Viral fever: Covid-19 impact on economy, corporate revenue and profitability

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Key messages

- Base-case GDP growth expected at 1.8% for fiscal 2021. Assumptions include effect of the pandemic subsiding materially in April-June quarter, a normal monsoon, and minimum fiscal support of Rs 3.5 lakh crore

- Risks tilted towards the downside scenario of zero GDP growth

- Permanent loss of ~4% of real GDP. Fiscal 2022 likely to see a V-shaped recovery at over 7% real GDP growth. However, its sustenance will not be able to lift GDP volume to its trend path even by 2024

- Large swathes of informal workforce of India are vulnerable to deep slowdown, particularly in construction, manufacturing and services sector

- External vulnerability likely to be low, with current account deficit (CAD) projected at 0.2% of GDP and forex reserves adequate, but domestic vulnerability rising. A risk-off scenario will, however, keep currency volatile

- Agricultural sector could be the bright spot as a bumper winter crop (rabi) is being harvested. But it will need support via fiscal measures aimed at reducing labour constraints, input provision and logistics support

- States accounting for 33% of population and 41% of national output are most at risk from Covid-19

- Fiscal support will need to be upped at the central and state level in scale and scope to go beyond vulnerable households and cover vulnerable firms as well
Problem nonpareil
In choppy, uncharted waters

**Entering an unknown terrain**

- Solution will come from science, until that happens, keep the mask on, stay put. We assume medical solution only by mid-2021, and the current wave to be contained significantly in April-June quarter

**Non-linear event**

- High level of uncertainty on the peak and rate of spread makes it difficult to quantify outcome
- If the lockdown time doubles, the adverse impact will more than double

**Past pandemics and crises have seen whetted desire to save – we might see it this time as well**

**Policy cannot offset the damage, only minimise it**
Supply and demand shocks in one fell blow

The pandemic first created a supply shock, as disruptions in global supply chains and factory shutdowns affect an economy’s contemporaneous ability to produce goods and services. The impact on demand is more complicated. In the short run, the perceived supply shortage could have induced consumers to hoard products, creating excess demand. However, factory shutdowns and resultant layoffs and income losses will ultimately weigh on demand as well.
Deadlier than the 2008 Global Financial Crisis

• Double trouble
  - Unlike the 2008 Global Financial Crisis (GFC), the pandemic has resulted in enormous human suffering, not seen in decades, and has also slammed the brakes on economic activity and jeopardised financial stability

• A dangerous cocktail of shocks
  - The GFC emanated from the financial sector, which choked financial flows. This hit demand, but did not cause supply disruptions. On the other hand, social distancing measures to arrest the pandemic’s spread have led to an immediate disruption in supply owing to factory shutdowns, accompanied by a reduction in demand for non-essential goods and services

• A crisis in every country
  - The GFC originated in the US, with impact on other countries dependent on how well they were linked to the US and the associated global financial system. The pandemic, however, has individually hit each country’s economy, with impact from both, weaker global as well as domestic demand

• Same policy tools cannot work
  - Monetary policy alone has limited ability to spur growth in the current crisis, when consumers cannot go out to spend and businesses cannot restart activity. Fiscal policy is set to do the heavy-lifting, but they cannot be used in all economies alike due to varying fiscal space available

• Trade-off between health and economic costs
  - Reviving the global economy at present is not an easy task since most economic activity would be constrained by lockdowns. Lifting the lockdowns could lead to a spurt in fresh Covid-19 cases, aggravating the present health emergency
India’s growth outlook and policy responses
Channels of Covid-19 transmission

With the rising spread, domestic channel becomes dominant

- Economic impact of Covid-19 began as a supply shock, emanating from China
- Transformed into external demand shock as the disease spread to rest of the world.
- With the pandemic eventually spreading in India and triggering a lockdown, the impact has further magnified into a domestic supply and demand shock

External
- Global recession
- Supply chain disruption
- Fall in commodity prices and discretionary spend
- Return to safe haven/risk off

Domestic
- Containment measures/lockdown
- Uncertainty, precautionary behaviour
- Financial sector stress

Source: CRISIL
Global recession certain, but its depth and length a tough call

At the end of the first quarter of calendar 2020

- Huge economic costs of pandemic apparent in downward revision of growth forecasts
- Unprecedented levels of monetary and fiscal stimulus unable to prevent global recession
- Non-linearity of the event and risk of second wave create downside risks to outlook
- Advanced economies to face the deepest recession in decades

GDP growth (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>2.3</td>
<td>-5.2</td>
</tr>
<tr>
<td>Eurozone</td>
<td>1.2</td>
<td>-7.3</td>
</tr>
<tr>
<td>India</td>
<td>6.1</td>
<td>1.2</td>
</tr>
<tr>
<td>China</td>
<td>1.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Japan</td>
<td>0.8</td>
<td>-3.6</td>
</tr>
<tr>
<td>World</td>
<td>2.9</td>
<td>-2.4</td>
</tr>
</tbody>
</table>

Source: S&P Global, April 2020
**Economy was in a limbo even before the pandemic hit**

| Industry | 1. IIP growth  
a. Total  
b. Manufacturing  
c. Capital goods  
d. Consumer durables  
e. Consumer non-durables  
2. Cement production (IIP cement)  
3. Steel production (Final steel consumption)  
4. PMI Manufacturing  
5. Domestic auto sales  
a. Total  
b. Tractors  
c. Commercial vehicles  
d. Two-wheelers  
e. Cars  
| Services | 1. PMI-Services  
2. Domestic airline passenger traffic  
3. Railway freight cargo  
4. Number of telecom subscribers  

| Inflation | 1. CPI inflation  
a. Core CPI inflation  
2. WPI inflation  
| Wages | 1. Agri wages  
2. Non-agri wages  

| Bank credit | Total credit  
a. Non-food  
b. Retail  
c. Industry  
d. Services  

| Commodity prices | 1. Brent crude oil price ($/barrel)  
2. Metals and minerals index  

| Currency | Rs/$  

| Trade | Export growth  

|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

| Brent crude oil price ($/barrel) | 64.13 | 66.41 | 71.20 | 70.53 | 63.30 | 64.00 | 59.25 | 62.33 | 59.37 | 62.74 | 65.85 | 63.60 | 55.00 | 32.98 |


| Source: Reserve Bank of India (RBI), National Statistical Office (NSO), Ministry of Commerce, Society of Indian Automobile Manufacturers (SIAM), CEIC, CRISIL |
Four assumptions behind the fiscal 2021 base case

