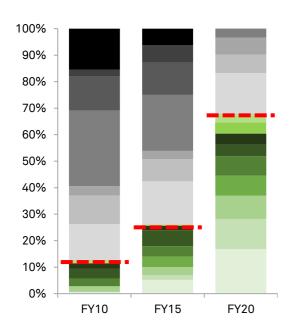


New entrants in roads racing legacy developers as award modes evolve

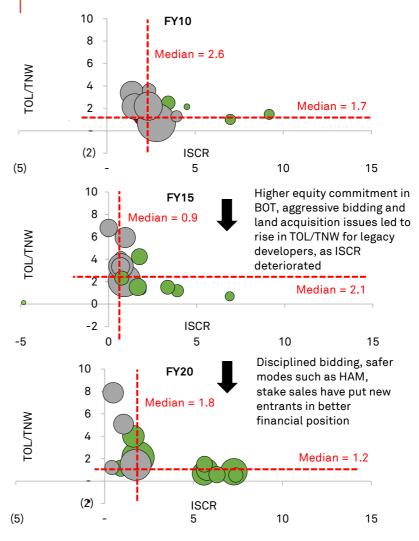
New entrants gained share post BOT phase-out



Notes:

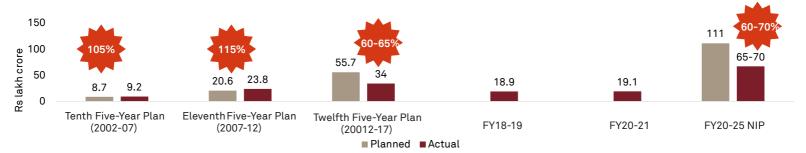
- 1. BOT: Build-operate-transfer; HAM: Hybrid annuity model
- 2. Shades of grey are for legacy developers; shades of green for new entrants
- 3. Market share based on revenue of the company for that year
- 4. ISCR: Interest service coverage ratio
- Source: Company reports, CRISIL Research

Financial health of legacy developers worsen, new entrants better off



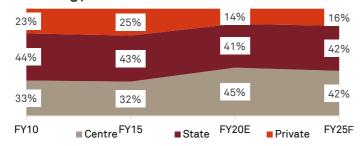
Ambitious NIP target relies a lot on government funding

National Infrastructure Pipeline (NIP) a tall order compared with earlier plans; CRISIL Research expects 60-70% target achievement



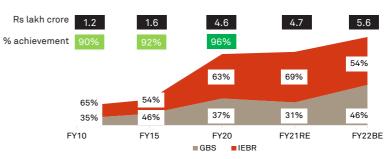
Note: Investments from fiscal 2015 in the Twelfth Five-Year Plan are CRISIL's estimates. The numbers in the red callout reflect achievement ratio Source: CRISIL Research, Planning Commission, NITI Aayog, India Investment Grid

Private participation already on a declining trend; NIP funding pattern to retain the skew



Source: CRISIL Research, India Investment Grid

Centre's reliance shifts from extra-budgetary to budgetary support



Source: CRISIL Research, budget documents

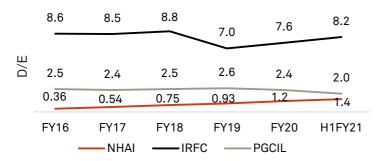


As PSE debt burden rises, innovative funding methods explored

Debt of public sector enterprises (PSEs)/ government bodies multiplies FY16-20 CAGR 50% 28% 8% FY16 FY17 FY18 FY19 FY20 H1FY21 NHAI FIRFC PGCIL

Source: CRISIL Research, company reports

Debt-to-equity worsens, leading to government increasing budgetary support in FY22



Notes: IRFC: Indian Railway Finance Corporation; PGCIL: Power Grid Corporation of India Ltd

