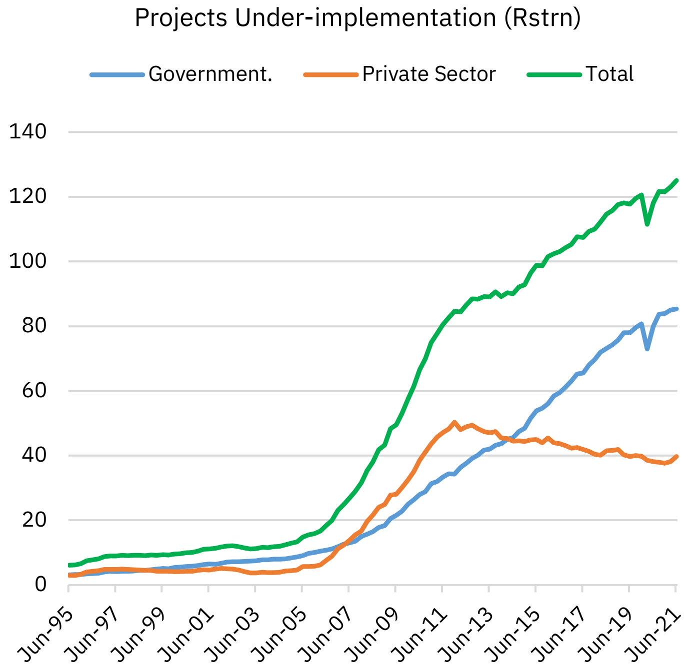
Unlike fresh announcements, value of revived and completed projects, State Government has a higher share than the Central Government in terms of value of projects dropped since the second half of 2019.

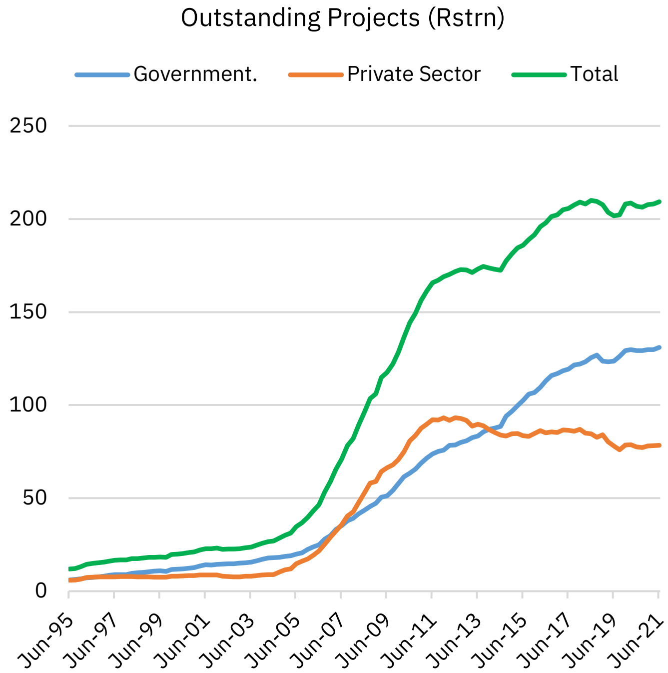



Source: CMIE – Economic Outlook. * Data extracted on July 08th, 2021.

**Figure 52: Under implementation and outstanding projects—Government vs. Private sector**

Government has been leading in terms of projects under implementation as well as outstanding projects since 2015, partly explained by revision in project cost and strong growth in value of projects getting shelved. Notably, several projects under implementation were temporarily impacted in the Government sector due to the containment measures taken by the Government, while it was already in a downward trajectory in the private sector.

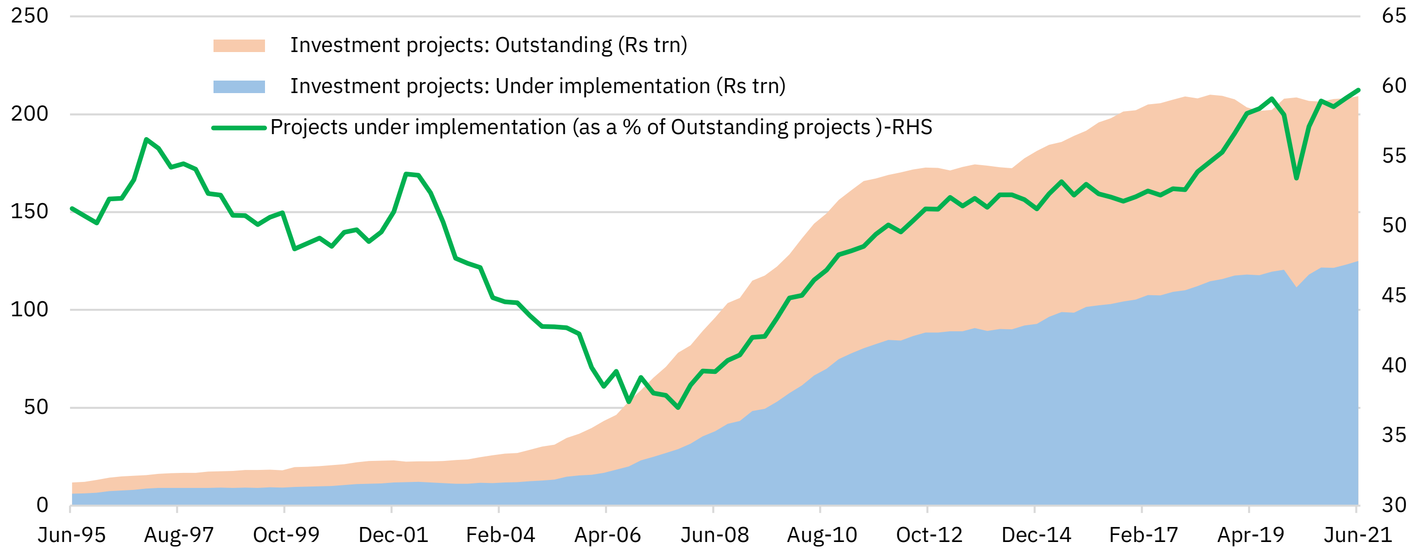



Source: CMIE Capex. *Data extracted on July 08th, 2021.

**Figure 53: Trend of investment projects under implementation vs. total outstanding projects**

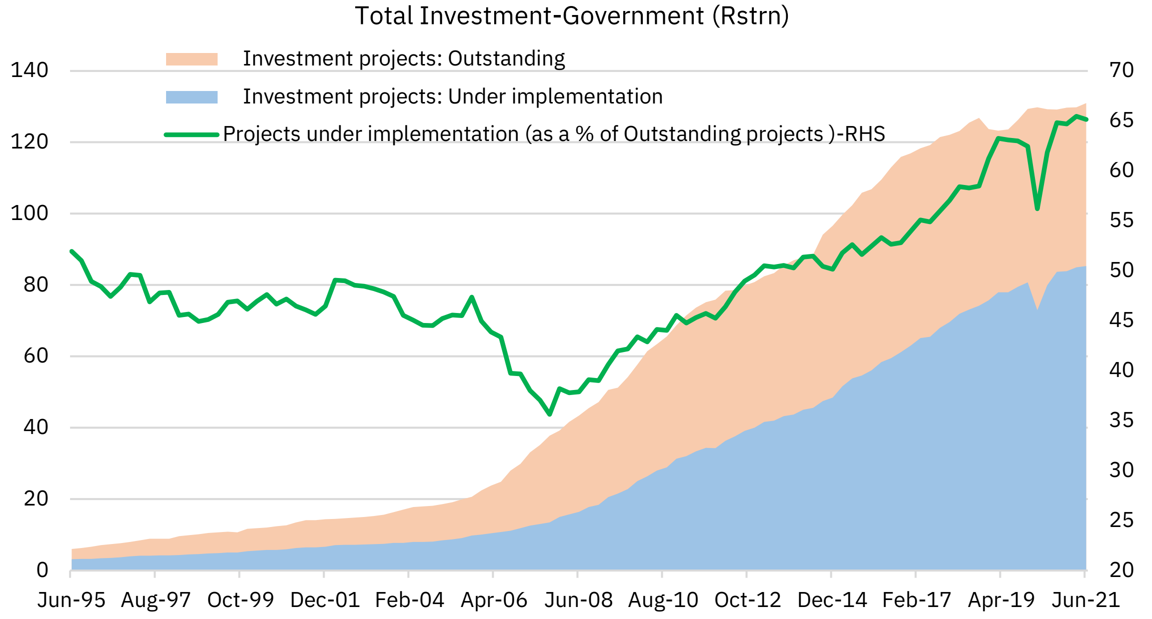
Implementation rate improved significantly from 37% of the outstanding projects in 2007 to 60% in 2019, largely led by the Government. Afterwards, it temporarily fell to 53% in Mar'20 mostly due to the sudden rise in coronavirus cases throughout the country, followed by a sharp recovery over the next three quarters as the containment measures were eased out in phased manner. As of June 2021, the implementation rate has increased to pre-covid level with limited impact of the second wave of the pandemic.




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

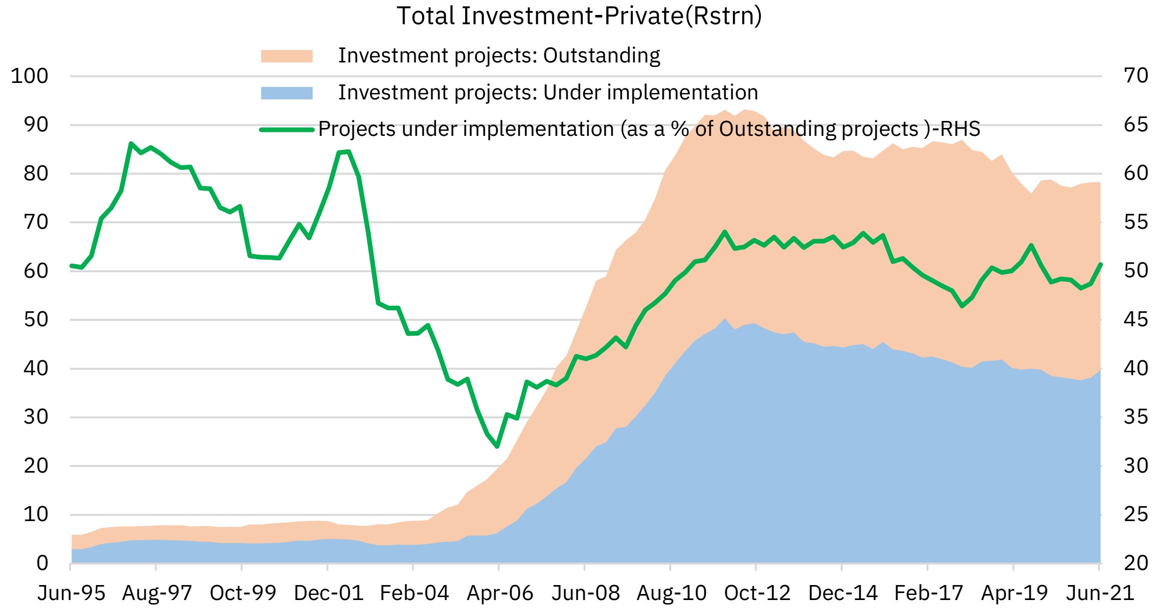
**Implementation rate in government projects is generally higher than in private sector:** The Government sector performed better than the private sector in terms of implementation rate. For government projects, out of the total outstanding projects, 66% were under implementation in the quarter ending Jun'21 whereas only 51% projects were under implementation in case of private sector. Notably, the government sector recorded a steady improvement in the implementation rate since 2007, barring a temporary and sharp fall in Mar'20 due to imposition of COVID-induced restrictions. In contrast, the private sector recorded a sharp fall in 2017 which improved over the subsequent two years only to see a steep fall post the COVID-19 outbreak. Project implementation rate for the private sector has not yet recovered fully, reflecting that the private sector was impacted well before the pandemic hit the country and the situation deteriorated further due to tight financial conditions, several containment measures taken by the government, weak consumer expectations, slow economic recovery and low domestic as well as global demand.

**Figure 54: Trend of projects under implementation in Government sector**




Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 55: Trend of projects under implementation in Private sector**




Source: CMIE – Capex. * Data extracted on July 08, 2021.

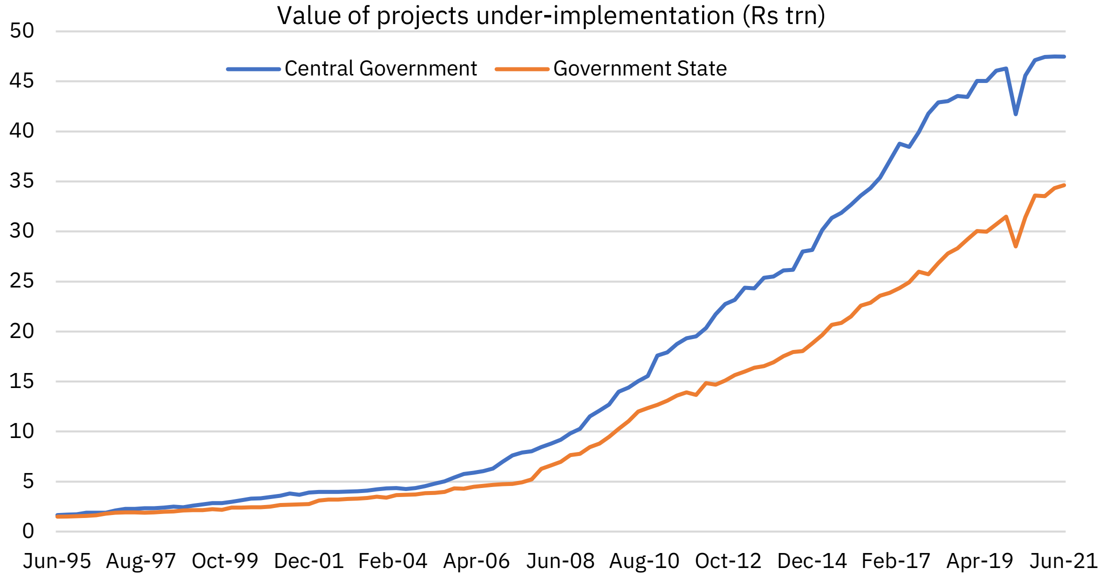
**Figure 56: Top five projects under implementation in major sectors in FY21**

| Project Name | Cost (Rsbn) | Ownership |
|---|---|---|
| **Electricity** | | |
| Gujarat (GUVNL - 500 MW Auction) Grid Connected Solar PV Power Project Phase 12 | 9.8 | Central Govt. - Commercial Enterprises |
| Kerala State Power Project (KSEBL Auction) | 4.9 | Tata Group |
| Ankleshwar Solar Power Project (Sajjan India) | 0.2 | Private (Indian) |
| Bikaner Rooftop Solar PV Power Project | 0.1 | Private (Indian) |
| Surat Solar Power Project | 0.1 | Private (Indian) |
| **Transport Services** | | |
| Ramanattukara Junction-Start of Valanchery Bypass Six Lane Highway (NH-66) Project | 23.7 | Central Govt. - Statutory Bodies |
| Start of Valanchery bypass-Kappirikkad Six Lane Highway (NH-66) Project | 21.4 | Central Govt. - Statutory Bodies |
| Upgradation of Kangra Bypass-Bhangbar (NH-88) Four Lane Highway Project | 13.2 | Central Govt. - Statutory Bodies |
| Badakumari-Karki Six Lane Road (Package-OD-3) (NH-130 CD) Project | 10.6 | Central Govt. - Statutory Bodies |
| Pangare-Warangaphata (NH-161) Four Lane Highway project (Package-IV) | 9.7 | Central Govt. - Statutory Bodies |
| **Construction & Real Estate** | | |
| Delhi In-Situ Rehabilitation EWS (Phase 1) Residential Project | 33.1 | State Govt. - Departmental Undertaking |
| Vasai (West) MIG Housing Project | 20.0 | Private (Indian) |
| Karnataka Tumakuru Industrial Area Project | 17.0 | Central Government |
| Puppalguda (Gandipet) Commercial Building Project | 11.0 | Private (Indian) |
| New Delhi (Okhla Industrial Area) Group Housing Expansion Project | 8.6 | Private (Indian) |
| **Irrigation** | | |
| Lower Bhavani Extension, Renovation & Modernisation Project | 9.3 | State Government |
| Muktyala Branch Canal Lift Irrigation Project | 8.2 | State Govt. - Departmental Undertaking |
| Bothalapalem-Wadapally Lift Irrigation Project | 2.3 | State Govt. - Departmental Undertaking |
| Kadana-Patadungri Lift Irrigation (Phase 2) Project | 2.3 | State Govt. - Departmental Undertaking |
| Dunnapothulagandi- Balnepally-Champlathanda Lift Irrigation Project | 2.2 | State Govt. - Departmental Undertaking |

Source: CMIE – Capex. *Data extracted on June 29th, 2020.

**Figure 57: Projects under implementation —Central Government vs. State Government**

The Coronavirus pandemic had limited and transitory impact on the value to project under implementation for both the Central and State government.




Source: CMIE – Economic Outlook. * Data extracted on July 08th, 2021.

**Electricity and Metal sector accounted for ~39% of new project announced in FY21:** Electricity sector accounted for ~20% of new project announcements in FY21, followed by 18% in Metal & Metal Products, 11.5% in Chemicals, 7.8% in Transport and 7.6% in Construction and Real Estate. Besides, investment in all major sectors recorded sharp decline over the last five (fiscal) years. Notably, investment in services fell by 40% (CAGR) over the period, followed by Construction & real estate (28%) and manufacturing (13%).