Assumption 1: Containment measures will be relaxed as the effect of the pandemic subsides in the April-June quarter

<table>
<thead>
<tr>
<th>Stringency of containment measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
</tr>
</tbody>
</table>

Fiscal year quarters; Q1 = April-June, 2020

- **Assumption 2: Normal monsoon**
  - According to the Indian Meteorological Department, monsoon this year is expected to be 96-104% of the long period average, which augurs well for agriculture

- **Assumption 3: Soft crude prices**
  - Crude oil prices are expected to average $30 per barrel in fiscal 2021

- **Assumption 4: Policy support**
  - A ‘whatever it takes’ stance of monetary policy and a minimum fiscal support of Rs 3.5 lakh crore to support vulnerable sections and businesses

Source: IMD and CRISIL Research
The five calls of our base case

<table>
<thead>
<tr>
<th>Macro variable</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21 F</th>
<th>Rationale for outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (%, y-o-y)</td>
<td>6.1</td>
<td>5.0*</td>
<td>1.8</td>
<td>The initial blow on the external front has rapidly transformed into a domestic shock, as the country reels under a forced lockdown. The impact from the pandemic’s spread and the 40-day lockdown is now dominant.</td>
</tr>
<tr>
<td>CPI inflation (%</td>
<td>3.4</td>
<td>4.8</td>
<td>4.4</td>
<td>Inflation should soften, as: (1) the abnormal surge in food inflation in fiscal 2019 has started to correct; (2) core inflation will remain moderate with slowing growth; and (3) the sharp drop in crude oil prices will keep fuel inflation soft</td>
</tr>
<tr>
<td>10-year G-sec yield (%)</td>
<td>7.5</td>
<td>6.2</td>
<td>6.5</td>
<td>Despite lower inflation and softer policy rates, higher market borrowings amid fiscal slippage should push up yields</td>
</tr>
<tr>
<td>CAD/GDP (%)</td>
<td>2.1</td>
<td>1.0</td>
<td>0.2</td>
<td>Current account deficit (CAD) is likely to remain under check, because of low commodity and crude prices. Yet, the rupee will be volatile, because of the selloff by foreign portfolio investors (FPIs) selloff and the risk-off scenario.</td>
</tr>
<tr>
<td>Rs/$ (March average)</td>
<td>69.5</td>
<td>74.4</td>
<td>73</td>
<td>Source: RBI, NSO, CRISIL</td>
</tr>
</tbody>
</table>
Any misses could pull GDP growth forecast down to 0%

Risks to the base case

- Further mark-down in global growth in case of uneven health recovery and premature austerity in the face of a large rise in public debt in most countries
- Inability to relax restrictions materially in India – these are early days and cases are still rising with no sign of abatement in key regions driving production/demand, extending the road to recovery. Productive capacity of several sectors could get hit, constraining supply
- A second wave of cases emerging, which could further add to the uncertainty, breaking sentiments further
- No further fiscal support to incomes and demand
- A setback to agriculture on either monsoon failure or supply disruptions
- Any change in the base situation could push India’s GDP growth closer to 0% in fiscal 2021

Source: CRISIL
Permanent loss of 4% GDP likely if policy response is lukewarm

- Sharp growth spurt helped catch up with trend within two years of the GFC
- GDP grew 8.2% on average in the two years following the GFC
- Massive fiscal spending, monetary easing, and swift global recovery played a role in V-shaped recovery

- A catch-up to trend GDP unlikely
- Monetary policy has been supportive and proactive, but fiscal space to spend is somewhat constrained by tight fiscal position of Centre and states
- We estimate ~4% permanent loss to real GDP (from the decadal trend levels) in the base case

- Catch-up requires a never-seen-before GDP growth of 8.5% on average for three years up to fiscal 2024
- This would imply extraordinary and extended policy support, reforms and facilitations to support domestic business and supply chains, and attract foreign investment

Source: CRISIL
# Sectors hit hardest unlikely to see a material revival even by Q4

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sub-sector: Mining (3%)</th>
<th>Sub-sector: Manufacturing (18%)</th>
<th>Sub-sector: Construction (8%)</th>
<th>Other manufacturing (39%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% share in GVA</td>
<td>% share in sub-sector GVA</td>
<td>% share in GVA</td>
<td>% share in sub-sector GVA</td>
<td>% share in sub-sector GVA</td>
</tr>
<tr>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-sector: Services (52%)</th>
<th>Sub-sector: Services (52%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% share in GVA</td>
<td>% share in sub-sector GVA</td>
</tr>
<tr>
<td>Q1</td>
<td>Q2</td>
</tr>
</tbody>
</table>

**Source:** CRISIL

**Worst hit**

- **Services**
  - Trade (w/sale, retail) (22%)
  - Hotels & restaurants (2%)
  - Communication (telecom)
  - Broadcasting (media)
  - Rail transport
  - Road transport
  - Air transport
  - Transport services
  - Financial services (11%)
  - Real estate
  - Professional services (IT)
  - Public administration (11%)
  - Healthcare
  - Education

**Industry**

- Food products, beverages & tobacco (10%)
  - Dairy products
  - Beverages & consumer foods
  - Textiles & leather (12%)
  - Metals (14%)
  - Machinery & equipment (25%)
  - Cement
  - Pharmaceuticals
  - Consumer durables
  - Automobiles
  - Gems & jewellery
  - FMCG
- Sub-sector: Utilities (mostly power) (2%)
- Sub-sector: Construction (8%)

**Services**

- Sub-sector: Mining (3%)
- Sub-sector: Manufacturing (18%)
- Sub-sector: Construction (8%)
- Other manufacturing (39%)

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How vulnerable is India’s workforce?

- India's workforce or active working population is estimated at ~46.5 crore. Of this, 89-90%, or about 41.5 crore work in informal economy.

- Casual labourers, majority of the self-employed, and a part of regular wage/salary workers in the organised sector whose work is contractual in nature constitute the base of informal workforce in India.

- Though agriculture employs almost four times the informal workers that construction does, it is likely to be less impacted because of the lockdown as it is an essential activity, and also the farm economy has received support under the PM-Kisan scheme.