Source: CRISIL Research, company reports

Structural initiatives in innovative funding channels

| | tunding cha | anneis | 5 | | | | | |
|-----------------|--|--------|-----------|-------|--------------|-------|--|--|
| REIT / InvIT | | US | Singapore | Japan | Hong Kong | India | | |
| | Year | 1960 | 2001 | 2001 | 2003 | 2014 | | |
| | Market cap/GDP | 5-6% | 20-21% | 2-3% | 7-8% | 0.70% | | |
| | Nascent stage; can potentially unleash Rs 8 lakh crore in the next five fiscals | | | | | | | |
| DFI | Rs 20,000 crore development financial institution (DFI) aims to have a lending portfolio of Rs 5 lakh crore in three fiscals | | | | | | | |

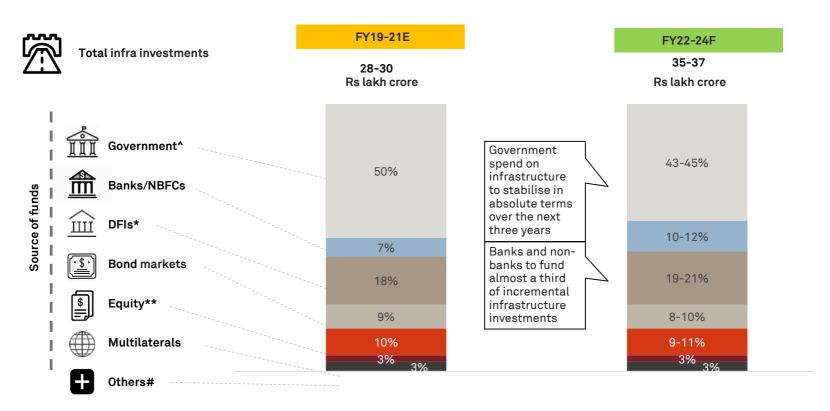
monetisation pipeline on the lines of NIP for ease of monetisation of operational projects

Establishment of national monetisation

Note: Market cap is as of September 2020 Source: CRISIL Research

Asset

Banks, DFIs to support incremental requirement for infra financing



Note: Total infrastructure spend is incremental investment for block of three years. ^Includes central and state governments. * DFI includes contribution from new DFI over the next three years. ** includes internal accruals/FDI. #Others include asset monetisation plans by private players.

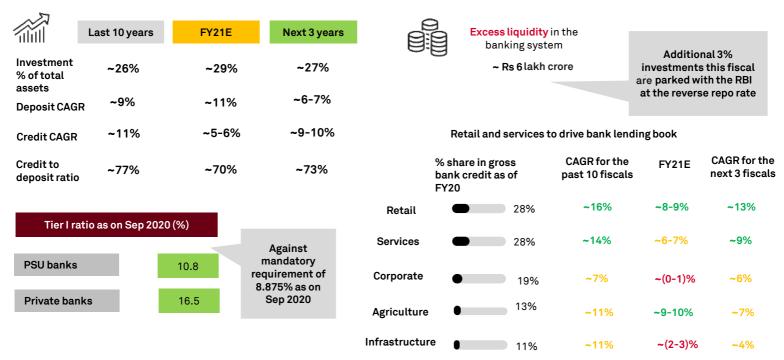
Source: Government reports, industry, CRISIL



Liquidity at banks to support PLI and infra funding; intent a monitorable



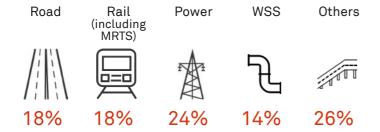
Pandemic-driven risk aversion led to increase in banking system liquidity



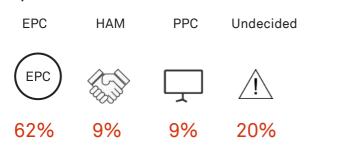
Notes: Colour code for CAGR> Green depicts increasing share and orange depicts no major change in bank credit share and red depicts declining share Source: RBI, Company reports, CRISIL Research

NIP projects worth approximately Rs 40 lakh crore under construction

Transport, energy and water projects account for ~80% of NIP spending of Rs 111 lakh crore