In services, investment in fresh projects declined sharply across all categories except in Information technology that recorded a 26% CAGR over the last five years largely due to the sudden rise in demand for cloud-based services across industries during the pandemic to enable work from home. The situation is somewhat similar in manufacturing as well where investment in fresh projects declined drastically across all industries.

**Figure 58: Share of investment in new projects announced for top five sectors in FY21 (%)**

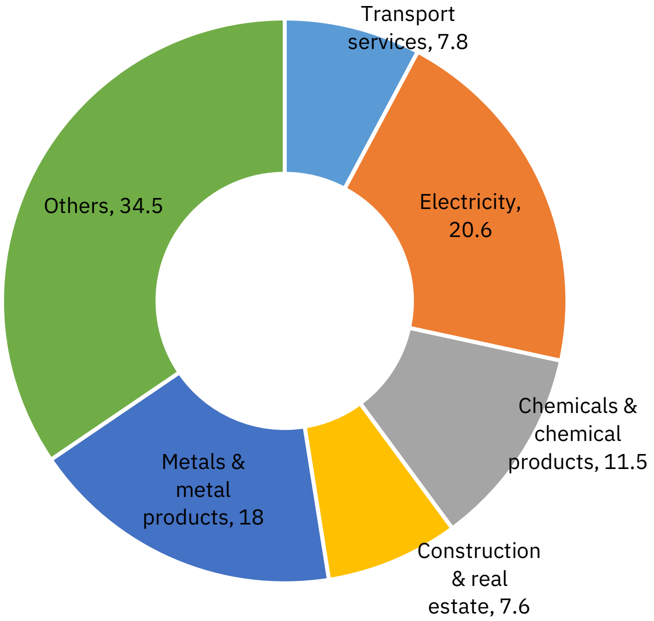
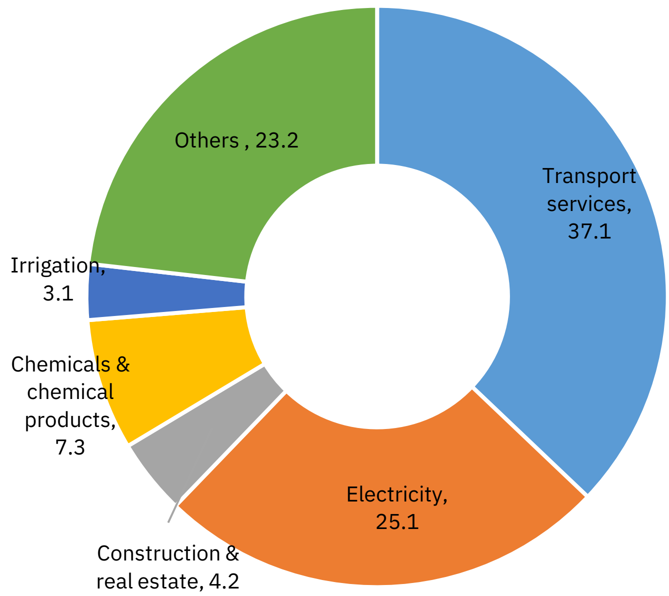



**Figure 59: Share of investment in projects completed for top five sectors in FY21 (%)**




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 60: Growth of investment in new projects over last five years**

| %YoY | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| **Non-financial sector** | **1** | **(15)** | **(17)** | **(3)** | **11** | **(65)** |
| Manufacturing | 85 | (41) | (22) | 31 | (37) | (11) |
| Food & agro-based products | 108 | 10 | (36) | (18) | (44) | 0 |
| Textiles | 154 | 49 | 15 | (64) | (57) | 50 |
| Chemicals & chemical products | 165 | (53) | (18) | 97 | (47) | (48) |
| Consumer goods | 381 | (26) | 84 | (45) | (58) | 105 |
| Construction materials | (36) | 125 | (34) | 29 | (45) | (49) |
| Metals & metal products | (35) | 55 | (64) | 54 | (6) | 48 |
| Machinery | 205 | (90) | 35 | 45 | (43) | 11 |
| Transport equipment | 113 | (63) | 4 | (30) | 31 | (13) |
| Miscellaneous manufacturing | 178 | (80) | 285 | (70) | (81) | 49 |
| Mining | (63) | 31 | 233 | (65) | (5) | (12) |
| Electricity | (41) | (43) | 48 | (2) | 41 | (70) |
| Services (other than financial) | (2) | 7 | (36) | (13) | 18 | (80) |
| Hotels & tourism | 52 | (33) | 0 | 51 | (27) | (77) |
| Wholesale & retail trading | (5) | (65) | 43 | 139 | (91) | (80) |
| Transport services | 1 | 11 | (35) | (26) | 40 | (92) |
| Communication services | (54) | 1,440 | (92) | (32) | (64) | (100) |
| Information Technology | 59 | 5 | (68) | 475 | 26 | 9 |
| Miscellaneous services | (18) | (23) | (25) | (0) | (23) | (46) |
| Construction & real estate | (8) | 31 | (6) | 4 | 68 | (84) |
| **Irrigation** | **28** | **175** | **(61)** | **60** | **(72)** | **(34)** |
| **All industries** | **1** | **(14)** | **(18)** | **(2)** | **9** | **(65)** |

Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Project completions were mostly restricted to Transport, Electricity, Chemicals in FY21:** Transport services led all other sectors in terms of completion rate in FY21, accounting for ~37% of investment in completed projects, followed by Electricity (25%)

and Chemical & chemical products (7%). Even though there has been a significant change in the distributional pattern, these sectors, along with Metals, Construction, and irrigation, have consistently led investment in completed projects over the last five years. On the negative side, however, the recent slowdown in investment can be observed across all major sectors, while the pace of decline has accelerated since FY20 largely due to the containment measures and slow economic recovery in the country.

**Figure 61: Growth of investment in completed projects over last five years**

| %YoY | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| **Non-financial sector** | **43** | **9** | **(25)** | **30** | **(20)** | **(42)** |
| Manufacturing | 57 | (15) | (26) | 11 | 16 | (62) |
| Food & agro-based products | 5 | 88 | (9) | (17) | (43) | (17) |
| Textiles | (6) | (3) | (65) | (32) | 210 | (70) |
| Chemicals & chemical products | 120 | (3) | (2) | (25) | 11 | (50) |
| Consumer goods | (19) | (7) | 25 | 185 | (64) | (4) |
| Construction materials | 69 | 27 | (61) | 11 | 110 | (24) |
| Metals & metal products | 48 | (47) | (79) | 344 | 60 | (97) |
| Machinery | 13 | (8) | 40 | 45 | (69) | 1 |
| Transport equipment | 27 | (45) | 9 | (8) | 73 | (59) |
| Miscellaneous manufacturing | 309 | 89 | (34) | (64) | (35) | (93) |
| Mining | 47 | (61) | (11) | 82 | 61 | (72) |
| Electricity | 34 | (12) | (13) | (11) | (28) | (33) |
| Services (other than financial) | 95 | 92 | (37) | 61 | (53) | 23 |
| Hotels & tourism | 51 | (6) | (1) | 145 | (69) | (68) |
| Wholesale & retail trading | (5) | 153 | (56) | 73 | (18) | (53) |
| Transport services | 84 | 2 | 34 | 53 | (58) | 58 |
| Communication services | (100) | | (100) | 1,657 | (100) | |
| Information technology | 172 | (56) | 45 | (54) | 364 | (90) |
| Miscellaneous services | 190 | (9) | 3 | 92 | (55) | (15) |
| Construction & real estate | (30) | 41 | (14) | 143 | 18 | (88) |
| **Financial services** | | | | | | |
| **Irrigation** | **259** | **146** | **(77)** | **980** | **(46)** | **(27)** |
| **All industries** | **44** | **10** | **(26)** | **35** | **(21)** | **(42)** |

Source: CMIE – Capex. * Data extracted on July 08th, 2021

**Projects were stalled mostly in Transport services and Electricity:** Out of total stalled projects in FY21, about 28% were in Transport services, followed by Electricity (26%), Construction & Real Estate (9.6%) and Chemical and Chemical products (9.4%). Though several projects were announced in these sectors over the last decade, many of them were stalled in subsequent years. Except a few, investment in stalled projects has, however, increased over the last five years in all major sectors. Among them, investment in stalled projects increased sharply in Construction & Real Estate (25% CAGR) between FY17 and FY21, followed by Transport services (20% CAGR), and Chemicals (4% CAGR). In contrast, stalled projects in Electricity declined by 7% CAGR over the period.

**Figure 62: Share of investment in stalled projects for top five sectors in FY21 (%)**

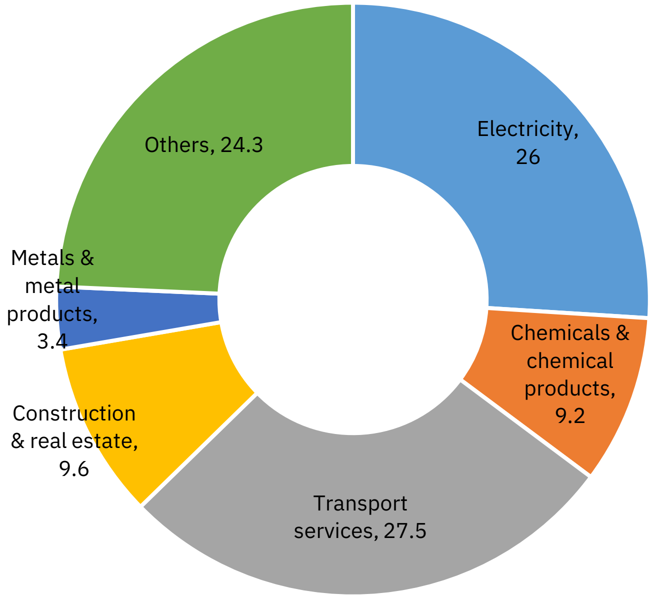
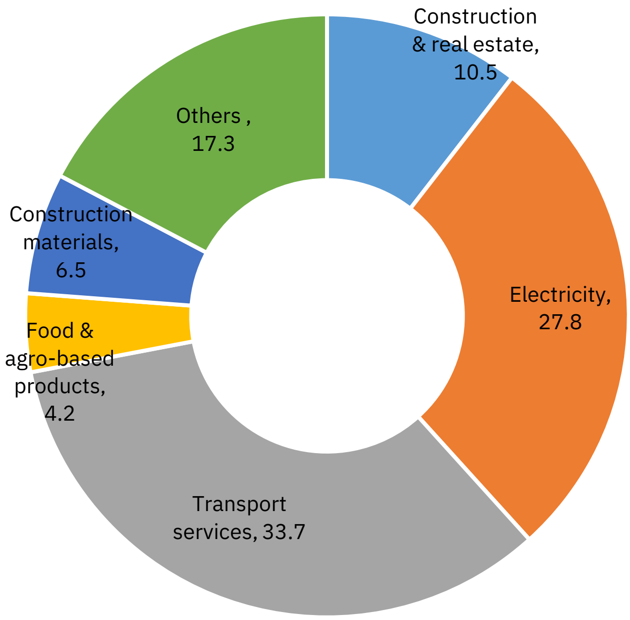



**Figure 63: Share of investment in revived projects for top-five sectors in FY21 (%)**




Source: CMIE – Capex. * Data extracted on July 08, 2021

**Figure 64: Growth of investment in dropped projects over last five years**

| %YoY | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|---|
| **Non-financial sector** | **30** | **(7)** | **(19)** | **62** | **24** | **(35)** | **(33)** |
| Manufacturing | 19 | (15) | (8) | (14) | 99 | (54) | (27) |
| Food & agro-based products | 181 | (33) | 172 | (3) | (12) | (11) | (13) |
| Textiles | (29) | 24 | (78) | 411 | (55) | 62 | 135 |
| Chemicals & chemical products | (49) | (25) | (4) | 15 | 469 | (85) | 14 |
| Consumer goods | 61 | (60) | 44 | 20 | 110 | 15 | (11) |
| Construction materials | 374 | (64) | 34 | (23) | (45) | 43 | 3 |
| Metals & metal products | 59 | 10 | (32) | (20) | (52) | (4) | (52) |
| Machinery | 10 | 34 | 168 | (45) | (48) | 470 | (68) |
| Transport equipment | 110 | (69) | 389 | (54) | 97 | 44 | (45) |
| Miscellaneous manufacturing | (18) | 4 | (83) | 262 | 386 | (73) | (59) |
| Mining | 169 | 5 | (67) | 66 | (23) | (4) | (43) |
| Electricity | 96 | 10 | (40) | 93 | (14) | (24) | (40) |
| Services (other than financial) | 27 | (20) | 18 | 111 | 8 | (32) | (20) |
| Hotels & tourism | 24 | (38) | 6 | (24) | (4) | 12 | 2 |
| Wholesale & retail trading | 23 | 20 | (58) | 121 | 28 | (66) | (32) |
| Transport services | 25 | (23) | (1) | 272 | 3 | (43) | (6) |
| Communication services | 2,900 | (59) | (59) | 329 | (86) | (73) | 1,528 |
| Information technology | 133 | (9) | 172 | (75) | 9 | 58 | (56) |
| Miscellaneous services | (5) | (16) | 34 | 0 | 63 | 10 | (53) |
| Construction & real estate | (56) | (32) | (22) | 229 | 86 | (18) | (52) |
| **Irrigation** | **132** | **(11)** | **(3)** | **(23)** | **17** | **259** | **126** |
| **All industries** | **30** | **(7)** | **(19)** | **61** | **24** | **(35)** | **(31)** |

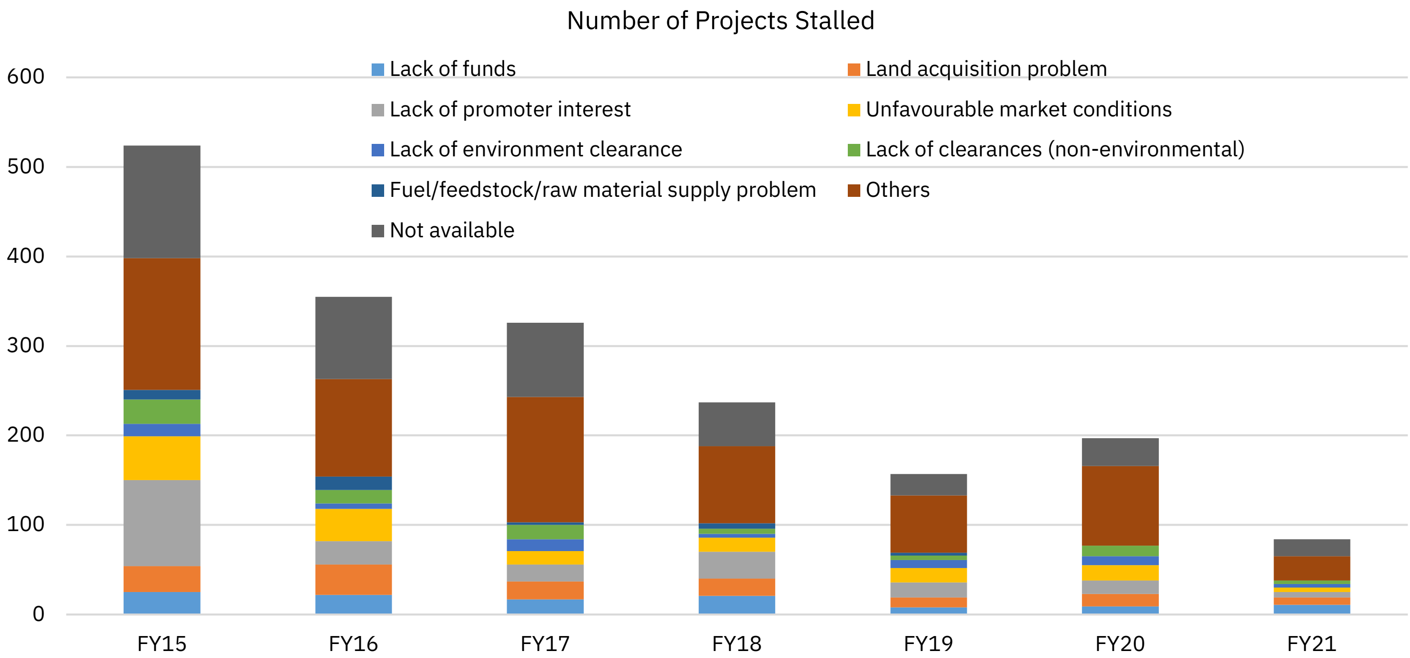
Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Barring FY20, the number of projects stalled has decreased continuously since FY15**: As shown in the following chart, the number of stalled projects has dropped gradually from 524 projects in FY15 to merely 84 projects in FY21. In India, lack of promoter interest, land acquisition problems, unfavourable market conditions, funding constrains and lack of clearance from the government are the major reasons for projects getting stalled.

In 2015, the maximum number of projects stalled were due to lack of promoters' interest and unfavourable market conditions which included mostly infrastructure, energy and steel projects, whereas in 2016, land acquisition problem and unfavourable market conditions have become prominent causes for stalling besides lack of promoters' interest. In the private sector, projects were stalled mainly due to lack of favourable market conditions, whereas in the Government sector, land acquisition problem appeared to be the prominent factor for projects to be stalled in 2016. Demonetization, GST and the Real Estate (Regulation and Development) Act brought in additional worries in 2017, which resulted in Rs912bn worth of projects getting stalled solely due to lack of promoter interest. Most of these projects were in the private sector.