Source: PLFS 2017-18, CRISIL; Other services include information and communication, financial and insurance activities, real estate activities, administrative activities etc.
Employment sentiment likely to impact demand and retail credit

Risk matrix of 40,000 companies (across 50+ sectors) in terms of employee cost (of Rs 12 lakh crore)

Distribution by count of companies (40,000 companies)

- **Erosion in revenue growth**
  - High: 6%
  - Medium: 2%
  - Low: 3%

- **Sector credit profile**
  - Low
  - Medium
  - High

Distribution by share of employee cost (Rs 12 lakh crore)

- **Erosion in revenue growth**
  - High: 23%
  - Medium: 4%
  - Low: 4%

- **Sector credit profile**
  - Low
  - Medium
  - High

Note: Companies and their employee cost distribution are based on the sectoral risk grid, where the Y axis measures magnitude of revenue erosion, while the X axis is the current credit profile. For instance, if the airlines sector is placed in the HH grid, then all companies in the sector and their employee cost are plotted in the corresponding grid. Similarly, if telecom is in the LL grid, all companies and employee cost are plotted on the LL grid. Source: Quantix, industry, CRISIL Research
About 70% of 40,000 companies have cash to cover employee cost for only two quarters (leaving aside other fixed cost)

<table>
<thead>
<tr>
<th>Turnover (in crore)</th>
<th>Share in count</th>
<th>Share in revenue</th>
<th>Share in employee cost</th>
<th>Cash coverage to cover employee cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs 0-100</td>
<td>70%</td>
<td>6%</td>
<td>8%</td>
<td>5-6 months</td>
</tr>
<tr>
<td>Rs 100-250</td>
<td>15%</td>
<td>7%</td>
<td>7%</td>
<td>8-9 months</td>
</tr>
<tr>
<td>Rs 250-1000</td>
<td>11%</td>
<td>15%</td>
<td>16%</td>
<td>8-9 months</td>
</tr>
<tr>
<td>Rs 1000-10000</td>
<td>4%</td>
<td>29%</td>
<td>34%</td>
<td>8-9 months</td>
</tr>
<tr>
<td>Rs &gt;10000</td>
<td>&lt;1%</td>
<td>43%</td>
<td>36%</td>
<td>10-11 months</td>
</tr>
</tbody>
</table>

42,000 companies | Rs 130 lakh crore | Rs 11 lakh crore | 0.7

*Cash coverage to employee is months till total cash and bank balance will last to only pay employee cost. It doesn’t take into account other liabilities and fixed costs.*

Source: Company reports, CRISIL Research
Remittances to India to decline 23% on-year in calendar 2020

<table>
<thead>
<tr>
<th>Source</th>
<th>Remittance to India in 2018 ($ billion)</th>
<th>2019</th>
<th>2020F</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Arab Emirates</td>
<td>18.5</td>
<td>1.3</td>
<td>-3.5</td>
</tr>
<tr>
<td>United States</td>
<td>12.7</td>
<td>2.3</td>
<td>-5.9</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>11.7</td>
<td>0.3</td>
<td>-2.3</td>
</tr>
<tr>
<td>Kuwait</td>
<td>6.7</td>
<td>0.7</td>
<td>-1.1</td>
</tr>
<tr>
<td>Oman</td>
<td>5.8</td>
<td>0.5</td>
<td>-2.8</td>
</tr>
<tr>
<td>Qatar</td>
<td>4.3</td>
<td>0.1</td>
<td>-4.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4.0</td>
<td>1.4</td>
<td>-6.5</td>
</tr>
<tr>
<td>Canada</td>
<td>3.0</td>
<td>1.6</td>
<td>-6.2</td>
</tr>
<tr>
<td>Australia</td>
<td>2.3</td>
<td>1.8</td>
<td>-6.7</td>
</tr>
<tr>
<td>Nepal</td>
<td>1.6</td>
<td>7.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Bahrain</td>
<td>1.5</td>
<td>1.8</td>
<td>-3.6</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.9</td>
<td>0.7</td>
<td>-3.5</td>
</tr>
<tr>
<td>Italy</td>
<td>0.7</td>
<td>0.3</td>
<td>-9.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.6</td>
<td>4.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>Germany</td>
<td>0.4</td>
<td>0.6</td>
<td>-6.9</td>
</tr>
</tbody>
</table>

Source: World Bank, International Monetary Fund (IMF)

- At $83 billion, India was the highest remittance recipient country in 2019
- The above 15 countries accounted for ~95% of remittance that India received in 2018
- Gulf countries, which are going to take a major hit due to sharp fall in oil prices, accounted for ~60% of the remittance received by India
Alarm bells are ringing in the financial sector

- Global market volatility and risk-off sentiment has significantly impacted Indian markets
- All asset classes are seeing selloffs and high volatility
- This puts more stress on the financial sector, which already had limited ability to support economy
- Bank credit growth is expected to slow down to 2-3% in fiscal 2021

<table>
<thead>
<tr>
<th></th>
<th>Oct-19</th>
<th>Nov-19</th>
<th>Dec-19</th>
<th>Jan-20</th>
<th>Feb-20</th>
<th>Mar-20</th>
<th>Apr-20</th>
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<tbody>
<tr>
<td>Global conditions</td>
<td></td>
<td></td>
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<tr>
<td>S&amp;P 500 (%)*</td>
<td>11.5</td>
<td>7.5</td>
<td>11.3</td>
<td>13.0</td>
<td>17.0</td>
<td>-4.2</td>
<td>-5.6</td>
</tr>
<tr>
<td>US 10-year treasury yield (%)</td>
<td>1.7</td>
<td>1.8</td>
<td>1.9</td>
<td>1.8</td>
<td>1.5</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Brent ($ per barrel)</td>
<td>59.4</td>
<td>62.7</td>
<td>65.9</td>
<td>63.6</td>
<td>55.0</td>
<td>33.0</td>
<td>24.2</td>
</tr>
<tr>
<td>Foreign capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Net FPI ($ billion)</td>
<td>2.3</td>
<td>3.2</td>
<td>0.4</td>
<td>0.1</td>
<td>1.3</td>
<td>-15.9</td>
<td>-1.3</td>
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<tr>
<td>Forex markets</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rs/$ (month-on-month, %)</td>
<td>-0.4</td>
<td>0.6</td>
<td>-0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>4.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Equities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sensex (%)*</td>
<td>-0.7</td>
<td>10.0</td>
<td>13.0</td>
<td>18.6</td>
<td>11.6</td>
<td>-12.1</td>
<td>-31.1</td>
</tr>
<tr>
<td>Debt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-year G-sec (%)</td>
<td>6.7</td>
<td>6.5</td>
<td>6.6</td>
<td>6.6</td>
<td>6.4</td>
<td>6.2</td>
<td>6.3</td>
</tr>
<tr>
<td>Term premium (%)</td>
<td>1.1</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Corporate spreads (%)</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
<td>0.7</td>
<td>1.0</td>
<td></td>
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<td>Money markets</td>
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<td></td>
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</tr>
<tr>
<td>Call money rate (%)</td>
<td>5.1</td>
<td>5.0</td>
<td>5.0</td>
<td>4.9</td>
<td>5.0</td>
<td>4.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Commercial paper 6-month rate (%)</td>
<td>6.69</td>
<td>6.41</td>
<td>6.34</td>
<td>6.35</td>
<td>6.17</td>
<td>6.89</td>
<td>6.73</td>
</tr>
<tr>
<td>Liquidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net absorption(-)/injection(+) under LAF (Rs crore)</td>
<td>-195,600</td>
<td>-238,300</td>
<td>-256,400</td>
<td>-317,800</td>
<td>-316,200</td>
<td>-390,200</td>
<td>-667,900</td>
</tr>
<tr>
<td>Credit availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank credit growth (total)</td>
<td>8.4</td>
<td>7.3</td>
<td>7.0</td>
<td>8.5</td>
<td>7.3</td>
<td>6.0</td>
<td></td>
</tr>
</tbody>
</table>