High pressure on public funds as EPC dominates mode of implementation



Note: All charts are for FY20-25 Source: CRISIL Research, Indi a Investment Grid

~Rs 40 lakh crore of projects currently under implementation

| Planning | Pre- construction | Under construction | Completed |
|----------|----------------------|--------------------|-----------|
| | X | | |
| 21% | 36% | 43% | <1% |

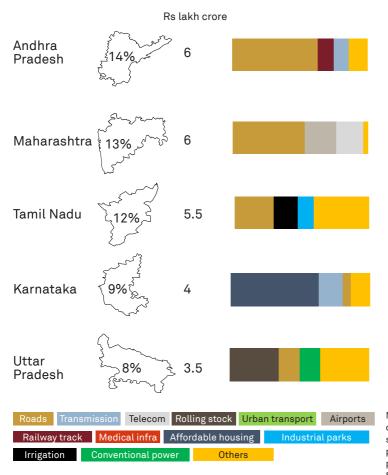
EPC opportunity at Rs 65 lakh crore is the highest in the transport sector

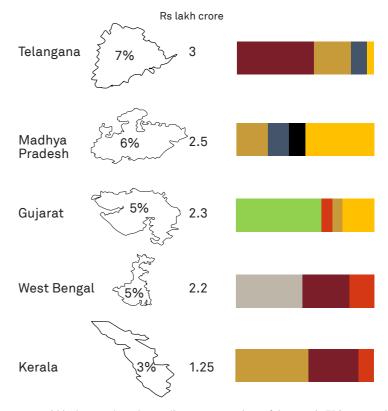
| Road | Rail (including MRTS) | Power | WSS | Others |
|------|-----------------------------|-------|-----|--------|
| | | | F | |
| 31% | 15% | 6% | 15% | 33% |

Note: Others include: irrigation, rural infra, ports, airports, health, petroleum, natural gas, and education



Highest EPC opportunity in NIP in Maharashtra and Andhra Pradesh

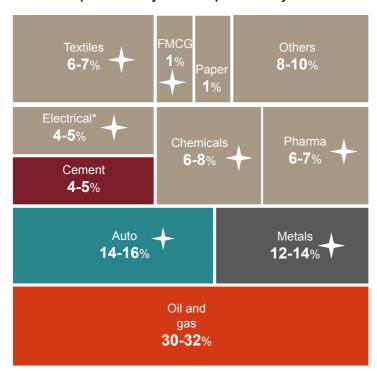




Note: 1. Percentage within the state boundary outline represents share of the state in EPC opportunity outlined in the NIP, excluding pan-India projects 2. Bar chart adjoining the state represents percentage share of top 3 infrastructure sub-sectors by EPC opportunity outlined in the NIP, excluding pan-India projects 3. Top 10 states account for 75-85% of the state projects by EPC outlined in the NIP 4. State projects accounted for 70% (45 lakh crore) of the NIP with pan-India projects accounting for the rest Source: CRISIL Research, India Investment Grid

Industrial capital investment to get major push from PLI

~16,000 manufacturing companies spent Rs 3-3.5 lakh crore on capex annually over the past three years

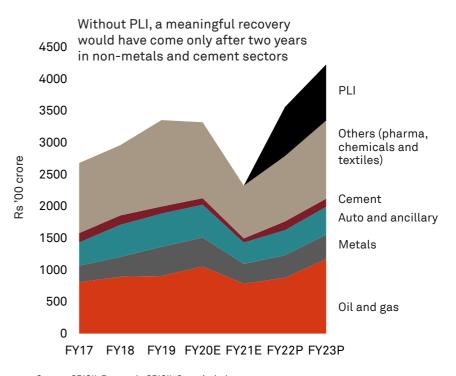


Notes: 1) Electrical includes all electrical, consumer durables, appliances, electronics and heavy equipment 2) auto includes auto-components and tyres 3) metals includes ferrous and non-ferrous