In case of the Government sector, lack of environment clearance and land acquisition problem were two major reasons for many projects to get stalled. These issues persist in the following years as well, and as a result, there was a sudden jump in the value of stalled projects in 2018. However, this has somewhat calmed down in 2019 may be due to the fact that value of fresh announcements and outstanding projects came down considerably over the year. Afterwards, there was a temporary rise in the number of stalled projects in FY20, largely due to unfavourable market conditions, lack of promoters' interest and land acquisition problem. In 21, however, only 84 projects have reportedly stalled partly because value of fresh announcements and outstanding projects came down considerably over the year.

**Figure 65: Reason for projects getting stalled (No. of projects)**




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 66: Top projects stalled in major sectors in FY-21**

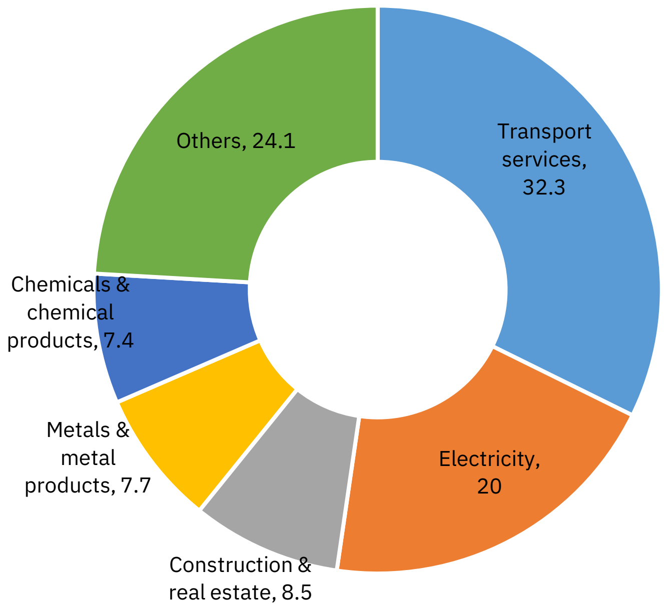
| Industry | Project Name | Cost (Rs bn) | Ownership |
|---|---|---|---|
| **Transport Services** | | | |
| Road transport | Akkalkot (Near Rampur Village) (NH-150E) - KN/TS Border (Near Singnodi Village) Four/Six Lane Greenfield Highway Project | 462.1 | Central Govt. |
| Transport logistics | Maharashtra Logistics Park Project | 431.0 | Private (Indian) |
| Shipping transport | Tuticorin Conversion of Berths No.1, 2, 3 & 4 into Container Terminals Project | 269.6 | Central Govt. |
| Road transport | KN/TS Border near Nandinne village-Kurnool Six Lane Greenfield Highway Project | 195.4 | Central Govt. |
| Road transport | Uni-Directional Tunnel (Sudhmahadev-Daranga section on NH-244) Project (Package 1) | 189.6 | Central Govt. |
| Transport logistics | Raigarh Logistics Park Project | 150.0 | Private (Indian) |
| **Chemicals & Chemical products** | | | |
| Fertilisers | Gopalpur Fertilizer and Petrochemical Industries Plant Project | 200.0 | Private (Indian) |
| Drugs & pharma | Bhatinda Pharmaceutical Park Project | 180.0 | State Government |
| Drugs & pharma | Jhagadia Greenfield Synthetic Organic Chemicals Plant Project | 141.4 | Alchemie Group |
| Synthetic rubber | Panipat Poly Butadiene Rubber Plant Project | 120.1 | Central Govt. |
| Refinery | Paradip Needle Coker Unit Project | 117.0 | Central Govt. |
| **Electricity** | | | |
| Conventional electricity | Veeraballi Pumped Storage Power Project | 1,278.8 | Private (Indian) |
| Renewable electricity | West Bengal & Jharkhand Floating Solar Power Project | 1,170.0 | Central Govt. |
| Renewable electricity | Rajasthan Grid-Connected Solar PV Power Project (Tranche 4) | 1,160.3 | Central Govt. |
| Renewable electricity | 1,200 MW ISTS Connected Wind Power Projects (Tranche 10) | 720.0 | Central Govt. |
| Renewable electricity | Rajasthan 1,070 MW Grid-Connected Solar PV Power Project (Tranche 3) | 695.5 | Central Govt. |

Source: CMIE – Capex. *Data extracted on June 29th, 2020.

**In case of revived projects, Transport services and Electricity contributed the most in FY21:** Out of total investment in revived projects, about 34% were in Transport services, while Electricity and Construction & Real Estate contributed 28% and 10.5% over the last fiscal year. Over the year, revived projects increased in value terms to Rs438bn in Transport services and Rs362bn in Electricity with a 25% and 7% CAGR over the last five (fiscal) years, while it has recorded 32% decline (CAGR) in Construction & Real Estate to merely Rs137bn in FY21. Among others, Irrigation, Mining, Machinery and Construction materials recorded significant rise over the same period, while it has declined in Metals and Metal Products, and Chemicals & chemical products.

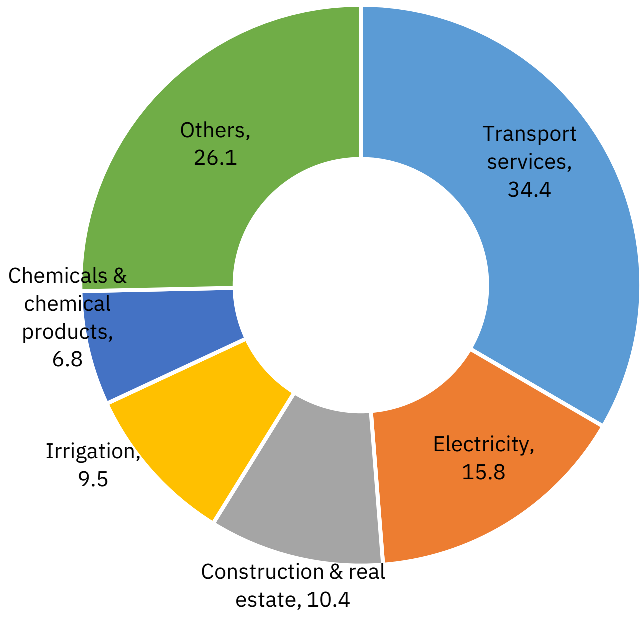
**Transport Services and Electricity contributed to more than half of investment in outstanding projects:** Transport Services accounted for nearly one-third of the outstanding projects (in value terms) in FY21, showing a CAGR of 3% over the last five years to reach Rs67trn in FY21 from Rs10.9 in FY17. In contrast, Electricity has seen 5% decline (CAGR) over the same period to be the second largest contributor to total outstanding projects with a share of 20% in FY21. Among others, Construction & Real Estate, Metals and Chemical & Chemical Products sectors have contributed significant share of investment in outstanding projects.

**Figure 67: Share of investment in outstanding projects for top five sectors in FY21 (%)**




Source: CMIE – Capex. * Data extracted on July 08th, 2021

**Figure 68: Share of investment in projects under implementation for top five sectors in FY21 (%)**




Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 69: Growth of investment in outstanding projects over last five years**

| %YoY | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| **Non-financial sector** | **5** | **4** | **1** | **(3)** | **3** | **(0)** |
| Manufacturing | 4 | 1 | 4 | (2) | 2 | 5 |
| Food & agro-based products | 20 | 5 | (5) | (6) | (6) | (1) |
| Textiles | (0) | 21 | 20 | 7 | (10) | (17) |
| Chemicals & chemical products | 25 | 9 | 11 | (6) | 1 5 | 4 |
| Consumer goods | 98 | 27 | 52 | 3 | (1) | 4 |
| Construction materials | (9) | (5) | (5) | 6 | (6) | (7) |
| Metals & metal products | (16) | (1) | (3) | 5 | (1) | 12 |
| Machinery | 57 | (15) | (1) | 2 | (18) | (3) |
| Transport equipment | 24 | (3) | 10 | (7) | (1) | (0) |
| Miscellaneous manufacturing | 33 | (4) | 19 | (31) | (15) | (4) |
| Mining | (7) | 4 | 13 | 4 | (1) | 6 |
| Electricity | (4) | (4) | (8) | (7) | (1) | (3) |
| Services (other than financial) | 17 | 11 | 4 | (0) | 6 | (1) |
| Hotels & tourism | (1) | (4) | (4) | (4) | 1 | (7) |
| Wholesale & retail trading | 1 | 1 | (6) | 6 | (3) | 3 |
| Transport services | 16 | 16 | 5 | (1) | 8 | (1) |
| Communication services | 138 | (25) | 10 | 1 | 1 | (4) |
| Information technology | (4) | (19) | (5) | 10 | 3 | 15 |
| Miscellaneous services | 18 | 6 | 4 | (1) | (2) | (0) |
| Construction & real estate | 4 | 10 | 0 | (7) | (1) | (3) |
| **Irrigation** | **23** | **12** | **17** | **6** | **2** | **2** |
| **All industries** | **6** | **5** | **1** | **(2)** | **3** | **(0)** |

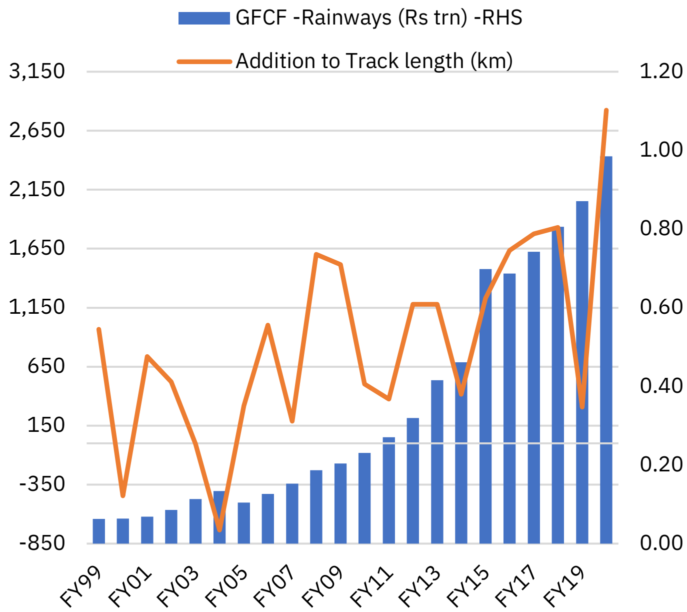
Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Similar trend observed in projects under-implementation as well:** Transport Services and Electricity account for more than 50% of investment in projects under-implementation over the last 22 years. However, they have taken a different trajectory over the period. While the share of Electricity has declined gradually from more than 35% in 1990s to merely 20% in FY21, it has been on an upward trajectory for the Transport Services towards 32% in FY21 as compared to ~10% in late 1990s. Similar trend was observed over the last five years as well with an 8% CAGR in Transport Services and 8% decline in Electricity to have Rs42trn and Rs19trn investment projects under implementation, respectively in FY21.

During this period, investment in Transport services was led by government sectors as several major projects were announced in railways, roads transport and allied services. Notably, the Central Government is implementation more than 10 major projects worth Rs113bn in FY21 under the National Highways Authority of India. Besides, Ministry of Road Transport & Highways and several State Governments have initiated projects worth Rs2.3bn on average to improve connectivity in the country.

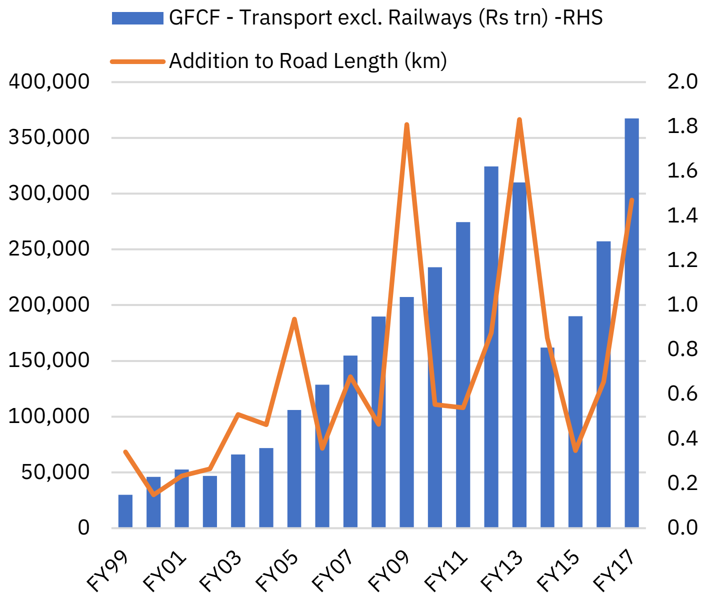
Unlike Transport Services, both private and Government sectors have contributed significant share in Electricity. Notably, the Central Government started the Gujarat (GUVNL - 500 MW Auction) Grid Connected Solar PV Power Project Phase 12 worth Rs9.8bn and Tata Power Corporation initiated the Kerala State Power Project worth Rs4.9bn during the period.

**Figure 70: Improvement in rail-connectivity doesn't move in tandem with rise in investment in the sector**



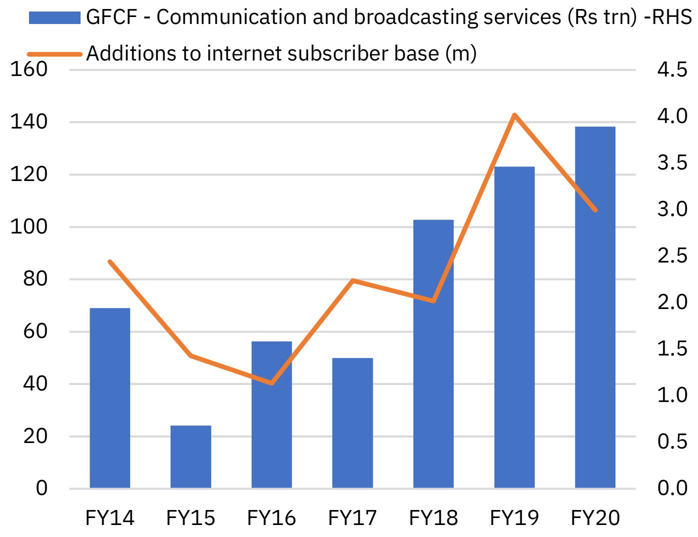

Source: CMIE-Economic Outlook.

**Figure 71: Investment in roadways improved connectivity in the country**



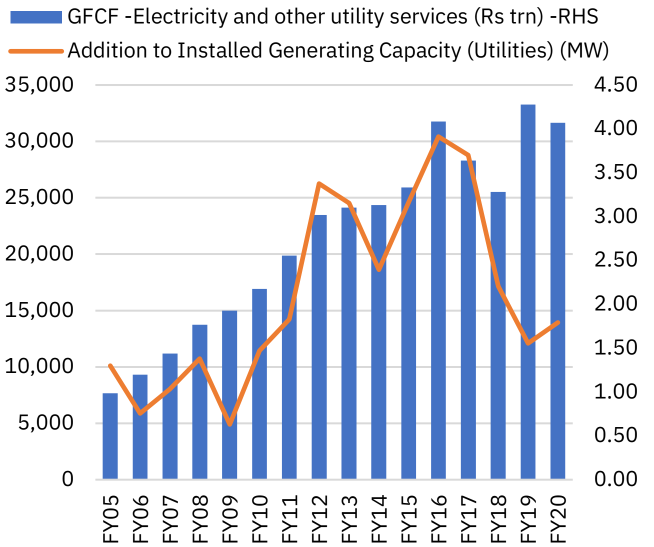

Source: CMIE-Economic Outlook.

**Figure 72: Investment helped to accelerate internet subscriber base over time**




Source: CMIE-Economic Outlook.

**Figure 73: Barring FY19 and FY20, investment in Electricity coincided with the rise in installed generating capacity**




Source: CMIE-Economic Outlook.

**Among other major sectors, investment increased substantially in Chemicals & chemical products and Irrigation:** Investment in projects under implementation increased substantially in Chemicals & chemical products with a CAGR of 20% over the last five years from Rs4.0trn in FY17 to Rs8.4trn in FY21. As a result, its share to investment in projects under implementation has increased from 3.7% to 6.8% over the period. Similar trend was seen for Irrigation as well. Investment in this sector rose at a CAGR of 11% to reach at Rs11.6trn in FY21 as compared to Rs7.5trn in FY17. This increase was largely driven by the Government sector as all major projects were implemented by the State Governments. Notably, Government of Tamil Nadu started the Lower Bhavani Extension, Renovation & Modernisation Project worth Rs9.3bn and the Government of Telangana initiated the Muktyala Branch Canal Lift Irrigation Project worth Rs8.2bn over the period.