- Favourable movement
- Adverse movement
- Neutral

Note: *% change with respect to 2-year moving average, a positive % change in rupee implies depreciation against US dollar and vice-versa, 10 year G-sec refers to 6.45% GS2029 yield, term premium is difference between 10 year and one year G-sec yield, corporate spreads are for 10-year AAA rated public sector undertaking (PSU) benchmark over G-Sec; LAF is liquidity adjustment facility

Source: RBI, National Securities Depository Ltd (NSDL), US Treasury department, CEIC, CRISIL
External vulnerability still low, but domestic ground shaky

- Impact of an external shock to India is dependent on the quantum of shock and domestic vulnerability
- This time, the shock is much larger, even though our external vulnerability is low
- Our domestic vulnerability was deteriorating even before the pandemic hit
- Deterioration on account of slowing GDP growth and worsening fiscal health

### External liabilities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20E</th>
<th>FY21F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD (% of GDP)</td>
<td>1.3</td>
<td>2.3</td>
<td>2.9</td>
<td>2.7</td>
<td>4.3</td>
<td>4.8</td>
<td>1.7</td>
<td>1.3</td>
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<td>0.6</td>
<td>1.8</td>
<td>2.1</td>
<td>1.0</td>
<td>0.2</td>
</tr>
<tr>
<td>External debt (% of GDP)</td>
<td>18.3</td>
<td>20.7</td>
<td>18.5</td>
<td>18.6</td>
<td>21.1</td>
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<td>20.1</td>
<td>19.8</td>
<td>20.1*</td>
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<tr>
<td>Short-term external debt (% of GDP)</td>
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<td>3.9</td>
<td>4.0</td>
<td>3.7*</td>
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### Ability to finance external liabilities

<table>
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<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20E</th>
<th>FY21F</th>
</tr>
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<tbody>
<tr>
<td>Debt service ratio</td>
<td>4.8</td>
<td>4.4</td>
<td>5.8</td>
<td>4.4</td>
<td>6</td>
<td>5.9</td>
<td>5.9</td>
<td>7.6</td>
<td>8.8</td>
<td>8.3</td>
<td>7.5</td>
<td>6.4</td>
<td>6.4*</td>
<td>N/A</td>
</tr>
<tr>
<td>Reserves/(short-term debt + CAD)</td>
<td>5.0</td>
<td>3.5</td>
<td>3.1</td>
<td>2.7</td>
<td>1.9</td>
<td>1.6</td>
<td>2.5</td>
<td>3.0</td>
<td>3.4</td>
<td>3.6</td>
<td>2.8</td>
<td>2.5</td>
<td>3.4*</td>
<td>N/A</td>
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<tr>
<td>Reserves/ IMF EM ARA metric</td>
<td>2.6</td>
<td>2.1</td>
<td>2.0</td>
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<td>1.6</td>
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### Domestic macro-economic health

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<tr>
<th>Indicator</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20E</th>
<th>FY21F</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth (% y-o-y)</td>
<td>7.7</td>
<td>3.1</td>
<td>7.9</td>
<td>8.5</td>
<td>5.2</td>
<td>5.5</td>
<td>6.4</td>
<td>7.4</td>
<td>8.0</td>
<td>8.3</td>
<td>7.0</td>
<td>6.1</td>
<td>5.0</td>
<td>1.8</td>
</tr>
<tr>
<td>CPI inflation (% y-o-y)</td>
<td>6.2</td>
<td>9.1</td>
<td>12.4</td>
<td>10.4</td>
<td>8.4</td>
<td>9.9</td>
<td>9.4</td>
<td>5.9</td>
<td>4.9</td>
<td>4.5</td>
<td>3.6</td>
<td>3.4</td>
<td>4.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Government debt (% of GDP)</td>
<td>74.0</td>
<td>72.7</td>
<td>71.1</td>
<td>66.0</td>
<td>68.3</td>
<td>69.1</td>
<td>68.5</td>
<td>67.8</td>
<td>69.9</td>
<td>69.0</td>
<td>69.8</td>
<td>69.8</td>
<td>71.9*</td>
<td>74.3*</td>
</tr>
</tbody>
</table>

Vulnerability indicator: High, Low, Neutral

Note: *As on December 2019; #IMF estimates
Source: RBI, IMF, Ministry of Statistics, CRISIL
With more support, agriculture could still make it through

- Agriculture is one sector that could achieve trend growth despite the pandemic. This could cushion overall GDP growth as agriculture contributes ~15% to the gross value added (GVA) and is the biggest employer.
- This year, the IMD has forecast normal southwest monsoon ranging 96-104% of the long-period average. Last year, monsoon had created havoc, making a delayed entry and then turning excessive, hurting crops.
- So far, pre-monsoon sowing of kharif has begun and reports suggest paddy acreage is higher on-year. Sowing typically picks up with the onset of southwest monsoon in June.
- However, glitches due to disruption in sowing activity due to the pandemic, constraints to procuring fertilisers and seeds owing to weak cash flows and logistics support could create challenges.
- If the recent dip seen across crop prices continues, farmer incomes could be hit despite a good crop.
- Policy response so far for the sector is in the form of income support through PM-Kisan. A few states have also announced provision of agricultural inputs such as seeds and farming equipment on rent, but the coverage is low.
- More focused measures are warranted, which ensure ease of transportation and logistics, facilitation of storage, and better prices.