4) Star marks are for sectors where PLI has been introduced

Source: CRISIL Research,

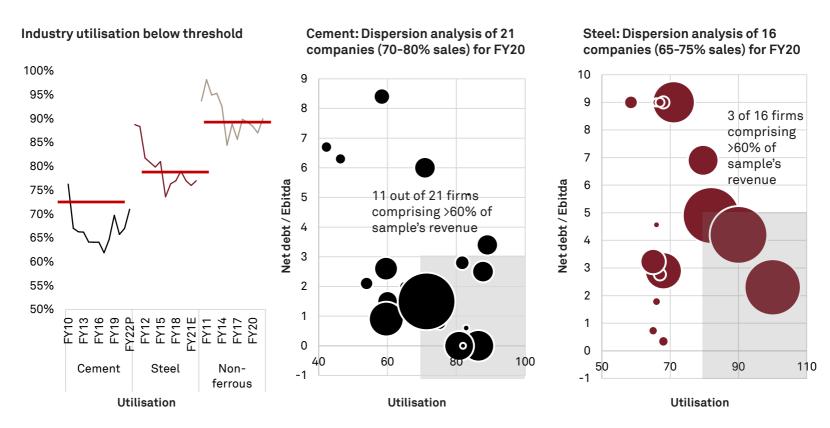
Industrial capex to rise 45-55% next fiscal after 35% contraction this fiscal, driven by core sectors and PLI



Source: CRISIL Research, CRISIL Quantix, industry



Core industry utilisation sub-par; large companies better placed

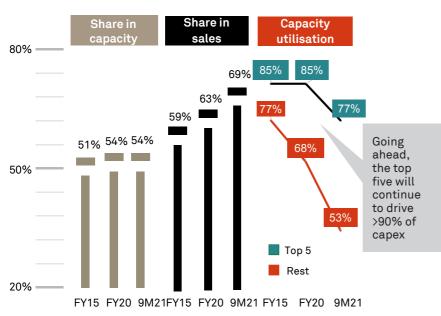


Utilisation across most industrial sectors will remain below optimum, except for non-ferrous, even in fiscal 2022

Note: Scale adjusted for net debt/Ebitda as <0 and >9 to show all companies Source: CRISIL Research, CRISIL Quantix, Industry

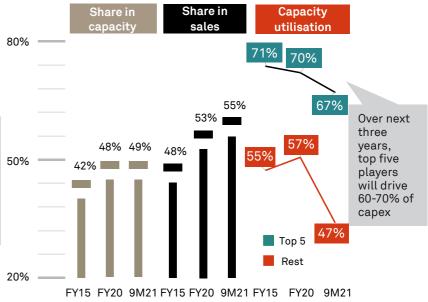
Steel, cement biggies adding capacity as share in sales rises

Steel: Share of top five players



Steel sector added 26 million tonne (MT) of capacity over past five years, with the top five players accounting for >90% addition, driving capex. In comparison, 37 MT capacity was added over fiscals 2010 to 2015, with top five players contributing only 50-55%

Cement: Share of top five players



Capacity and market share of top five players have risen over past six years, driving almost half of sector's capex. Also, acquisitions led to the capex rise