**Figure 74: Growth of investment in projects under implementation over last five years**

| %YoY | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 |
|---|---|---|---|---|---|---|
| **Non-financial sector** | **5** | **5** | **2** | **5** | **(6)** | **11** |
| Manufacturing | (13) | 3 | 4 | 8 | 0 | 12 |
| Food & agro-based products | (5) | 5 | 2 | (5) | (2) | (9) |
| Textiles | 9 | (20) | 24 | 13 | (29) | 11 |
| Chemicals & chemical products | 1 | 1 | 12 | 28 | 6 | 38 |
| Consumer goods | 29 | 19 | 94 | 23 | (2) | (12) |
| Construction materials | (9) | (6) | (12) | 39 | (22) | 21 |
| Metals & metal products | (26) | 8 | 0 | (11) | (3) | (8) |
| Machinery | (31) | 3 | (7) | (17) | 18 | 5 |
| Transport equipment | 32 | 3 | 6 | 6 | 1 | 4 |
| Miscellaneous manufacturing | (7) | (21) | (42) | 224 | 5 | (63) |
| Mining | (3) | 19 | (1) | 23 | (1) | 17 |
| Electricity | 0 | (5) | (12) | (7) | (17) | 7 |
| Services (other than financial) | 20 | 16 | 13 | 9 | (5) | 11 |
| Hotels & tourism | (7) | 2 | 2 | (20) | (4) | (2) |
| Wholesale & retail trading | 4 | 6 | (10) | 25 | (26) | 24 |
| Transport services | 20 | 24 | 16 | 7 | (5) | 14 |
| Communication services | 149 | (51) | 17 | 43 | (2) | (5) |
| Information technology | (5) | 9 | (13) | 6 | 24 | 1 |
| Miscellaneous services | 11 | 14 | 7 | 14 | (1) | 4 |
| Construction & real estate | 4 | (4) | (3) | 1 | (5) | 10 |
| **Irrigation** | **27** | **3** | **31** | **10** | **2** | **4** |
| **All industries** | **6** | **5** | **4** | **5** | **(6)** | **10** |

Source: CMIE – Capex. * Data extracted on July 08, 2021.

## Geographical spread of India's investment

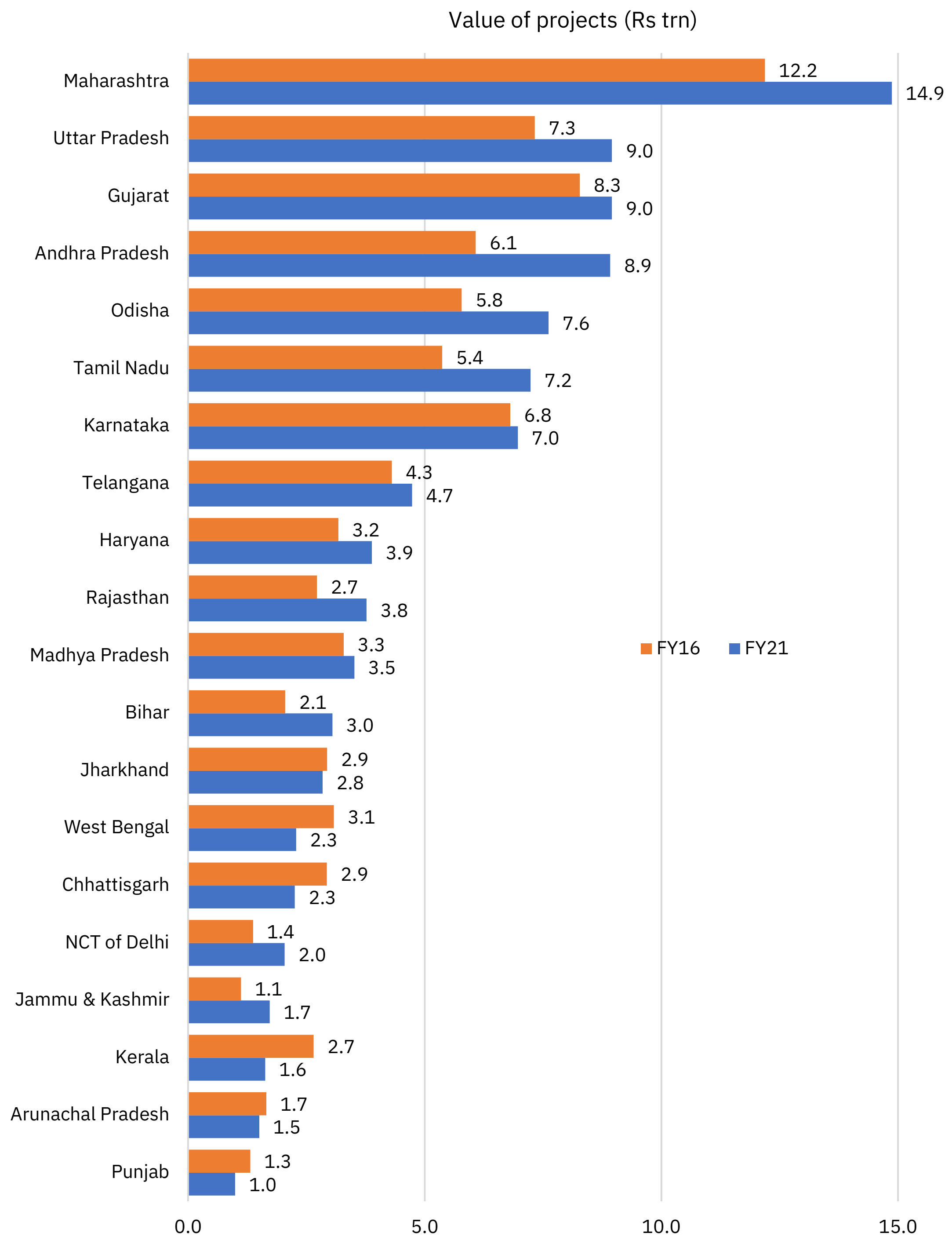
**Investment remains concentrated to a few states…:** Out of total projects under implementation in FY16, around 40% were in top five states, viz. Maharashtra, Gujarat, Uttar Pradesh, Karnataka, and Andhra Pradesh. The distributional pattern remains similar in FY21 as well. Among them, Maharashtra is leading throughout the period with a marginal rise in its share from 11.9% in FY16 to 12.1% in FY21. Similar trend was seen for Uttar Pradesh and Andhra Pradesh as well, while the share of Gujarat and Karnataka in investment under implementation has declined during the period. Among other states, Odisha, Tamil Nadu, and Telangana contributed additional 15% of investment in India. However, their investment pattern is quite different across sectors.

**…thanks to several favourable business conditions:** Ease of doing business, availability of funds, favourable economic environment, necessary infrastructure, and existing eco-system attract more investments in a few states than others. For instance, Gujarat has been a preferable investment avenue for both Indian and foreign investors due to ease of doing business, convenient trade routes and home to established large business houses. Though its share in total has declined marginally, investment in the state has increased with a CAGR of 2% over the last five years. Maharashtra on the western coast of India, with easy import and export services and being the most industrialized state, which attracts investments opportunities and has maximum share in terms of projects under implementation. Telangana, on the other hand, offered several tax and non-tax incentives and subsidies to attract investment in the state.

**In these major states, investment has largely been in Transport Services, Electricity and Chemicals & chemical products:** A significant portion of investment in major states were done in Transport services, Electricity, Construction & real estate, and Chemicals & Chemical Products. But the overall distribution varies widely across states. For instance, out of Rs14.9trn investment made in Maharashtra in FY21, ~47% were in Transport services, followed by Construction & real estate (17%) and Electricity (10%). In Gujarat, however, maximum investment projects are initiated in Chemicals & chemical products, followed by Transport services and Irrigation. Odisha, on the other hand, attracts major investment projects in Metals, Transport, Electricity, Chemicals and Mining.

**Their performance varied widely in terms of fresh announcements, completion, revival rates:** Even though Odisha has announced highest number of projects (954) in FY21, its performance in terms of rate of project implementation (47%) and completion (2%) remain low as compared to other states. Similar trend was observed for Gujarat as well. In contrast, Uttar Pradesh announced only 262 projects in FY21 with a completion rate of 4% and implementation rate of 78% over the year. Similarly, Rajasthan did quite well with 68% implementation rate and 4% completion rate even though it has announced only 268 projects over the year. Besides, Tamil Nadu performed quite well in terms of revival rate over the year.

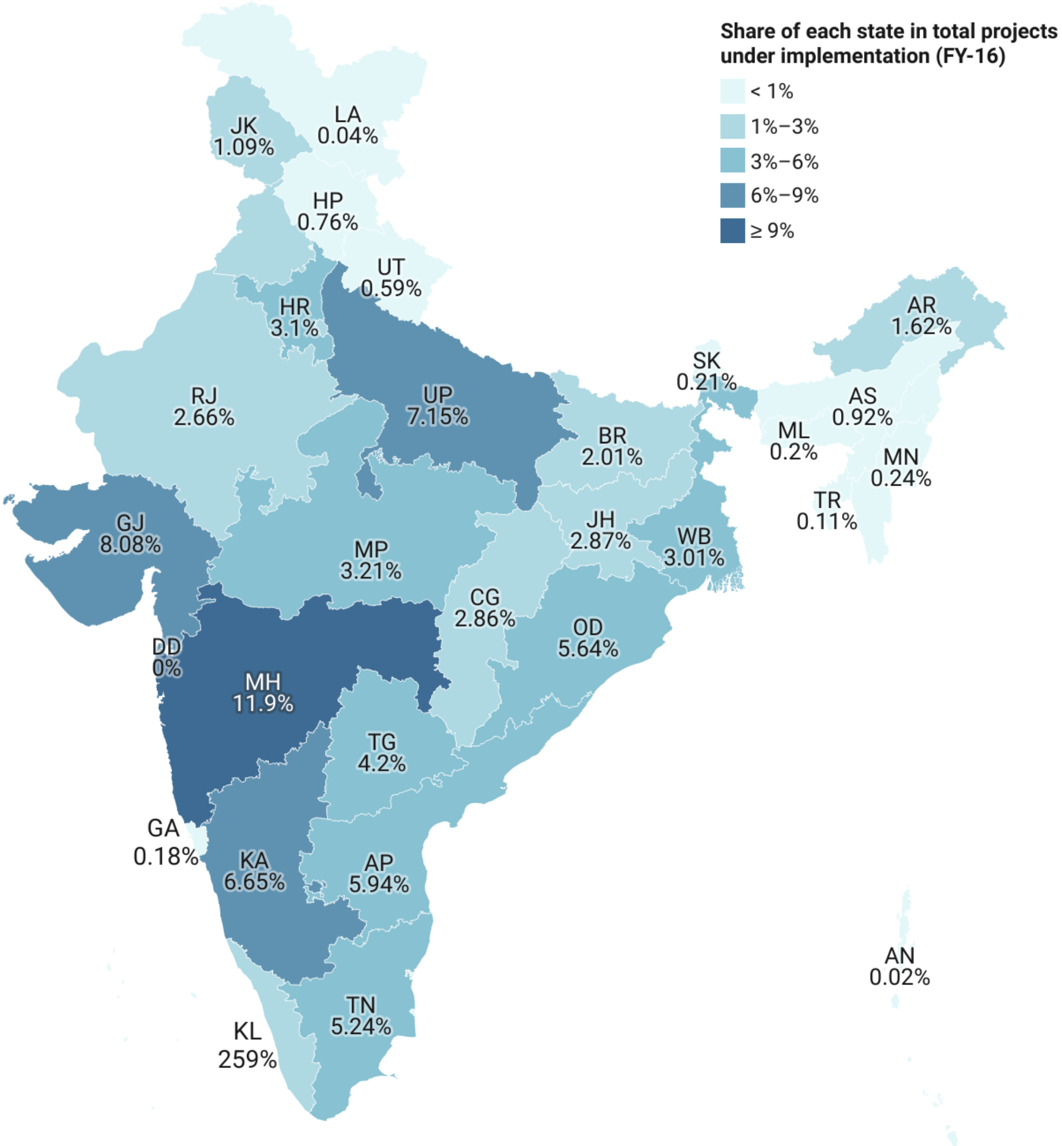
**Figure 75: State-wise investment on projects under-implementation**




Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 76: State's share in projects under implementation (FY16)**

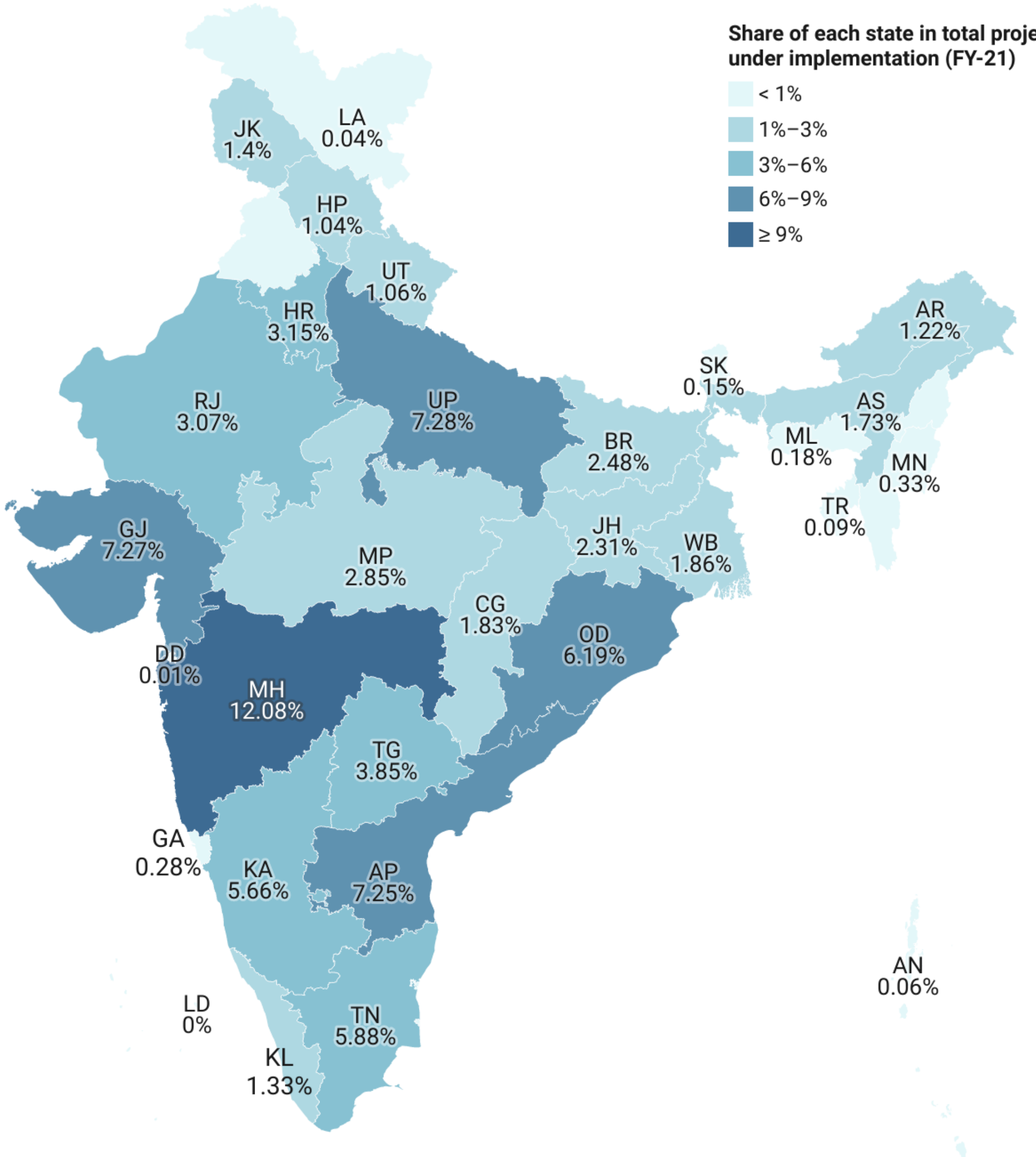
Out of total projects under implementation in FY16, more than 12% were in Maharashtra, followed by Gujarat (8%) and Uttar Pradesh (7%). Among others Karnataka and AP contributed a significant share in investment, while several Rajasthan, Jammu & Kashmir and several north-eastern states are lagging in terms of the share of projects under implementation in the country.