Source: CRISIL
Risks to our forecast

Containment could take longer than expected, ‘second wave’ risks to be dealt with

If fiscal support to incomes and demand is lacking, recovery will be challenged

Existing stress in the financial sector could worsen

Monsoon fails
What is defining India’s response to the pandemic

- India’s high population density – thrice that of China – makes it more vulnerable to the spread of the virus
- Weak health infrastructure means India cannot take the medical overload if the pandemic spins out of control
- Limited fiscal space compared with advanced countries to spend its way out of hardship

It is crucial to be aware of, and balance, the trade-offs

- The more we rely on lockdown measures, the greater will be the need to cushion the economy via monetary fiscal stimulus, which may be constrained due to limited fiscal room
- The large unorganised labour force may have little option but to return to work sooner than later, as the government may not have the fiscal muscle to support all of them beyond a point, and they will need to be protected
- India has extended the 21-day lockdown by another 19 days till May 3. The second phase (April 15-May 3) appears less stringent than the first, with attempts to balance the trade-off and include relaxation clauses, particularly for rural areas, and gradual extension to non-essential items
The need to go for broke…

** Fiscal support

Excluding guarantees by G-20 nations

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal support (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>20.1</td>
</tr>
<tr>
<td>UK</td>
<td>18.8</td>
</tr>
<tr>
<td>Australia</td>
<td>11.4</td>
</tr>
<tr>
<td>Germany</td>
<td>10.6</td>
</tr>
<tr>
<td>US</td>
<td>8.9</td>
</tr>
<tr>
<td>South Korea</td>
<td>7.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>6.6</td>
</tr>
<tr>
<td>Canada</td>
<td>5.4</td>
</tr>
<tr>
<td>China</td>
<td>2.5</td>
</tr>
<tr>
<td>Spain</td>
<td>2.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.8</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.6</td>
</tr>
<tr>
<td>Russia</td>
<td>1.5</td>
</tr>
<tr>
<td>Italy</td>
<td>1.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>1.2</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.7</td>
</tr>
<tr>
<td>France</td>
<td>0.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.5</td>
</tr>
<tr>
<td>India</td>
<td>0.3</td>
</tr>
<tr>
<td>EU</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: IMF

- India’s fiscal response so far seems tight-fisted, even when compared with some of the smaller emerging market peers
- Both quantum and coverage are inadequate

** Monetary support

- Policy rate and cash reserve ratio cut ✓
- Targeted long-term refinance options ✓
- Loan, working capital interest moratorium ✓
- Relaxation of prudential norms ✓
- Increasing ways and means advances limits for government ✓
- Operation Twist ✓
- Quantitative easing ❌

- India’s monetary policy response has been much stronger and more proactive in comparison
- The RBI has thrown the ‘kitchen sink’ of all conventional and unconventional tools to support the economy
...and including the excluded and the most vulnerable

- **PM-Kisan**: Of the targeted 14.49 crore farmer families, the government has announced benefits for 8.89 crore under this scheme. This means ~5.6 crore farmer families (~39%) remain below the radar. Moreover, landless and tenant farmers would remain excluded in the current scheme of things.

- **Jan Dhan accounts**: The government has announced support for only 20.51 crore women account holders. But, as per the latest statistics, India has 38.08 crore Jan Dhan accounts. Besides, there is still a huge unbanked population that would remain outside the ambit of such a bank-transfer scheme.

- **Mahatma Gandhi National Rural Employment Guarantee Act**: In the past, the work supplied under the scheme has always lagged work demanded. In fiscal 2019, these figures were 5.3 crore vs 5.9 crore households. With reverse migration, demand for work is set to rise. Hence, allocation to the scheme needs to be ramped up significantly.

- **Informal firms**: According to the latest Economic Census data, of the 5.85 crore establishments, ~94% were not registered with the government and ~95% of firms had employed less than five workers. Thus, it is unlikely that these small firms would benefit from the government’s steps, such as contribution to the Employment Provident Fund Organisation, or credit market interventions in the form of cheaper loans. Since most MSMEs primarily operate on cash, more direct measures of liquidity may be the need of the hour.

- **Support to disrupted businesses**: Small and medium enterprises and other disrupted businesses need direct fiscal support, guarantees, etc.
State of the states
Which states are seeing the most cases?

Maharashtra (MH), Rajasthan (RJ), Gujarat (GJ), Andhra Pradesh (AP), Telangana (TL) and Madhya Pradesh (MP) are most affected where the active cases per million are higher than national average

- 33% of total population
- 41% of India’s output

- Quadrant I: States have tested less but are seeing higher cases, possible risk of surge in cases as testing expands
- Quadrant II states: Have conducted more tests and are seeing higher cases, healthcare facilities may be overwhelmed in case of exponential increase
- Quadrant III states: Majority, including populous Bihar and Uttar Pradesh still have very low testing rates compared with the national average
- Quadrant IV states: Safe zone, Kerala and Karnataka have high testing rates and have managed to reduce active cases

Note: Data on number of cases and tests as on April 27. Data for tests of Telangana as on April 16
Source: Ministry of Health and Family Welfare (MoHFW), respective state health departments, news reports, CRISIL
## Vulnerability matrix of all states

<table>
<thead>
<tr>
<th>State</th>
<th>Covid-19 shock</th>
<th>Economic vulnerability</th>
<th>Workforce vulnerability</th>
<th>Health infra vulnerability</th>
<th>Fiscal vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of active cases per million as on April 27</td>
<td>Share of manufacturing in GSV</td>
<td>Share of construction in GSVA</td>
<td>Share of services in GSV</td>
<td>% of casual labour</td>
</tr>
<tr>
<td></td>
<td>FY19</td>
<td>FY18</td>
<td>FY19</td>
<td>FY18</td>
<td>FY19</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>53.6</td>
<td>23.1</td>
<td>5.8</td>
<td>51.5</td>
<td>24.1</td>
</tr>
<tr>
<td>Gujarat</td>
<td>43.8</td>
<td>35.8</td>
<td>5.8</td>
<td>32.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
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<td>12.2</td>
<td>8</td>
<td>33.2</td>
<td>28.2</td>
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<td>8.3</td>
<td>39.6</td>
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<td>4.7</td>
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<td>8</td>
<td>39.4</td>
<td>36.9</td>
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<td>11.8</td>
<td>49.1</td>
<td>33.5</td>
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<td>9.4</td>
<td>49.8</td>
<td>31.8</td>
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<td>Karnataka</td>
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<td>6.7</td>
<td>61.1</td>
<td>26.8</td>
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<td>47.6</td>
<td>20.6</td>
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<td>40.1</td>
<td>23.6</td>
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<td>15.8</td>
<td>18.1</td>
<td>8</td>
<td>41.2</td>
<td>24.9</td>
</tr>
</tbody>
</table>