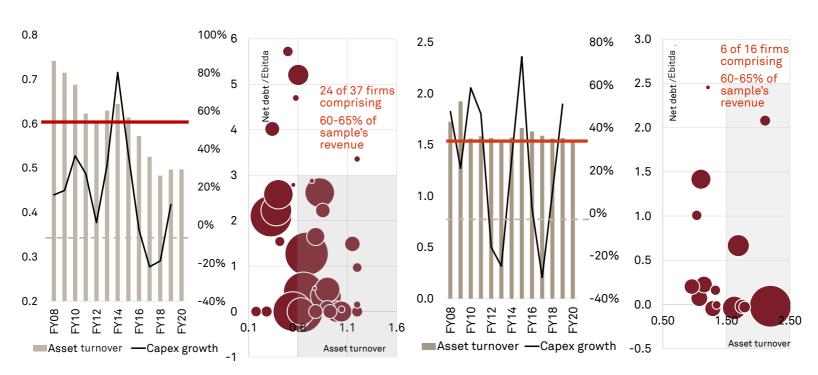


In pharma and

FMCG, big players driving capex in pockets

Pharma: Asset turnover and capex growth last fiscal

FMCG: Asset turnover and capex growth last fiscal



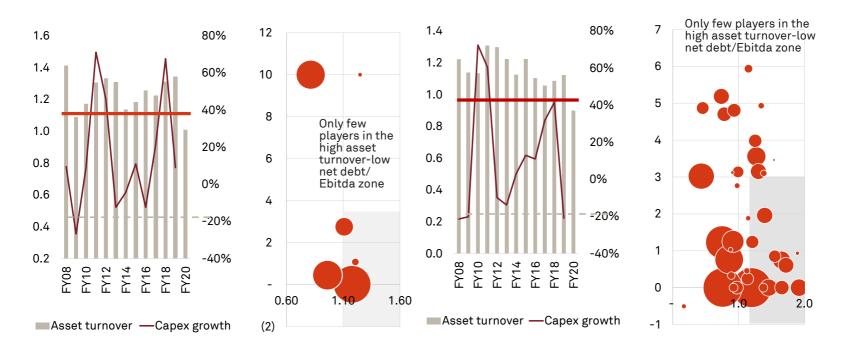
Note: Sample of 37 companies constituting 65-70% of sector revenue Source: CRISIL Research

Note: Sample of 16 companies constituting 75-80% of sector revenue

Auto and auto-components hobbled by low asset turnover

Auto: Asset turnover and capex growth for six companies

Auto-components: Asset turnover and capex growth for 42 companies

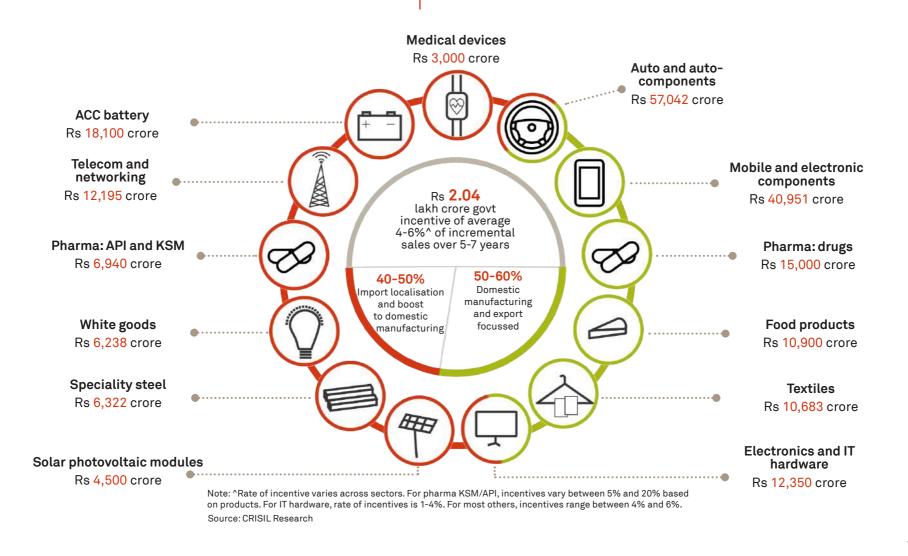


Note: Sample of six players constituting 50-55% of sector revenue Source: CRISIL Research

Note: Sample of 42 firms constituting 20-25% of sector revenue Source: CRISIL Research