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 77: State's share in projects under implementation (FY21)**

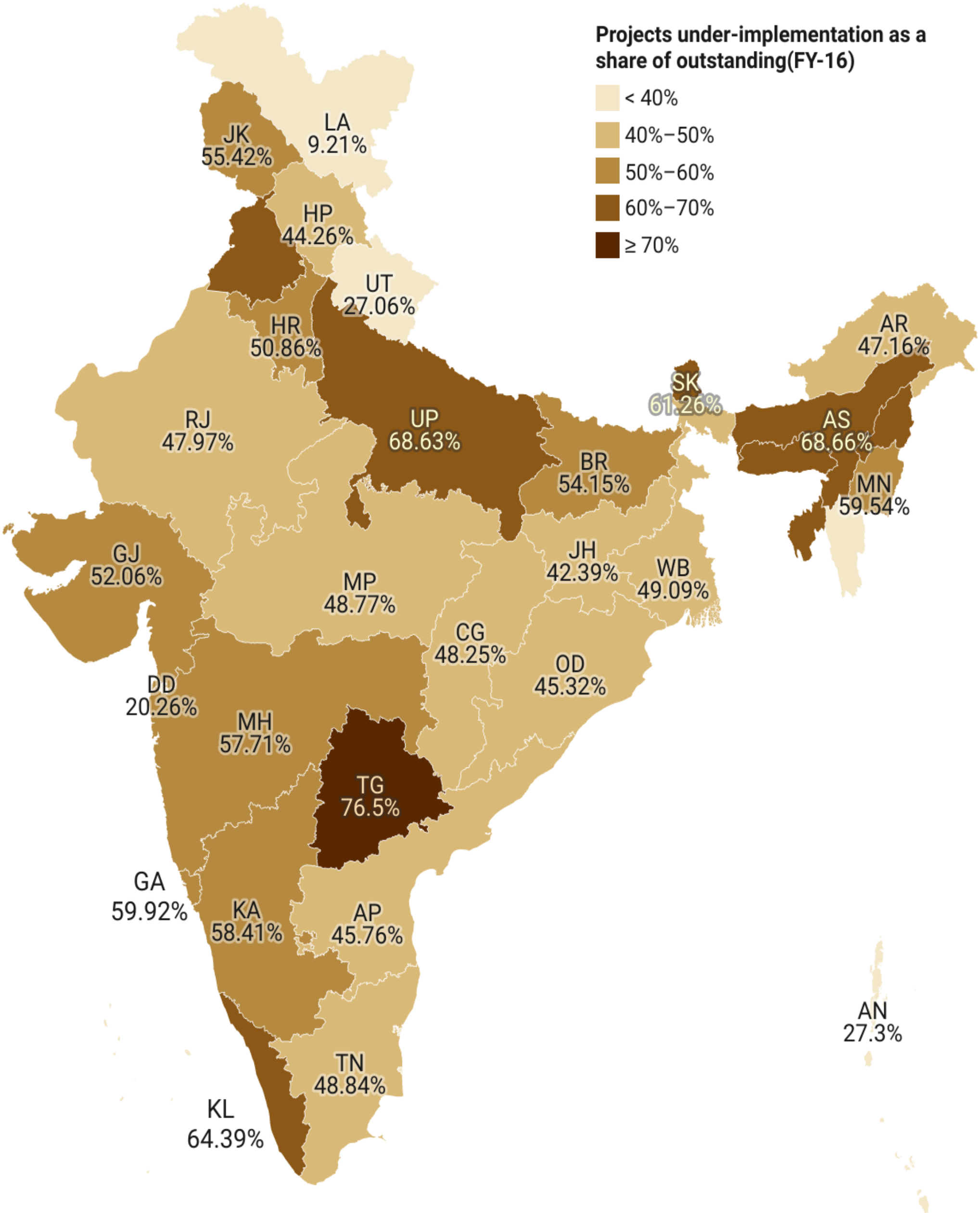
The overall distribution has slightly changed across states. While Maharashtra continues to contribute largest share of total projects under implementation in FY21 as well, along with Gujarat, Uttar Pradesh, and Andhra Pradesh. Odisha and Tamil Nadu became one of the top five investment destinations in the country.




Source: CMIE – Capex. * Data extracted on July 08, 2021.

**Figure 78: Rate of under implementation (% of total outstanding) as of FY16**

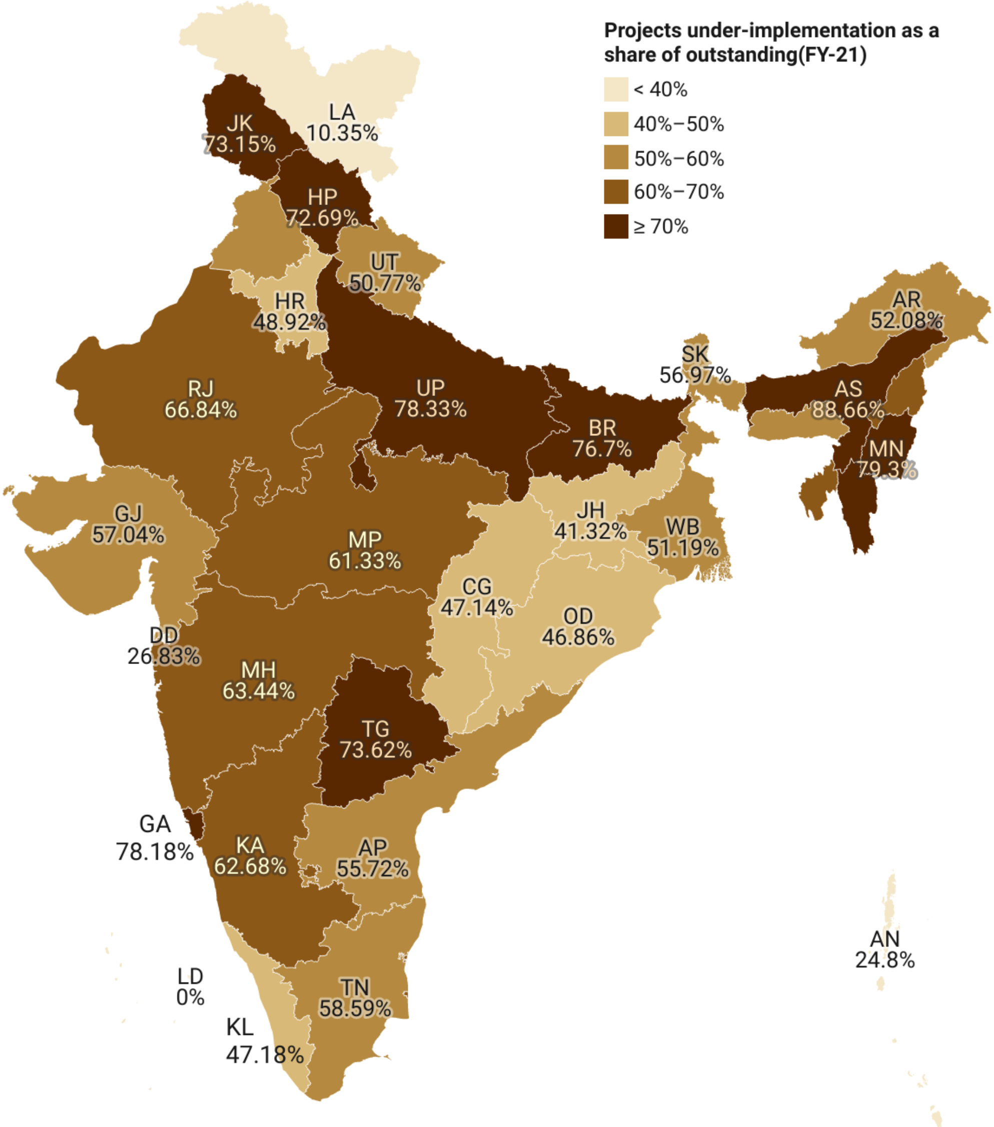
Though major projects are concentrated in the western and southern parts of India, they did not perform well in terms of implementation rate i.e., value of projects under implementation as a share of outstanding projects.




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 79: Rate of under implementation (% of total outstanding) as of FY21**

As shown in the following chart, there is a significant improvement in terms of implementation rate across many states in FY21. It has improved not only in the western and southern parts in India, many less developed states like UP, Bihar, Rajasthan performed quite well during this time. Among small states, overall performance of Northeast states improved remarkably over the year.




Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 80: Value of projects under implementation in major states in FY21 (Rs bn)**

Maharashtra topped among all states in India in terms of value of projects under implementation, followed by Gujarat, and AP due to favourable economic environment, necessary infrastructure, tax and non-tax incentives and subsidies offered by the state government. A large share of all these projects were in services-ex financial, Construction & Real Estate and Electricity. Major irrigation projects were mostly done in these states, while East and north east regions are lagging in this aspect as they were lacking in terms of ease of doing business.

| State | Manufacturing | Mining | Electricity | Services (other than Financial Services) | Construction & Real Estate | Irrigation | All Industries |
|---|---|---|---|---|---|---|---|
| Maharashtra | 1,218 | 133 | 1,557 | 8,273 | 2,512 | 1,172 | 14,866 |
| Gujarat | 3,429 | 341 | 689 | 2,028 | 1,197 | 1,257 | 8,942 |
| Andhra Pradesh | 1,200 | 880 | 1,749 | 2,349 | 1,414 | 1,294 | 8,886 |
| Uttar Pradesh | 508 | 34 | 1,030 | 4,100 | 2,889 | 272 | 8,834 |
| Odisha | 2,942 | 1,166 | 1,300 | 1,920 | 73 | 246 | 7,646 |
| Tamil Nadu | 1,270 | 169 | 2,519 | 2,672 | 416 | 190 | 7,237 |
| Karnataka | 1,471 | 106 | 384 | 3,061 | 955 | 995 | 6,971 |
| Telangana | 834 | 63 | 899 | 1,641 | 346 | 950 | 4,733 |
| Haryana | 432 | - | 357 | 2,073 | 1,011 | 11 | 3,884 |
| Rajasthan | 726 | 542 | 903 | 936 | 174 | 580 | 3,860 |
| Madhya Pradesh | 198 | 291 | 611 | 1,243 | 92 | 1,080 | 3,514 |
| Bihar | 270 | 1 | 984 | 1,662 | 30 | 95 | 3,042 |
| Jharkhand | 785 | 919 | 494 | 484 | 79 | 81 | 2,843 |
| West Bengal | 324 | 502 | 274 | 914 | 256 | 30 | 2,300 |
| Chhattisgarh | 416 | 792 | 555 | 308 | 37 | 149 | 2,257 |
| Assam | 317 | 136 | 71 | 1,541 | 52 | 11 | 2,127 |
| NCT of Delhi | - | - | 1 | 1,182 | 869 | - | 2,052 |
| Jammu & Kashmir | 4 | - | 794 | 916 | 3 | 8 | 1,726 |
| Kerala | 178 | - | 56 | 1,344 | 81 | 45 | 1,704 |
| Arunachal Pradesh | 2 | 4 | 1,314 | 180 | 4 | - | 1,504 |
| Uttarakhand | 15 | - | 237 | 1,025 | 19 | 11 | 1,306 |
| Himachal Pradesh | 13 | 17 | 617 | 500 | 19 | 118 | 1,284 |
| Punjab | 297 | - | 10 | 454 | 183 | 51 | 996 |
| Manipur | 1 | - | 106 | 283 | 1 | 20 | 411 |
| Goa | 148 | - | - | 186 | 8 | - | 343 |

Source: CMIE – Capex. * Data extracted on July 08th, 2021. * States are sorted based on value of projects under implementation in all industries.

**Figure 81: Value of projects under implementation in top ten states in FY21 (Rsbn)**

A significant portion of investment in major states were done in Transport services, Electricity, Construction & real estate, and Chemicals & Chemical Products. But the overall distribution varies widely across states. For instance, out of Rs14.9trn investment made in Maharashtra in FY21, ~47% were in Transport services, followed by Construction & real estate (17%) and Electricity (10%). In Gujarat, however, maximum investment projects are initiated in Chemicals & chemical products, followed by Transport services and Irrigation. Odisha, on the other hand, attracted major investment projects in Metals, Transport, Electricity, Chemicals and Mining.

| States | Maharashtra | Gujarat | Andhra Pradesh | Uttar Pradesh | Odisha | Tamil Nadu | Karnataka | Telangana | Haryana | Rajasthan |
|---|---|---|---|---|---|---|---|---|---|---|
| **Non-financial sector** | **13,693** | **7,684** | **7,592** | **8,562** | **7,400** | **7,046** | **5,976** | **3,782** | **3,874** | **3,281** |
| **Manufacturing** | **1,218** | **3,429** | **1,200** | **508** | **2,942** | **1,270** | **1,471** | **834** | **432** | **726** |
| Food & agro-based products | 69 | 24 | 17 | 54 | 22 | 4 | 50 | 17 | 15 | 10 |
| Textiles | 4 | 112 | 1 | 1 | 2 | 15 | 34 | 46 | 2 | 0 |
| Chemicals & chemical products | 467 | 2,158 | 518 | 207 | 1,262 | 951 | 185 | 707 | 402 | 508 |
| Consumer goods | 13 | 0 | 17 | 106 | 0 | 7 | 66 | 2 | 0 | 0 |
| Construction materials | 72 | 116 | 102 | 25 | 56 | 14 | 152 | 17 | 0 | 169 |
| Metals & metal products | 199 | 381 | 269 | 12 | 1,589 | 18 | 967 | 6 | 2 | 34 |
| Machinery | 1 | 438 | 12 | 49 | 2 | 65 | 4 | 11 | 1 | 3 |
| Transport equipment | 383 | 180 | 254 | 34 | 9 | 165 | 8 | 13 | 9 | 2 |
| Miscellaneous manufacturing | 11 | 21 | 9 | 19 | 0 | 31 | 5 | 15 | 1 | 1 |
| **Mining** | **133** | **341** | **880** | **34** | **1,166** | **169** | **106** | **63** | **0** | **542** |
| **Electricity** | **1,557** | **689** | **1,749** | **1,030** | **1,300** | **2,519** | **384** | **899** | **357** | **903** |
| **Services (other than financial)** | **8,273** | **2,028** | **2,349** | **4,100** | **1,920** | **2,672** | **3,061** | **1,641** | **2,073** | **936** |
| Hotels & tourism | 67 | 57 | 4 | 16 | 42 | 15 | 20 | 16 | 12 | 12 |
| Wholesale & retail trading | 123 | 243 | 76 | 94 | 137 | 102 | 98 | 19 | 17 | 4 |
| Transport services | 6,959 | 1,435 | 1,831 | 3,446 | 1,388 | 1,889 | 2,039 | 829 | 1,698 | 580 |
| Communication services | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Information Technology | 303 | 7 | 13 | 162 | 1 | 141 | 361 | 164 | 144 | 0 |
| Miscellaneous services | 819 | 285 | 425 | 382 | 353 | 524 | 543 | 612 | 201 | 339 |
| **Construction & real estate** | **2,512** | **1,197** | **1,414** | **2,889** | **73** | **416** | **955** | **346** | **1,011** | **174** |
| **Financial services** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Irrigation** | **1,172** | **1,257** | **1,294** | **272** | **246** | **190** | **995** | **950** | **11** | **580** |
| **All industries** | **14,866** | **8,942** | **8,886** | **8,834** | **7,646** | **7,237** | **6,971** | **4,733** | **3,884** | **3,860** |

Source: CMIE – Capex. * Data extracted on July 08th, 2021.

**Figure 82: Value of projects across major states for different project status in FY21 (Rs bn)**

Even though Odisha had announced highest number of projects (954), its performance in terms of rate of project implementation (47%) and completion (2%) remain low as compared to other states. In contrast, Uttar Pradesh announced only 262 projects in FY21 with a completion rate of 4% and implementation rate of 78% over the year. Besides, Uttar Pradesh and Tamil Nadu performed quite well in terms of revival rate over the year.

| States | New Announced | Completed | Dropped | Revived | Outstanding (as on March 31st, 2021) | Under-Implementation (as on March 31st, 2021) |
|---|---|---|---|---|---|---|
| Maharashtra | 371 | 180 | 56 | 16 | 23,437 | 14,866 |
| Gujarat | 772 | 174 | 293 | 68 | 15,694 | 8,942 |
| Andhra Pradesh | 245 | 123 | 17 | 29 | 16,019 | 8,886 |
| Uttar Pradesh | 262 | 423 | 11 | 110 | 11,326 | 8,834 |
| Odisha | 954 | 263 | 1 | 33 | 16,283 | 7,646 |
| Tamil Nadu | 510 | 122 | 4 | 121 | 12,356 | 7,237 |
| Karnataka | 395 | 120 | 12 | 64 | 11,117 | 6,971 |
| Telangana | 177 | 151 | 7 | 6 | 6,430 | 4,733 |
| Haryana | 43 | 57 | 4 | 49 | 7,938 | 3,884 |
| Rajasthan | 268 | 232 | - | 23 | 5,717 | 3,860 |
| Madhya Pradesh | 55 | 293 | 114 | 38 | 5,775 | 3,514 |
| Bihar | 47 | 71 | 7 | 11 | 3,968 | 3,042 |
| Jharkhand | 115 | 21 | 16 | 10 | 6,881 | 2,843 |
| West Bengal | 102 | 72 | 2 | 27 | 4,479 | 2,300 |
| Chhattisgarh | 92 | 11 | 4 | 261 | 4,786 | 2,257 |
| Assam | 4 | 34 | - | - | 2,400 | 2,127 |
| NCT of Delhi | 253 | 11 | - | 83 | 3,193 | 2,052 |
| Jammu & Kashmir | 54 | 6 | - | - | 2,342 | 1,726 |
| Kerala | 121 | 68 | 1 | 15 | 3,574 | 1,704 |
| Arunachal Pradesh | 1 | 85 | - | 15 | 2,888 | 1,504 |
| Uttarakhand | 16 | 45 | 0 | 250 | 2,572 | 1,306 |
| Himachal Pradesh | 29 | 23 | 16 | 22 | 1,779 | 1,284 |
| Punjab | 58 | 115 | 13 | 12 | 1,718 | 996 |
| Manipur | - | 6 | - | - | 518 | 411 |
| Goa | 0 | 17 | 3 | 1 | 456 | 343 |

Source: CMIE – Capex. * Data extracted on July 08th, 2021. * States are sorted based on value of projects under implementation.