Note: Per capita income (PCI) and gross state value added (GSVA) of Maharashtra projected based on average growth rate of FY18 and FY17. Outstanding liabilities of Andhra Pradesh, Assam and Madhya Pradesh of FY20 budget estimates; share of services excluding public administration. *All-states average considered for India outstanding liabilities to gross state domestic product (GSDP) ratio

Source: MOHFW, MOSPI, RBI, PLFS 2017-18, National Health Profile 2019, State Budget documents, CRISIL

- Using the above indicators, we have constructed a vulnerability index for the most affected states across five dimensions
Vulnerability of the most-affected states

- MH and GJ with higher per capita income, lower debt ratios, are better placed to push growth post the pandemic. RJ and AP may face borrowing constraints due to higher debt.

- TL, MP, GJ have lower number of doctors and government hospital beds compared with India average.

- MH and GJ have higher share of output from manufacturing, construction and services, and are at risk of sharper drop in output with continuing lockdown.

- AP, RJ, MP with higher share of casual labour and workers with little job security, are at risk of higher job losses due to extended lockdown.

- Vulnerability index across five dimensions calculated based on indicators in previous slide. For each dimension, the constituent indicators were normalised as these are measured in different units. Normalisation rescales the indicators in the range [0, 1]. Inverse of ‘positive’ indicators such as per capita income and hospital bed-population ratio were taken for appropriate comparison.

- Score on a particular dimension is computed by taking the average of the normalised scores of its constituent indicators.
Corporate revenue and profitability
Key messages

- **Revenue outlook:** India Inc to see a ~10% slide in revenue growth this fiscal, the worst in at least a decade

- **Consumption segments most impacted:** Most segments to see revenues falling. Consumer discretionary services, especially airlines and hotels, will be the worst-hit

- **Ebitda to fall faster than revenue:** This is despite lower raw material prices, due to adverse impact of operating leverage on falling utilisation and revenues

- **Liquidity squeeze and stretched working capital cycle to hurt MSMEs**

- **Many never-before trends emerging:**
  - The relatively resilient services exports to see muted growth for the first time in years
  - States to limit infrastructure spending because of higher healthcare spending, even as tax revenue from sale of liquor and excise duty collections decline

- **Credit metrics weakening across sectors:** Interest coverage ratio to drop below 1 for nearly 32% of debt this fiscal compared with 22% a year ago for the top 800 listed companies. Percentage of corporate debt with a debt-to-Ebitda above 4 times to rise to 76% from 66% a year ago.
Early lockdown has helped, but poor healthcare infra a big worry

Daily spread multiplier from first 100 cases until Day 60*

- US: 140x
- Spain: 32x
- France: 31x
- Germany: 22x
- Italy: 22x
- UK: 19x
- Turkey*: 19x
- Iran: 15x
- India: 3.5x
- China*: 2.3x
- South Korea: 1.7x

Dispersion so far has been limited, like in China, which is a positive

- China: 83%
- India: 74%

But fragile health infrastructure remains a key concern

- US: 65.9
- Spain: 83.5
- France: 68.2
- Germany: 66.0
- Italy: 56.2
- UK: 77.9
- Turkey: 52.4
- Iran: 37.7
- India: 46.5
- China: 48.2
- South Korea: 70.2

GHS (Global Health Security) Index

*Need to consider different levels of testing that may also impact the identification of positive cases and slope of the curve

Note: All other countries other than those specified report numbers from February 15 as Day 0;
GHS is an assessment across 6 parameters for countries including prevention, detection, reporting, responding, health infrastructure, norms and structural risk.
India Inc set to log its worst performance in a decade

Revenue growth versus nominal GDP growth (y-o-y)

<table>
<thead>
<tr>
<th>Period</th>
<th>Nominal GDP growth (% on RHS)</th>
<th>Taper tantrum</th>
<th>Demonetisation + GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY10</td>
<td>15.2</td>
<td>11.9</td>
<td>11.1</td>
</tr>
<tr>
<td>FY11</td>
<td>18.7</td>
<td>12.6</td>
<td>11.1</td>
</tr>
<tr>
<td>FY12</td>
<td>15.8</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>FY13</td>
<td>19%</td>
<td>-1%</td>
<td>10%</td>
</tr>
<tr>
<td>FY14</td>
<td>19%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>FY15</td>
<td>10%</td>
<td>-1%</td>
<td>10%</td>
</tr>
<tr>
<td>FY16</td>
<td>11%</td>
<td>9.3</td>
<td>11%</td>
</tr>
<tr>
<td>FY17</td>
<td>11%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>FY18</td>
<td>11.1</td>
<td>10%</td>
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<tr>
<td>FY19</td>
<td>10.5</td>
<td>Jersey</td>
<td>11%</td>
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<td>FY20E</td>
<td>7.5</td>
<td>Jersey</td>
<td>1%</td>
</tr>
<tr>
<td>FY21P</td>
<td>6.2</td>
<td>Jersey</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note: Based on the trend of 800+ listed companies (non-oil and non-BFSI), including standalone and consolidated companies

* Base case corresponds to FY21 real GDP growth forecast of 1.8% while downside scenario corresponds to 0% real GDP growth

Source: Company reports, CRISIL Research
Discretionary segments and construction to be hit hardest

Consumer discretionary services
LPA: 12-14%

Construction
LPA: 13%

Consumer discretionary products
LPA: 12%

Exports-merchandise (excluding pharma)
LPA: 4%

Consumer staples - FMCG
LPA: 10-12%

Telecom services
15-17%

*Includes Airlines, Hotels, Media, Org. Retail

*Includes Auto, Consumer durables

*Includes Textiles, Gems & Jewellery

*Includes infrastructure and real estate construction

*LPA is long period (decadal) average growth up to fiscal 2019

Source: Company reports, CRISIL Research
Shape and time of recovery to vary widely across sectors

**Consumer staples – mild impact and/or quick recovery**

- **FMCG**
  - Y-o-Y growth
  - LPA: 10-12%*
  - Income impact to hurt high-ticket segments