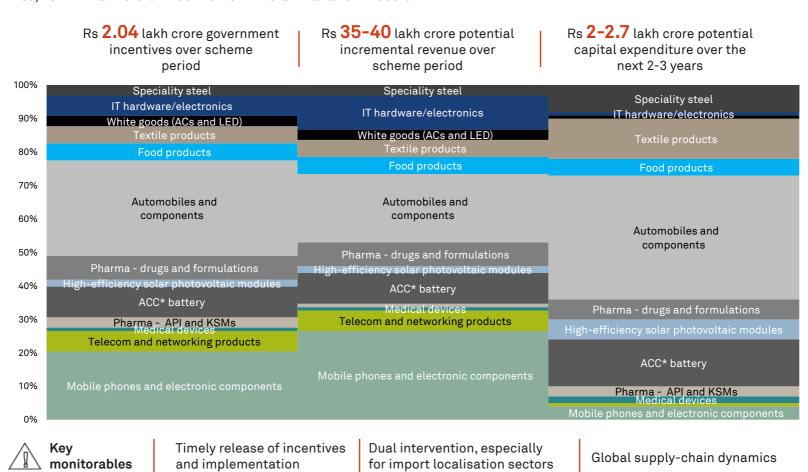


PLI to boost capex in many sectors



PLI can lead to Rs 35-40 lakh crore revenue in five years

Also, Rs 2-2.7 lakh crore investments with stark variation in sector mix



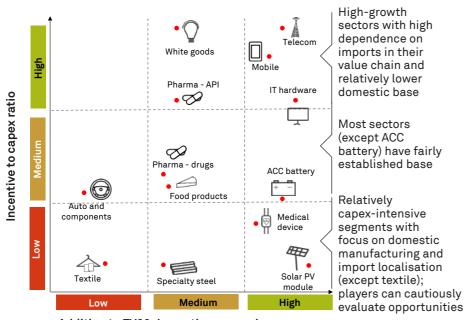
*ACC: Advance chemistry cell Source: Union Cabinet, CRISIL Research



PLI spells faster growth for select sectors

Wage bill addition of 15-20%* on the cards

Scheme most attractive for mobile, telecom and IT hardware

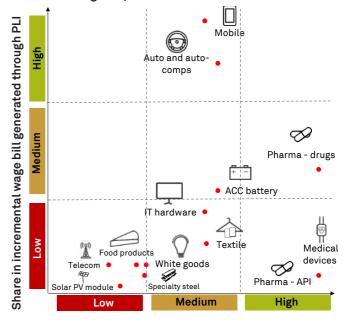


Addition to FY20 domestic revenue base

Note: Incentive to capex ratio: High: >1x, Medium: 0.5-1x, Low: <0.5x Revenue addition from PLI to FY20 domestic revenue base: High: >50% , Medium: 25-50%, Low: <25%

Source: CRISIL Research

Rs 3.5-4 lakh crore of potential incremental wage bill over scheme tenure, ie. 15-20% over annual wage bill of 16,000 manufacturing companies



Employee cost as a % of sales

Note: Employment cost as a % of sales: High: >15%, Medium: 10-15%, Low: <10%; Share in incremental wage bill generated through PLI: High: >15%, Medium: 10-15%, Low: <10%

*based on annual wage bill of 16,000 manufacturing companies Source: CRISIL Research

PLI directed at sectors that account for 30-35% of non-oil import bill

| | Sectors | • | ependence alue chains | | Import bill FY20 | Import as a % of consumption | Geographical dependence |
|---|--|-----------------|--------------------------|---------------|------------------------|--|-----------------------------|
| | | Raw material | Semi- finished | Final product | | | |
| | IT hardware (laptops, PCs, tablets and servers) | | | | Rs 25,000-30,000 crore | 80–85% of India's domestic laptop, tablet and server demand | China, Hong Kong |
| | Solar photovoltaic modules | | | | Rs 11,000-12,000 crore | 80-85% of India's domestic photovoltaic module demand | China, Singapore Vietnam |
| | Telecom and networking products | | | — | Rs 50,000-60,000 crore | 65-75% of India's requirement | China, Korea |
| 9 | Pharmaceuticals (API and KSM) | <u>*</u> | _ | - | Rs 20,000-25,000 crore | 30-40% of India's consumption of API/KSM | China |
| P | Speciality steel | | - | | Rs 20,000-25,000 crore | 30–35% of India's alloy steel consumption | China, Korea, Japan |
| 9 | Automobiles and components | | * | - × | Rs 80,000-90,000 crore | 20-25% of India's auto- component requirement | China, Korea |
| | White goods (AC and LED lights) | | | | Rs 35,000-45,000 crore | 20–30% of India's RAC and LED light demand | China |