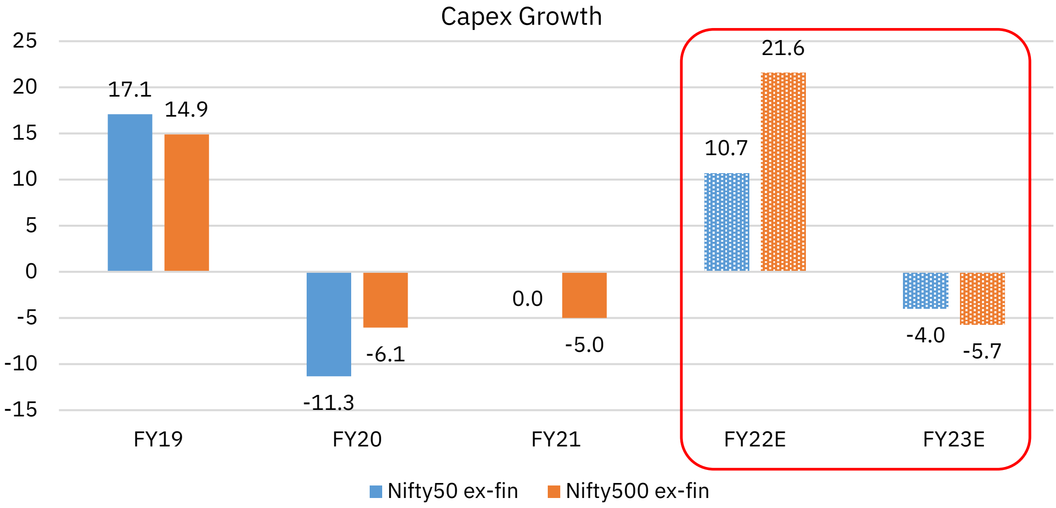
## Investments by listed corporates: A forward-looking analysis

We have extended our analysis to understand how investment pattern has changed over the last few years for large listed non-financial corporates. Towards this, we studied growth in capital expenditure (capex) of large non-financial companies from Nifty50 and Nifty500 over the last three fiscal years. We have also taken capex estimates for these companies in FY22 and FY23 to get a forward-looking view in the listed universe using data from a unique database called IBES from Refinitiv Datastream.

**Post a significant growth in FY19, large non-financial companies recorded a drop in capex in FY20 and FY21:** After registering a 17% growth in FY19, Nifty 50 non-financial companies recorded 11.3% decline in their total capital expenditure in FY20 and remained steady over the following year. Similar trend was observed for Nifty 500 as well, where aggregate capex fell by 6.1% in FY20 following a 14.9% growth in the previous year and further by 5% in FY21. The slowdown was largely due to weak demand environment, low capacity utilisation and tight financial conditions. The situation worsened in FY21 owing to massive supply- and demand-side disruptions caused by the COVID-19 pandemic, both at the domestic as well as global level.

**Capex growth may see a transitory recovery in FY22:** The capex growth is estimated to record a V-shaped recovery in FY22 for both Nifty 50 and Nifty 500 non-financial companies. According to the IBES estimates, aggregate capex of Nifty50/Nifty500 companies is pegged to grow by 10.7%/21.6% in FY22, albeit off a low base, possibly factoring in continued recovery in economic activity, sustained drop in COVID infections and casualties, and rapid acceleration in the vaccination coverage. That said, IBES estimates point to a drop in capex in FY23 again, translating into an annualised drop of 1.5% over the preceding five-year period.

**Figure 83: Capex growth of Nifty 50 and Nifty 500 Index excluding financial companies**

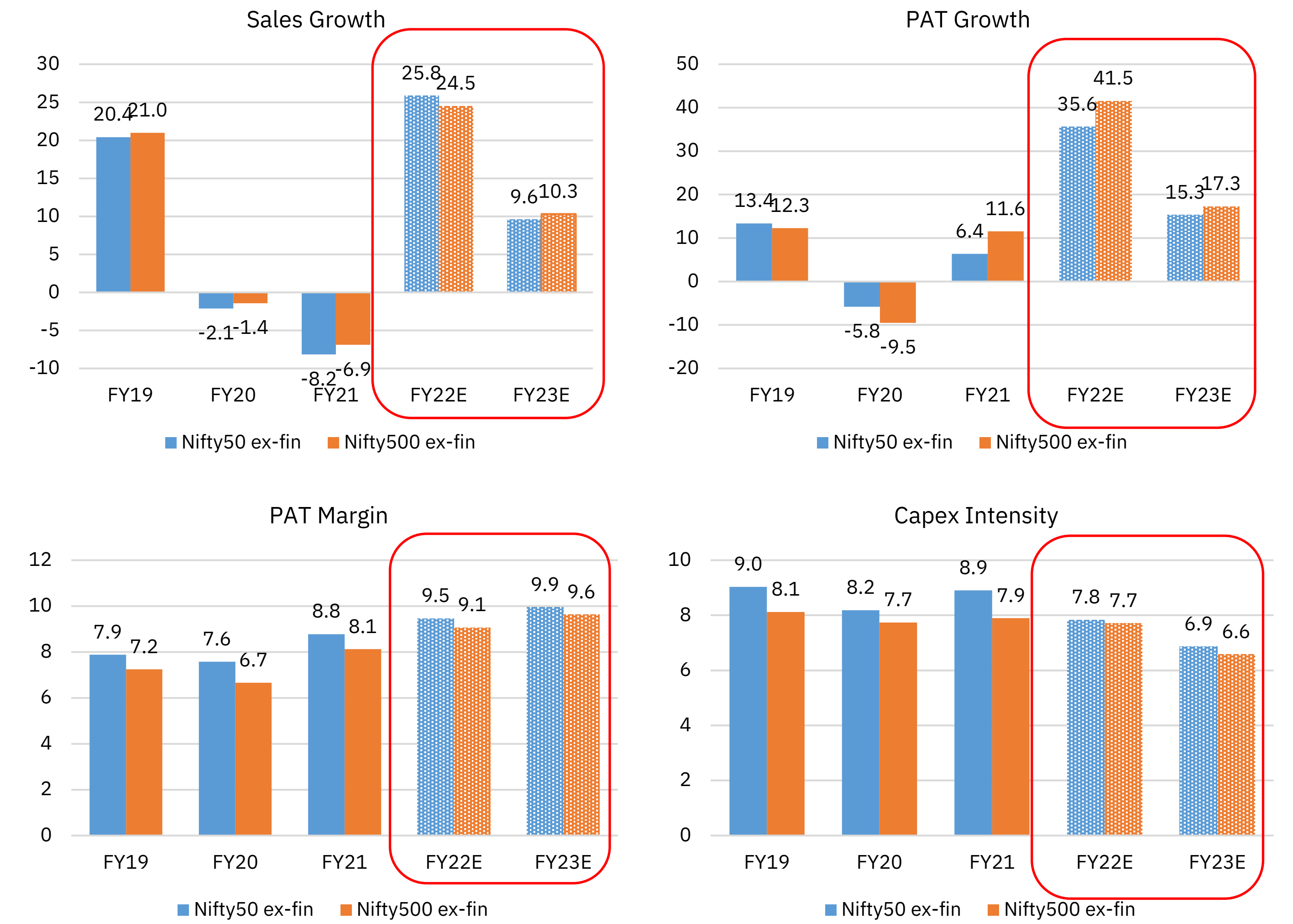



Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies was not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

**Capex growth has largely coincided with sales growth and PAT growth:** As can be seen in the below figures, capex growth of large listed companies has largely inclined with their sales growth as it incentivizes firms to make additional investment over the period. Notably, post a magnificent growth in FY19, sales growth of Nifty50/Nifty500 non-financial companies turned negative to -2.1%/-1.4% in FY20 and further to -8.2%/-6.9%

in FY21, which had discouraged them to make additional spending on investment, even as their PAT growth and PAT margin improved over the year. This indicates that the additional profit was generated on a lower base, lower administration/marketing/wage and rental expenses, and lower interest rates even as aggregate sales declined over the period. As a result, capex intensity is estimated to decline over the next two fiscal years as companies can meet additional demand by utilizing their unused capacity. Companies, in other words, are working towards higher operating leverage.

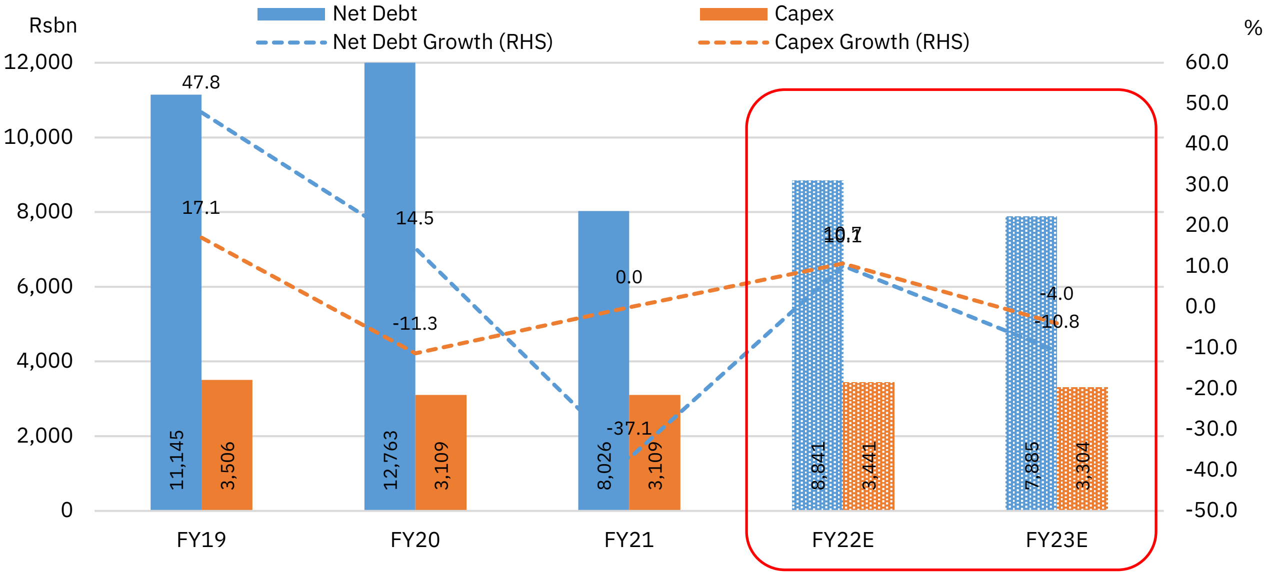
**Figure 84: Performance of Nifty 50 and Nifty 500 Index excluding financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

**Companies focused on deleveraging their balance sheets in FY21:** Leveraging on low interest rates and ample surplus liquidity, companies shifted their focus on deleveraging their balance sheets. Additionally, heightened business uncertainty and a weak domestic and external demand environment disincentivised companies to incur fresh capex. Net debt of Nifty 50 non-financial companies fell from Rs12.8trn in FY20 to Rs8.0trn in FY21 and is expected to rise only modestly over the next two years, partly aided by steady capex trajectory.

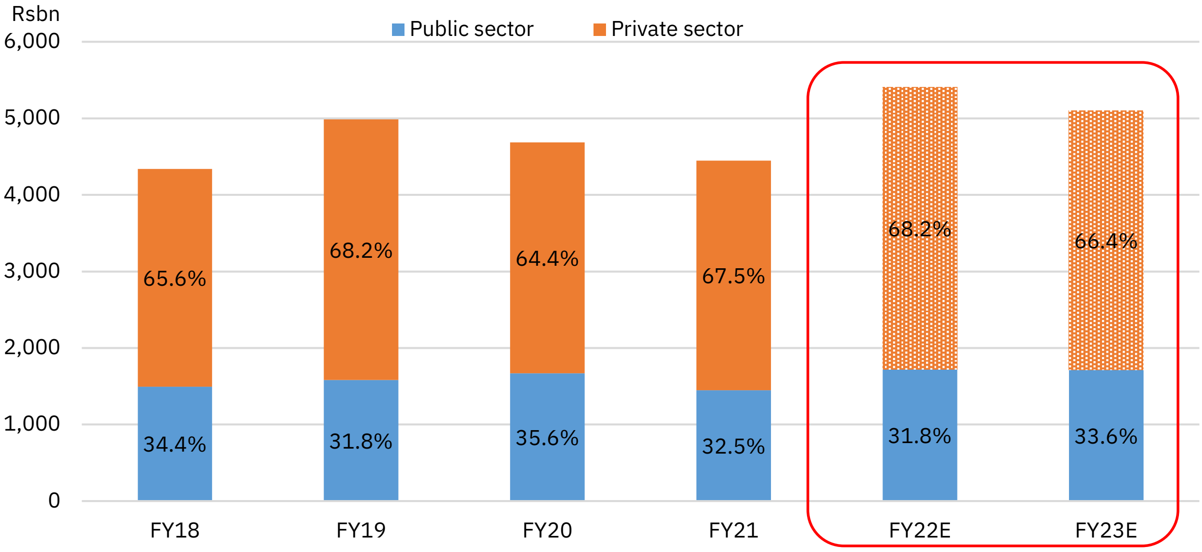
**Figure 85: Trends in Net Debt and Capex of Nifty 50 non-financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

**Private companies continue to contribute more than 65% to total capex:** Private companies contributed 65.6% to total capex in FY18 within the Nifty500 universe, which rose to 68.2% in FY19, followed by a gradual decline towards 67.5% in FY21. The recent decline was largely due to a rise in government capex in Transport services and Electricity. However, the trend may reverse in FY22 due to a significant rise in investment by private sector in renewable energy, construction, metal and chemical products.

**Figure 86: Capex by public and private sector non-financial companies in the Nifty 500 Index**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

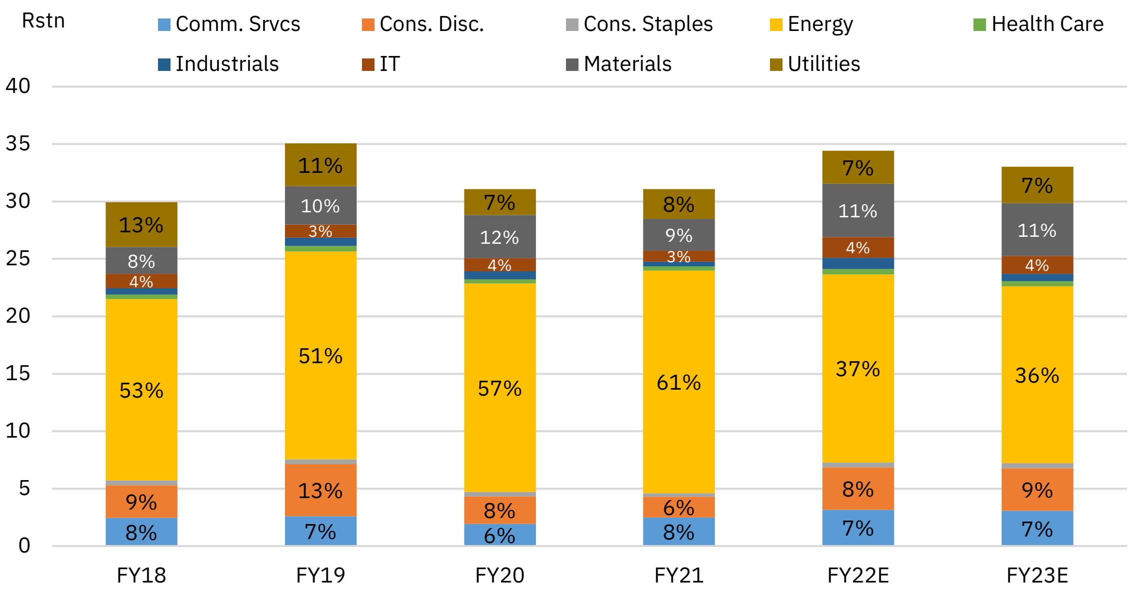
**Sector-wise distribution of total capex changed vividly over the last few years:** While Energy remains the largest contributor of total capex for both Nifty50 and Nifty500 companies, its share changed significantly over the last few years. Energy contributed 53% of total capex in Nifty50 ex-financial universe in FY18, but its share dopped to 51% in FY19 before rising over the subsequent two years to ~61% in FY21. In this sector, Reliance Industries increased its capex by 38% from Rs765bn in FY20 to Rs1,058bn in FY21, which has helped total capex in the sector to rise by 6.6% over the year.

The trend is expected to reverse in the following two years as Reliance Industries is projected to spend only Rs655bn in FY22 and Rs570bn in FY23. As a result, the share of Energy in total capex is expected to reduce to merely 37% and 36% over the next two fiscal years. The overall trend is somewhat similar for the Nifty 500 ex-financial universe.

Besides Energy, other major contributors to aggregate capex in the listed space include Utilities, Consumer Discretionary, Materials and Communication Services. Within the Nifty 50 universe, total capex of Communication Services and Utilities recorded 29% and 15% growth respectively in in FY21, while Materials and Consumer Discretionary recorded a 26% and 24% decline respectively. Notably, total capex of Bharti Airtel increased by 29% from Rs192bn in FY20 to Rs248bn in FY21 in communication services, while NTPC increased its total capex by 26% to Rs183bn in communication services. The sharp drop in capex in Materials was primarily led by Tata Steel and JSW Steel. While Tata Steel curtailed its capex from Rs104bn in FY20 to Rs70bn in FY21, JSW Steel reduced it from Rs128bn in FY20 to Rs93bn in FY21.