**Consumer discretionary products – sharp impact but moderate recovery time**

- **Passenger vehicles**
  - Y-o-Y growth
  - LPA: 8%
  - Q1FY20 to Q4FY21

- **Two-wheelers**
  - Y-o-Y growth
  - LPA: 9%
  - Q1FY20 to Q4FY21

- **Airlines**
  - Y-o-Y growth
  - LPA: 10-12%
  - Q1FY20 to Q4FY21

- **Hotels**
  - Y-o-Y growth
  - LPA: 6-7%
  - Q1FY20 to Q4FY21

- **Media**
  - Y-o-Y growth
  - LPA: 12-14%
  - Q1FY20 to Q4FY21

**Consumer discretionary services - sharp impact and long drawn recovery**

- **Telecom**
  - Y-o-Y growth
  - LPA: 15-17%
  - Q1FY20 to Q4FY21
  - Tariff hikes in H2FY20 will help ARPU in H1FY21

---

*LPA is long period (decadal) average growth up to fiscal 2019*

FMCG, Telecom, consumer durables, airlines, hotels exhibited as revenue growth for listed firms; Cars and two-wheelers exhibited as volume growth.
Exports revival to take longer; construction to get low-base boost

Export services – moderate recovery time

- IT services
  - y-o-y growth
  - LPA: 11%
  - Q1FY20: (5)-0%
  - Q1FY21: 0%
  - Q4FY21: 0%
  - Recovery hinges on how the rebound goes in the US, European Union and the UK

Export products – long drawn recovery excluding pharma

- RMG exports
  - y-o-y growth
  - LPA: 4-5%
  - Q1FY20: 50-60%
  - Q1FY21: 40-50%
  - Q4FY21: 40-50%

- Gems and jewellery
  - LPA: 2-4%
  - Q1FY20: (40-50%)
  - Q1FY21: (40-50%)
  - Q4FY21: (40-50%)

- Pharma
  - LPA: 10-11%
  - Q1FY20: 5-7%
  - Q1FY21: 5-7%
  - Q4FY21: 5-7%

Construction – sharp impact

- Construction
  - y-o-y growth
  - LPA: 10-12%
  - Q1FY20: (70%)
  - Q1FY21: 0%
  - Q4FY21: 0%
  - After the washout in Q1, construction sector demand to recover to 6-7% in the second half on low base of last year. However, sector is still well away from its long period average.
  - Government has started construction in some parts (infrastructure and housing)

LPA: Long period average growth for past decade until fiscal 2019

For exports, we have considered export value of those commodities (dollar terms) and for the rest we have considered revenue growth of key listed firms

Construction includes infrastructure and housing (affordable housing, real estate, IHB)
In line with global trade, little gains made over the past five years

Global trade growth declined over the last three years

India's exports growth significantly higher than world trade growth

India's exports growth mirrors world trade growth

Sharp fall in global trade likely

India's exports growth: 16% World trade growth: 9%

India's exports growth: 2% World trade growth: 9%

India's exports growth: (8-10)% World trade growth: (15-20)%

India's services exports remained resilient

India’s exports

Top-15 pandemic-affected countries form ~50% of India’s export basket

Notes: Dotted trend line in each graph indicates decadal average. All numbers are in $ terms; P- Projected
Source: DGFT, trade portals
Large sectors haven’t lost share in a decade, but the gems and jewellery, and readymade garments sectors are on the edge

Top five sectors account for more than 35% India’s goods exports

Source: DGFT, trade portals
Infrastructure capex would see further decline this fiscal as funds would be diverted towards health and social sectors.

Budget estimates for infra capex fell for the first time in FY21

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>IEBR FY20RE</th>
<th>FY21BE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td></td>
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<td></td>
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<tr>
<td>FY20RE</td>
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</tr>
</tbody>
</table>

Fiscal deficit of states FY20RE

Maharashtra worst affected. Tamil Nadu and Rajasthan, which had budgeted higher infra capex this fiscal, would see max shave-off

Fiscal deficit of states FY20RE

Maharashtra worst affected. Tamil Nadu and Rajasthan, which had budgeted higher infra capex this fiscal, would see max shave-off

Budgeted infra capex of states was anyway seen stagnant in FY21

<table>
<thead>
<tr>
<th>Year</th>
<th>Total state capex</th>
<th>% of infra capex</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY20RE</td>
<td></td>
<td></td>
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<tr>
<td>FY21BE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Covid-19 cases in states

i. Maroon to pink indicate states that would divert funds from infrastructure to healthcare and social, according to degree of diversion
ii. Dark blue to light indicate states which, despite lower Covid-19 cases, would see reduced infrastructure capex because of higher fiscal deficit.
iii. Size of the bubble indicates state infrastructure spend in Rs crore
iv. Madhya Pradesh budget for this fiscal has not been announced yet

Source: Union Budget and state budget documents, CRISIL Research
Profitability and liquidity
Ebitda set to plunge despite low commodity prices

Note: Based on trend for 800+ listed companies (non-oil and non-BFSI)
*Base case corresponds to FY21 real GDP growth forecast of 1.8% while downside scenario corresponds to 0% real GDP growth
Source: Company reports, CRISIL Research
Fixed cost to hurt airlines, textiles most among asset-heavy sectors

*For textiles, we have exhibited fixed asset turnover ratio. #Cost includes operating, depreciation and interest costs

Source: Industry, CRISIL Research
Stretched working capital cycle to keep smaller firms leveraged

Median gross current assets days

- During fiscal 2021, due to severe economic stress, we expect working capital requirement to increase across corporates – but more so for MSMEs
- The increase in requirement is mainly on account of higher receivables as many MSMEs have business-to-business (B2B) business models and payment cycles for these smaller companies tend to be stretched during bad years
- However, inventory levels tend to fluctuate less and have remained largely at similar levels during the past five years

Source: CRISIL Quantix
Note: Micro and small < Rs 75 crore, medium Rs 75-500 crore, large >Rs 500 crore
Based on common sample set of 13,017 companies for the past 5 financial years

Source: CRISIL Research
Of the total rated debt, 16% is housed in the high-risk grid

Sectoral distribution across risk matrix

- **High**
  - Airport infra
  - Passenger vehicles
  - Steel
  - Hotel
  - Road
  - Media-film
  - IT
  - Ports
  - Auto components
  - Gems and jewellery
  - Real estate
  - Airlines
  - Poultry and meat
  - Textiles