Indicates focus of PLI

[•] High dependence on imports

Low dependence on importsMedium dependence on imports

Notes

¹⁾ Raw materials for auto, white goods, IT hardware and medical devices are considered to be metals and plastic. Semi-finished refers to components and sub-components. Raw material for pharma is KSM, semi-finished is API and final product is drug/formulation

²⁾ Import bill for white goods largely on account of LED lights

³⁾ Import bill for all auto and components, TW, 3W, CVs and PVs. For pharma imports, only API/KSMs are considered. For white goods, imports of only RAC and LED lights is considered. For IT hardware, imports of only laptops, PCs, tablets and servers is considered



PLI also focuses on enhancing local manufacturing and exports base

| | Sectors | Focus of PLI across value chains | | | Export value FY20 | Share in global exports (value) | Competing economies |
|---|--------------------------------------|----------------------------------|-------------------|------------------|----------------------------|---------------------------------|--|
| | | Raw material | Semi- finished | Final product | | | |
| 0 | Automobiles and components | 0 | * | — <u>*</u> | Rs 1.3-1.4 lakh crore | 1-2% | Germany and Japan for auto; Germany and the US for auto components |
| 8 | Pharmaceuticals (formulations) | | | - - | Rs 1-1.2 lakh crore | 3-4% | India is leading generics supplier |
| | Food products | | | — | Rs 30,000- 35,000 crore | <2% | Brazil, China, Spain and the US |
| | Mobile and electronic components | | * | * | Rs 25,000- 30,000 crore | 1-2% | China with >45% share |
| | Textiles (man-made fibre, technical) | <u>*</u> | | - | Rs 9,000-10,000 crore | 5-6% | China, Indonesia and Korea |



Low domestic baseMedium domestic baseHigh domestic base

Notes:

- 1) Raw materials for mobile phones are considered to be metals and plastic. Semi-finished are components and sub-components
- 2) Raw material for pharma is KSM, semi-finished is API and final product is drug/formulation
- 3) Export value for mobiles; drugs and formulations for pharma; consumer foods for food products and MMF and technical textiles for textiles are considered
- 4) There is limited domestic capability for ACC battery in India currently
- 5) Details of electronic/tech products are awaited from the ministry

Source: Ministry of Commerce, CRISIL Research

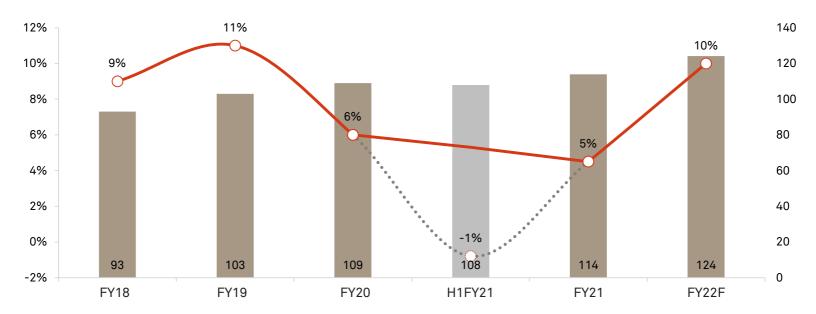
Financial sector





Bank credit has shown a V-shaped recovery

Trend in gross bank credit



Source: RBI, CRISIL estimates

- Degrowth of 0.8% in the first half of this fiscal; sharp sequential recovery of 3% in the third quarter
- ECLGS disbursements at Rs 1.6 lakh crore in the first nine months of this fiscal have lent support

Retail credit to lead the way; corporate loans to also bounce back

Break-up of gross bank credit



Note: Figures in boxes represent expected proportion in overall bank credit as on March 31, 2021 Source: RBI, CRISIL estimates