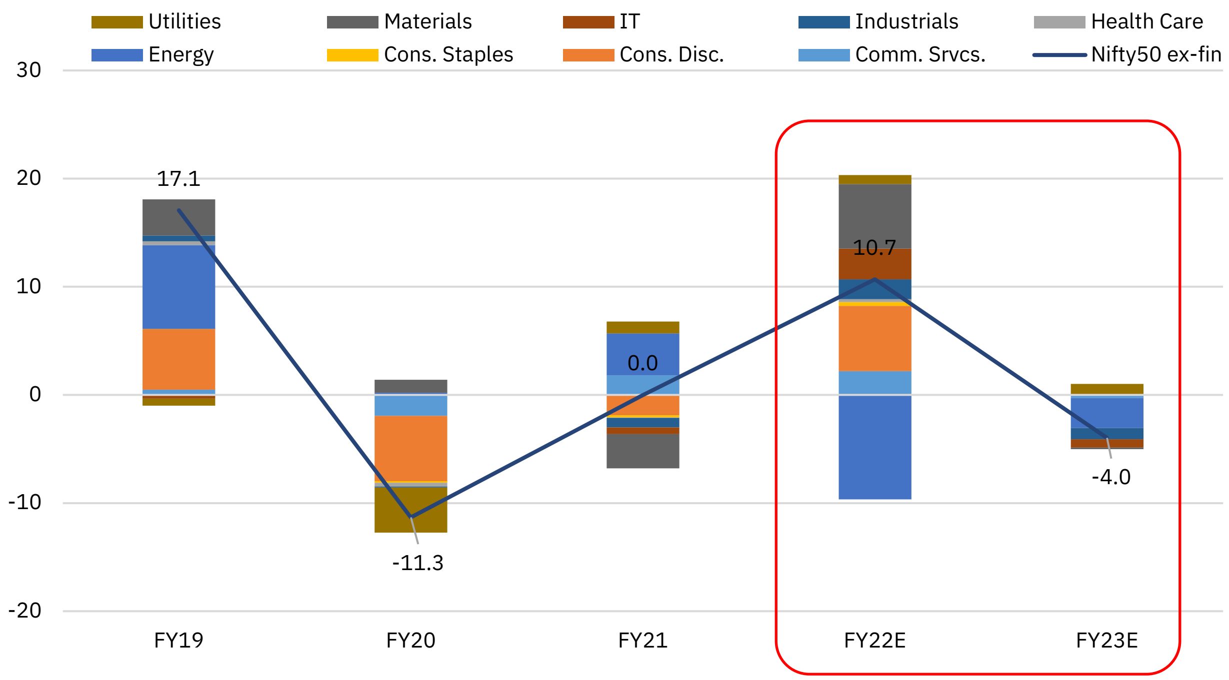
Total capex is expected to improve in FY22 across all sectors except in Energy owing to lower investments by Reliance Industries. Notably, investment in Consumer Discretionary may increase by 103% in FY22, followed by Materials and Communication Services.

**Figure 87: Sector-wise capex of Nifty 50 non-financial companies**



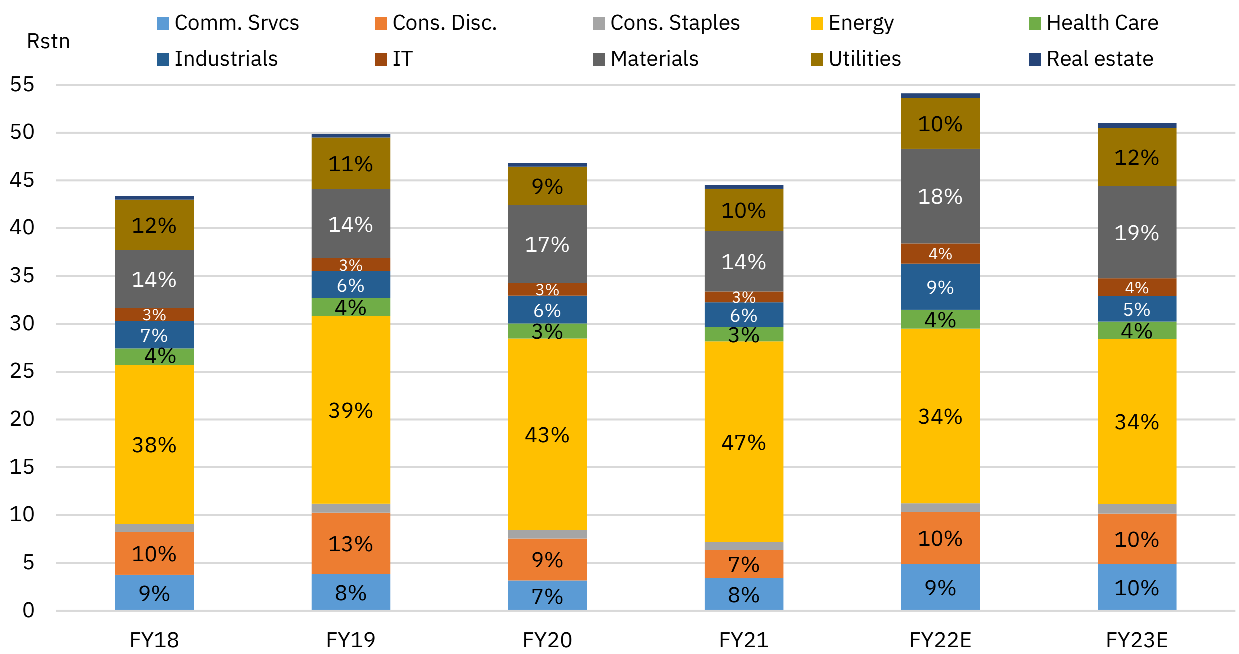

Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 data as data for other companies were not available in the IBES database between FY18 and FY23.

**Figure 88: Sector-wise contribution to capex growth of Nifty 50 non-financial companies**



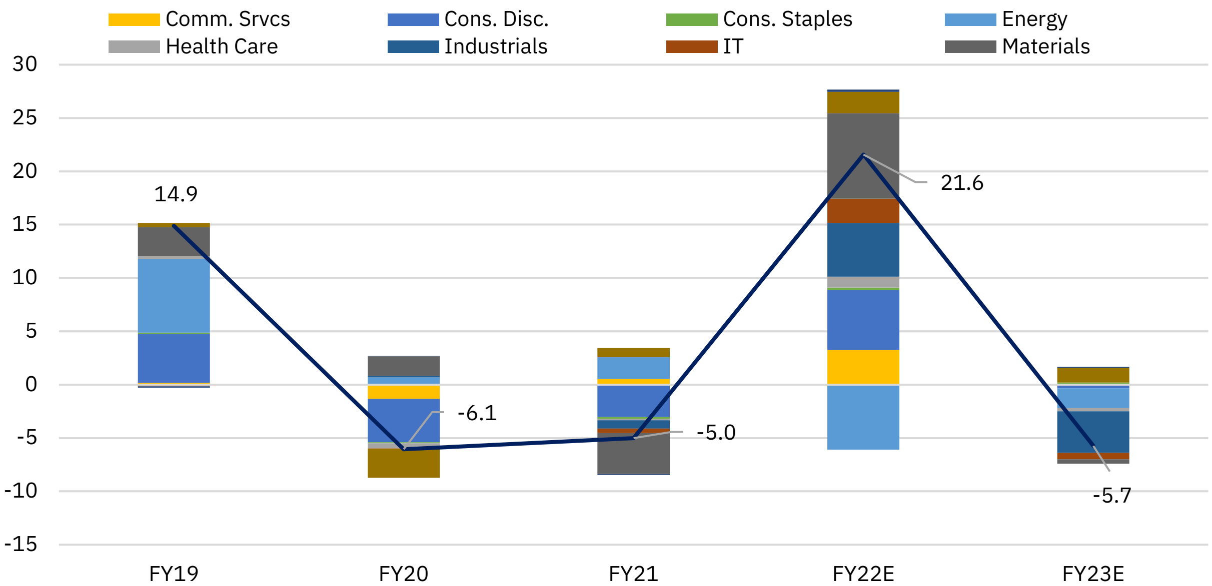

Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

**Figure 89: Sector-wise capex of Nifty 500 non-financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

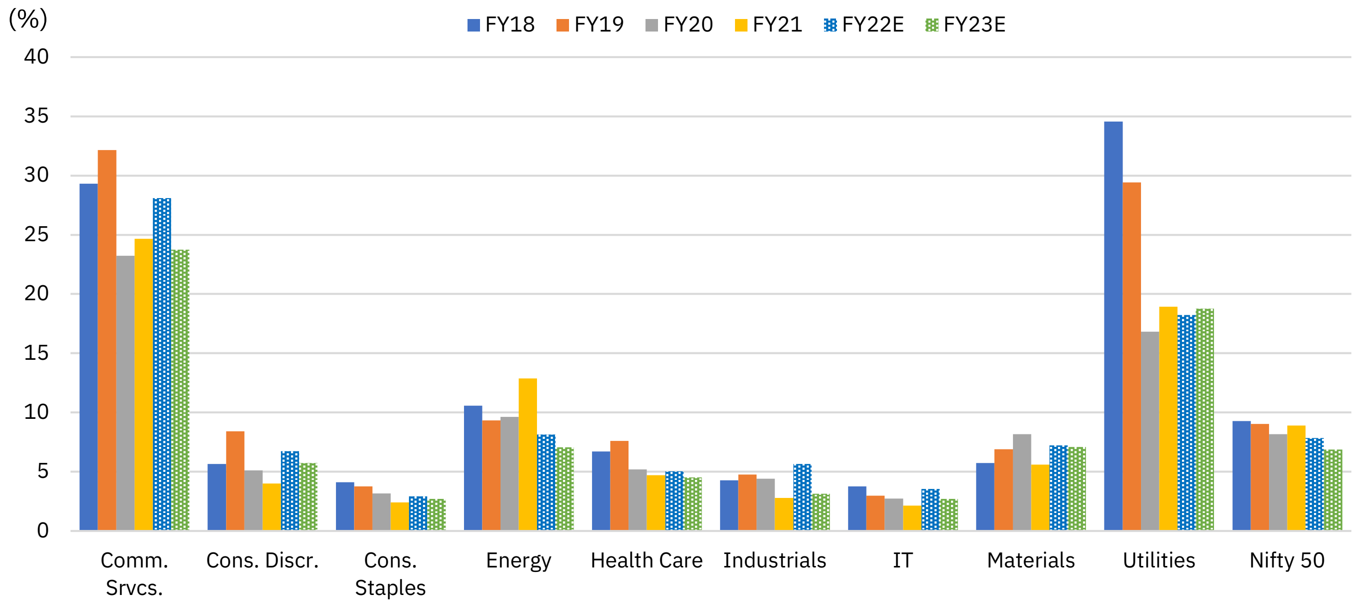
**Figure 90: Sector-wise contribution to capex growth of Nifty 500 non-financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

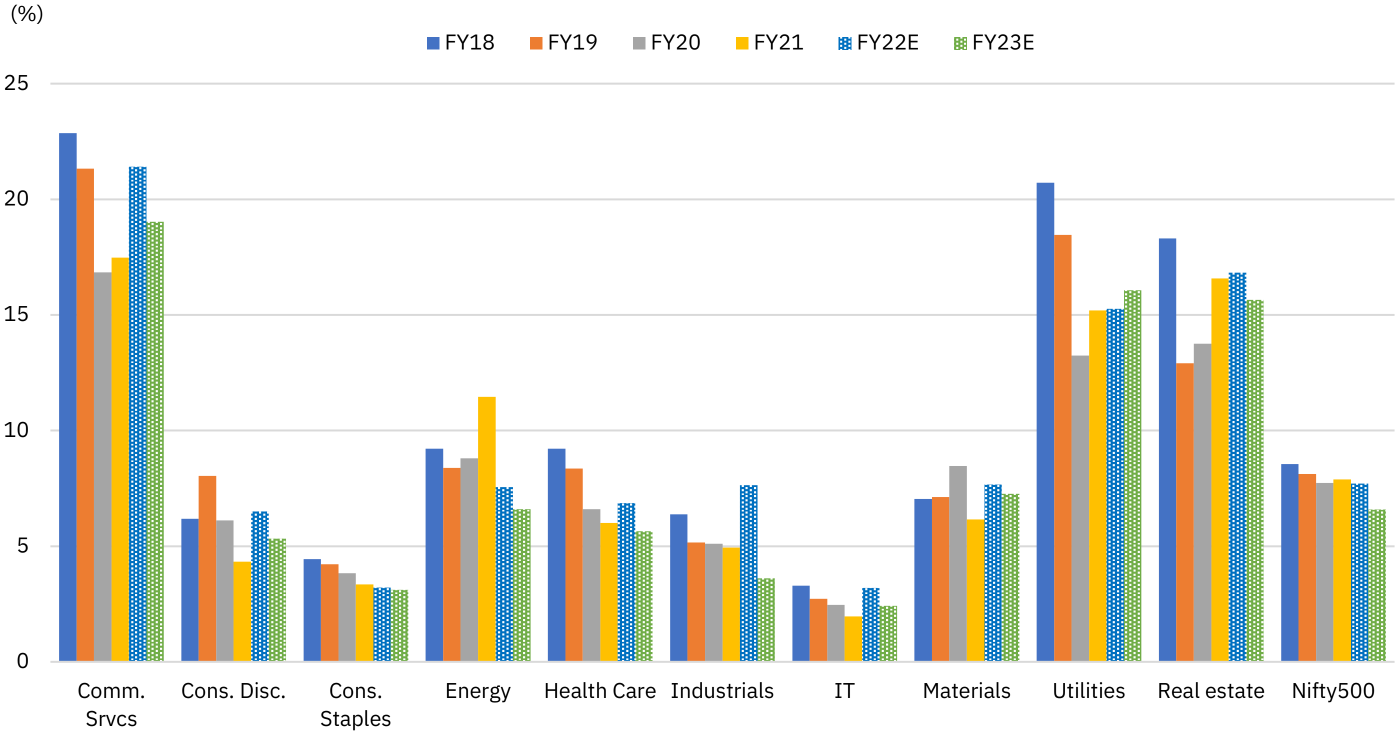
**Capital intensity rose temporarily in FY21:** Post a gradual decline during FY18-FY20, the overall capital intensity has shown a slight improvement in FY21 for both Nifty 50 as well as Nifty 500 non-financial universe. This was largely driven by Utilities, Energy and Communication Services, while all other sectors have seen a continuous decline in their capital intensity. In other words, revenue growth was higher than their capex growth in these sectors.

**Figure 91: Sector-wise capital intensity of Nifty 50 non-financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

**Figure 92: Sector-wise capital intensity of Nifty 500 non-financial companies**




Source: Refinitiv Datastream, NSE. *The estimate depends on capex data of 39 non-financial companies in Nifty 50 as data for other companies were not available in the IBES database between FY18 and FY23. For Nifty500, we have taken 329 non-financial companies whose data is available in the IBES database between FY18 and FY23.

## Policy measures to revive investment growth

**The Government has taken several policy measures over the last few years to revive investment scenario in the country.** Notably, the Finance Minister announced a significant corporate tax rate cut in 2019. Besides, the withdrawal of additional income tax on FPIs improved India's competitiveness in the global market. The Government proposed to grant 100 per cent exemption on interest, dividend and capital gains income on investments by sovereign wealth funds made in infrastructure and other notified sectors. Besides, the government unveiled the Rs105trn **'National Infrastructure Pipeline**' in Jan'20 to revive economic growth and draw investment pipeline on social and economic infrastructure projects. They identified investments worth Rs102trn over the next five years, with nearly 60% in development stage or under implementation. The balance Rs3trn worth of projects would be announced following the confirmation from states. While the Centre and states would fund 39% each, the balance 22% would be funded by the private sector.

**Government provided additional fiscal boost post the outbreak of COVID-19 pandemic…:** To mitigate the adverse impact of the Coronavirus pandemic, the government had announced Rs20trn *'Atmanirbhar Bharat'* package in five tranches. Under this package, the government provided a) liquidity support of Rs Rs3.7trn for MSMEs, Rs750bn for NBFCs/HFCs/MFIs, Rs900bn for DISCOMs and Rs500bn through TDS/TCS cut and Provident Fund support of Rs92.5bn in Tranche 1, b) free food grain distribution extended to migrants, relief of Rs65bn for small businesses/street vendors, liquidity support of Rs2.3trn to farmers, extension of credit-linked housing subsidy scheme for middle-income group in Tranche 2, c) setting up an Agriculture Infrastructure Fund worth Rs1trn for funding storage and post-harvest infrastructure at farm-gate/aggregation points, support of Rs100bn for Micro Food Enterprises, Rs200bn for fisheries, Rs155bn for animal husbandry and beekeeping etc., in Tranche 3, d) increased allocation to MGNERGS, enhanced borrowing for states but with conditions, relaxed IBC norms, increased spending on healthcare and education etc., in Tranche 5 etc.

**Figure 93: Sector wise annual capital expenditure in infrastructure under the National Infrastructure Pipeline**

| Ministry/Department | Amount (Rs bn) |
|---|---|
| **Energy** | |
| Power | 14,104.28 |
| Renewable energy | 9,295.00 |
| Atomic energy | 1,555.03 |
| Petroleum and natural gas | 1,945.72 |
| **Total energy** | 26,900.03 |
| **Roads** | 20,338.23 |
| **Railways** | 13,675.63 |
| **Ports** | 1,211.94 |
| **Airports** | 1,434.48 |
| **Atal Mission for Rejuvenation and Urban Transformation, Smart Cities, MRTS, Affordable Housing, Jal Jeevan Mission** | 19,192.67 |
| **Digital communication** | 3,096.72 |
| **Irrigation** | 8,944.73 |
| **Rural Infrastructure** | |
| Rural Infrastructure | 4,109.55 |
| Water and sanitation | 3,629.60 |
| **Total rural infrastructure** | 7,739.15 |
| **Agriculture and food processing infrastructure** | |
| Agriculture infrastructure | 1,624.72 |
| Food processing industries | 12.55 |
| Food and public distribution | 50.00 |
| **Total agriculture and food processing infrastructure** | 1,687.27 |
| **Social infrastructure** | |
| Higher education | 1,757.29 |
| School education | 377.91 |
| Health and family welfare | 1,510.19 |
| Sports | 90.69 |
| Tourism | 197.77 |
| **Total social infrastructure** | 3,933.85 |
| **Industrial infrastructure** | |
| Industries and internal trade | 3,067.32 |
| Steel | 82.25 |
| **Total industrial infrastructure** | 3,149.57 |
| **Total** | 111,304.28 |

Source: Government of India.

**Figure 94: Details of overall stimulus package announced under Atmanirbhar Bharat Scheme**

| Measures | Announcement date | Amount (Rs trn) |
|---|---|---|
| **Fiscal measures** | | |
| Tranche 1 on MSME, DISCOMs and ETFs | 13-Apr-20 | 5.95 |
| Tranche 2 on poor, migrant labour and farmers | 14-Apr-20 | 3.1 |
| Tranche 3 on agriculture and allied sectors | 15-Apr-20 | 1.5 |
| Tranche 4 on structural reforms to push investments | 16-Apr-20 | 0.08 |
| Tranche 5 on NREGA, state finances and ease of doing business | 17-Apr-20 | 0.4 |
| Revenue loss due to tax concessions since March 22nd, 2020 | | 0.08 |
| Pradhan Mantri Garib Kalyan Package | 26-Mar-20 | 1.7 |
| Spending on healthcare | | 0.15 |
| **Total fiscal measures** | | **12.95** |
| **Total monetary measures (actual)** | | **8.02** |
| **Total stimulus provided by Atmanirbhar Bharat package** | | **20.97** |

Source: Government of India.

**...and announced some structural measures to boost investment:** The Government has taken this opportunity to announce several pending structural measures in Agriculture, Coal, Mining, Defence, Aviation, and Power sectors to push investments in the long-term. In the Agriculture sector, the Government will a) amend of Essential Commodities Act, b) formulate a central law to bring agricultural marketing reforms, and c) facilitate a legal framework focusing on risk mitigation, price and quality assurance for farmers. In other sectors, the government announced some crucial reforms to liberalise the coal sector by introducing commercial mining, extending rebates in revenue share for gasification of coal, building evacuation and transfer infrastructure, among others. It has also increased FDI limit in Defence sector from 49% to 74% to boost local and private manufacturing. At the same time, it will provide Viability Gap Funding for social infrastructure projects up to 30% of the project cost with a total outlay of Rs81bn.

Besides, **government announced the Production Linked Incentive (PLI) scheme in May 2020** across 30 sectors. The scheme will provide incentives for incremental sales from products manufactured in domestic units with an objective to encourage foreign companies to set up units in India and local firms to expand or set up domestic manufacturing units and make India compliant with WTO norms and be neutral towards Indian firms. The scheme may have significant impact on investment in the manufacturing sector as it is uncomplicated, has a straightforward application process and the incentives offered are easy to calculate. Given that the eligible companies are large in general, they will be capable of meeting their targets with minimal support from the government.

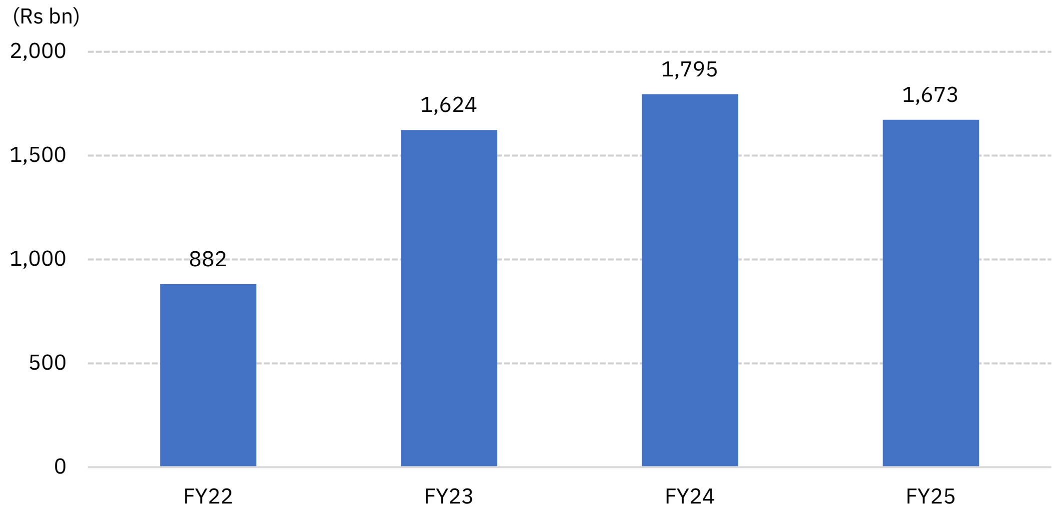
**Figure 95: The PLI scheme will be implemented in two tranches**

| Priority | Sectors | Implementing Ministry/Department | Incentives | Approved financial outlay over a five-year period (Rs bn) |
|---|---|---|---|---|
| **PLI Tranche 1** | | | | |
| 1 | Mobile Manufacturing and Specified Electronic Components | Ministry of Electronics and Information Technology | 1st Round: 4% to 6% on incremental sales (over base year) of goods manufactured in India and covered under target segments, to eligible companies, for a period of five years post the defined base year.<br>2nd Round: 3% to 5% shall be extended on incremental sales (over base year) of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four years. | 409.5 |
| 2 | Critical Key Starting materials/Drug Intermediaries and Active Pharmaceutical Ingredients | Department of Pharmaceuticals | 10% on incremental sales (over base year) for FY 2022-23 to FY 2025-26, 8% for 2026-27 and 6% for 2027-28. | 69.4 |
| 3 | Manufacturing of Medical Devices. | | 5% on incremental sales (over base year) for FY 2022-2023 to FY 2026-2027. | 34.2 |
| **Total** | | | | **513.1** |
| **PLI Tranche 2** | | | | |
| 1 | Advance Chemistry Cell (ACC) Battery | NITI Aayog and Department of Heavy Industries | To be implemented | 181 |
| 2 | Electronic/Technology Products | Ministry of Electronics and Information Technology | | 50 |
| 3 | Automobiles & Auto Components | Department of Heavy Industries | | 570.4 |
| 4 | Pharmaceutical drugs | Department of Pharmaceuticals | | 150 |
| 5 | Telecom & Networking Products | Department of Telecom | | 122 |
| 6 | Textile Products: MMF segment and technical textiles | Ministry of Textiles | | 106.8 |
| 7 | Food Products | Ministry of Food Processing Industries | | 109 |
| 8 | High Efficiency Solar PV Modules | Ministry of New and Renewable Energy | | 45 |
| 9 | White Goods (ACs & LED) | Department for Promotion of Industry and Internal Trade | | 62.4 |
| 10 | Speciality Steel | Ministry of Steel | | 63.2 |
| **Total** | | | | **1,459.8** |

Source: Government of India – MEITY and Department of Pharmaceuticals.

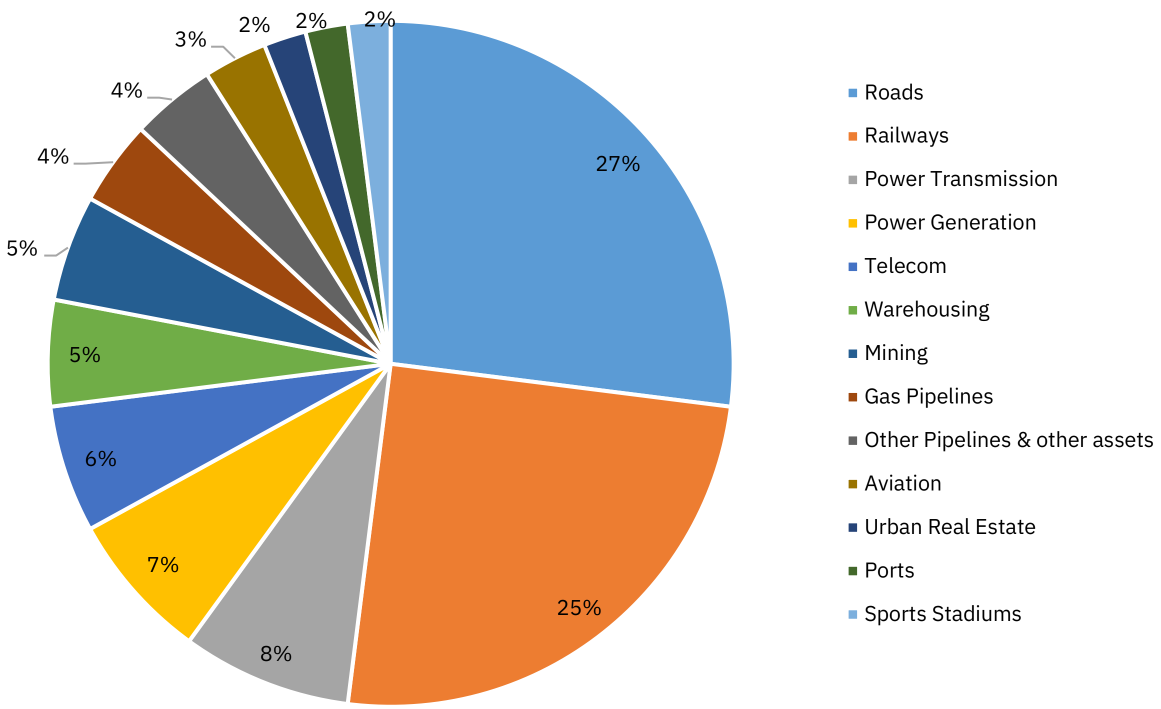
**The government has recently sketched out the detailed National Monetization Plan** (NMP) with a potential to generate Rs6trn by unlocking value in brownfield public sector assets over a four-year period and tap long-term patient capital which can be leveraged for further public investments. Under this scheme, Roads are estimated to have highest contribution of 27% through the monetisation exercise, followed by Railways (25%), Power transmission (8%) and Power Generation (7%), among others.

**Figure 96: Indicative value of the monetization pipeline under the National Monetization Plan (FY22-25)**




Source: PIB, Ministry of Finance.

**Figure 97: Share of sectors in National Monetization Plan**




Source: PIB, Ministry of Finance:

**Figure 98: Snapshot of infra-asset base under key central govt. entities for the National Monetization Plan**

| Asset class | Ministry /Entity | Key asset variable | Value |
|---|---|---|---|
| Roads | Ministry of Road Transport & Highways through National Highways Authority of India | Length of National Highway network | 132,499 km |
| Power transmission | Ministry of Power through Power GridCorporation of India Ltd. | Transmission network andsubstations | 171,950 km transmission lines, 262 sub-stations with 444,738 MVA transformation capacity |
| Power generation | National Thermal Powe rCorporation (and its JVs & subsidiaries) | Thermal generation | 60,224 MW |
| | National Hydroelectric Power Corporation<br>National Thermal PowerCorporation | Hydro & renewable generation (Solar) | 4,912 MW (NTPC and its JVs & subsidiaries)7,071 MW (NHPC) |
| Airports | Airport Authority of India | Number of AAI airports | 137 airports |
| Ports | 12 Major Port Trusts | Handling capacity of major ports | 1535 MMTPA |
| Telecom Towers | Bharat Sanchar NigamLtd Mahanagar TelephoneNigam Ltd | Number of telecom towers | 69,047 towers |
| Optical FibreCable | Bharat BroadbandNetwork Limited | Length of opticalfibre cable | 5,25,706 km (laid under Bharatnet) |
| Railway Stations | Indian Railways | Number of railway stations pan India | 7,325 stations |
| Railway Track | Indian Railways | Track network | 1,26,366 track km (67,956 route length) |
| Natural gas pipeline | Gas Authority of India Ltd, Indian Oil Corporation Ltd & others | Length of operational pipeline network | 19,998 km |
| Petroleum & products pipeline | IOCL, HPCL, BPCL, OIL | Length of pipeline network | 14,623 km |
| Warehouses | Food Corporation of India, Central Warehousing Corporation & other agencies | Warehousing capacity | 818 lakh MT |
| Sports stadium | Sports Authority of India, Ministry of Youth Affairs & Sports | Number of Sports Stadia & regional centres | 5 national stadia and various regional centres |

Source: NITI AAYOG.

**The central bank has also announced several expansionary monetary policies to revive economic activities and investment in India:** The RBI has reduced the policy rate to record-low of 4% and maintained its accommodative stance to revive economic activities and encourage additional investments even as the inflation was hovering above 6% due to several supply-side bottlenecks post the Coronavirus pandemic. This had helped to reduce the lending cost for both fresh and outstanding loans through banks as well as NBFCs, to incentivise both households and corporate to make additional investments. However, on the negative side, low interest rates and high inflation have discouraged households from making additional savings in banks which may have created supply side constraints to investment in the country.

**Additional measures were taken to provide ample amount of liquidity in the system:** The RBI has undertaken several other policy measures, including a) On-tap TLTROs

(Targeted Long-term Repo Operations) to be earmarked for specific sectors, b) 100bps cut in Cash Reserve Ratio, c) special liquidity facility to National Housing Board (NHB) and NABARD, d) a one-time restructuring of eligible COVID-19-related stressed corporate and personal loans, including stressed MSME borrowers that were standard as on March 1st, 2020, e) increase in loan-to-value ratio for gold loans to provide ample amount of liquidity in the system at a low interest rate. Besides, it had given multiple extensions of moratorium on instalments on term loans and resolution timelines to ease out instalment payment and insolvency procedure for distressed borrowers.

## Medium-term outlook

**Low household savings created supply-side bottlenecks to investment growth:** Households' savings plays a vital role to revive investment growth in India given the fact that they had contributed Rs40.0trn in FY20 which is around 62% to total domestic savings and 61% of total savings in India. However, the recent rise in unemployment, K-shaped economic recovery, concentration of wealth as well as rise in poverty post the pandemic may have direct and adverse impact on total households' savings. Besides, the negative real interest rate along with high inflation in the country may weighed on their savings rate over the medium-term as well.

**Recent rise in government dis-savings may crowd-out private investment:** Government savings remain negative throughout the years which are mainly financed through the bond market. Total government dis-savings increased significantly by a staggering 150% from Rs1.5trn in FY19 to Rs3.7trn in FY20 due to several expansionary measures taken by the government, a sharp fall in government revenue due to the containment measures taken during Q4FY20 and a sudden rise in health expenditure over the period. The trend continued in FY21 as well and fiscal deficit is estimated to have grown to 9.2% of GDP in FY21 as compared to 4.6% of GDP in FY20 which may have crowd-out impact on private investments.

**Investment outlook on large projects remained subdued in FY22** as announcement of fresh investment fell considerably along with completion and revival rates, while stalled projects jumped up in value terms in Q1FY22. This was largely driven by weak economic recovery, slow vaccination drive, weak recovery in consumer sentiments and consumer expectations over the period. Besides, the rise in inflation and unemployment rate may worsen the situation further in the country.

**COVID-induced business uncertainty remains high:** Even though the advanced economies remain well ahead of emerging markets and developing economies in terms of inoculation and coverage of population those are fully vaccinated, the former are still suffering with surge in total coronavirus infections largely due to the rise in delta variant cases. While in India, with 51% partially vaccinated and 20% fully vaccinated population, the possibility of subsequent waves remains high in the wake of emergence of new COVID variants. Hence, the situation remains uncertain, and both the manufacturing and service sector may take longer time to recover from the downturn and postpone their investment plans in the near future. This may have slow recovery in employment generation and have adverse impact on households' savings as well.

**In the listed space, recovery in investment growth is expected to be transitory in nature:** The capex growth is estimated to have a V-shaped recovery in FY22 for both the Nifty 50 and Nifty 500 non-financial companies. According to the IBES estimates, capex of Nifty50/Nifty500 companies would increase by 10.7%/21.6% in FY22, albeit off a low base, possibly factoring in continued recovery in economic activity, sustained drop in COVID infections and casualties, and rapid acceleration in the vaccination coverage. However, the improvement is expected to be transitory in nature, with aggregate capex expected to drop again in FY23, partly reflecting fading policy support and persistent COVID-led uncertainty on business and consumer sentiments.

**Slowdown in investment growth may continue in the absence of structural reforms:** Despite several monetary and fiscal policy measures announced post the COVID-19 outbreak and gradual recovery in economic activities including investment over the first half of 2021, India's investment rate declined to a record low level of 27.1% in FY21. The rate has been on a downward trajectory since the Global Financial Crisis barring occasional bouts of partial and transitory improvement. Beyond the near-term causes, the structural slowdown in investment was mainly driven by weak global demand and scarce capital in India over the last decade. The situation worsened over the last few years owing to tight financial conditions post the NPA woes in the banking sector and liquidity crisis for NBFCs, with demonetisation and GST implementation adding to economic uncertainty with their disproportionate impact on the unorganised space. The last year-and-half has been worse, thanks to the COVID-19 pandemic and attendant economic ramifications. In addition, the declining savings rate (% of GDP) over the period has created a supply side constraint for investment. Even as the government has initiated several structural measures to improve the situation, investment recovery in the country would depend on their successful implementation in the coming years.

## Economic Policy & Research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