- **Medium**
  - Petrochemicals
  - Two-wheelers
  - Coal
  - Hospitals
  - Fertiliser
  - Power
  - Paper
  - Distilleries and breweries
  - Ceramic tiles
  - Sugar
  - Edible oils
  - Packaging

- **Low**
  - Tyre
  - Commercial vehicles
  - Dairy
  - Consumer - food
  - Rice

- **Erosion in revenue growth**
  - Low
  - Medium
  - High

- **Credit risk**
  - Low
  - Medium
  - High

Source: Quantix, Industry, CRISIL Research

*Revenue erosion in FY21 over long period average (low is revenue erosion of up to 300 bps and high is >1000 bps*
Credit metrics to weaken across sectors

India Inc
Rs 16 lakh crore

Power generation
Rs 3.2 lakh crore

Steel
Rs 2 lakh crore

Construction
Rs 61,800 crore

Cotton yarn
Rs 6,800 crore

Note: Based on trend for 800+ listed companies (non-oil and non-BFSI). Figures in the box indicate total debt of listed set in each vertical. Consolidated or standalone financials used as appropriate. Companies with very large international subsidiaries taken on a standalone basis.

Source: Company reports, CRISIL Research
Credit scenario
Systemic credit growth expected to slump

Lending by both banks and NBFCs* to slow

System-wide rate cut transmission remained weak

- Amidst the economic slowdown, reduced capex and working capital requirements would moderate credit growth for strong corporates. Risk aversion would check credit flow to weaker entities.

- Prevailing risk aversion and higher deposit rates continue to restrict banks from passing on rates to the borrower. However, higher transmission in retail loans (like housing) was witnessed post introduction of repo rate-linked loan products.

Source: Company Reports, MFIN, CRISIL Research

* Non-banking financial companies

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Retail loan growth to be the lowest in the past many years

Only working capital demand to lend some support to corporate book

Significant de-growth in underlying assets to affect retail loans

Financing penetration (%)
## Actions/ measures from the apex bank

<table>
<thead>
<tr>
<th>Measure</th>
<th>Boost credit offtake</th>
<th>Improve liquidity in the system</th>
<th>Mitigate impact on credit quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressively slashed repo rate by 75 bps to 4.4%; lowest in past two decades</td>
<td><img src="green.png" alt="" /></td>
<td><img src="amber.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Widened reverse repo rate corridor by lowering it to 4% and further to 3.75%</td>
<td><img src="green.png" alt="" /></td>
<td><img src="amber.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Reduced cash reserve ratio requirement for banks from 4% to 3%, injecting liquidity of Rs 1.3 lakh crore</td>
<td><img src="amber.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Targeted long-term repo operations of Rs 1.5 lakh crore for investment in corporate bonds</td>
<td><img src="amber.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Refinancing window of Rs 50,000 crore from all-India financial institutions</td>
<td><img src="amber.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Special liquidity facility for mutual funds worth Rs 50,000 crore</td>
<td><img src="amber.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
</tr>
<tr>
<td>Three-month moratorium on all types of loans from banks as well as non-banks</td>
<td><img src="grey.png" alt="" /></td>
<td><img src="amber.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
</tr>
<tr>
<td>Standstill asset classification norms for existing loans under moratorium period</td>
<td><img src="grey.png" alt="" /></td>
<td><img src="grey.png" alt="" /></td>
<td><img src="green.png" alt="" /></td>
</tr>
</tbody>
</table>

*Note: Green represents high impact; Amber represents moderate impact; Grey represents no / insignificant impact*
Outlook for banking sector
Decadal-low growth for pvt sector banks will slash sector growth

Overall banking credit growth to be in the range of 2-3% in fiscal 2021, compared with ~6% in fiscal 2020 and ~11% in fiscal 2019

- Merging banks (~23% of banking credit) to witness de-growth in their books, as they will focus on integration post-consolidation
- The pandemic-led economic slowdown should hurt consumption demand, thereby impacting private banks’ credit growth
- After the lockdown, banks should focus more on recovery/collections before looking at growing advances, pulling down the overall credit growth

10 PSU banks merging effective April 1, 2020, are considered for margining banks
As on April 1, 2020, 4 banks were under prompt corrective action (PCA) framework
P: projected
Source: RBI, company reports, CRISIL Research Estimates
NPAs to rise 150-200 bps this fiscal on higher slippage, lower recovery

No major NCLT resolution expected this fiscal, fresh slippages to increase

- The pandemic-led economic slowdown should result in higher incremental slippage in the current fiscal – 3.9% of net advances
- Lockdown to impact collections and resolutions – reductions to halve in fiscal 2021 compared with fiscal 2020, thus increasing NPAs
- Higher PCR and write-offs to increase credit costs, impacting the banking sector’s profitability
- In downside scenario, the GNPAs can slip further by 200 bps in fiscal 2021

P: projected,
Fresh slippages are % of opening net advances
Source: RBI, company reports, CRISIL Research Estimates

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Asset-quality risks to rise across sectors

Worries in the retail segment to mount as quality of unsecured loans deteriorates

- Normal monsoon expectation suggests less impact on agriculture; horticulture and cash crops to be impacted due to lower exports amid the pandemic
- Industries such as textiles, gems and jewellery, autos, infrastructure (power) and construction to pose higher risks this fiscal
- Lockdown and sluggish economic activity to impact services sectors, including transport operators, tourism, hospitality, commercial real estate and trade
- Retail segment to witness asset-quality concerns, especially in the unsecured-loans segment. Vehicles and home loans are also expected to witness a deterioration in asset quality

Source: RBI, NHB, MFIN, CRISIL Research
Lower NII, higher credit cost to push banking sector into negative zone

PCR is expected to increase to ~69% by fiscal 2021 from 63% in fiscal 2019

- Repo rate at 4.4% (lowest in two decade) to be a drag on interest rates in the current fiscal
- Pandemic-led economic downturn to result in lower credit growth, higher slippage and lower collections/resolutions, which will not only impact the credit costs, but also net interest income (NII) for the banking sector

P: projected; ^RoA (return on assets) doesn’t include the adjustment for deferred tax assets for fiscal 2020
Source: RBI, company reports, CRISIL Research Estimates
Outlook for NBFC sector
Larger NBFCs to gain market share at the cost of others

- Players with strong balance sheets – high capital adequacy and ample liquidity – are in a better position to absorb the impact of the pandemic.
- Players with strong parentage will have greater access to funding sources compared with their peers and would return to growth path once the pandemic is controlled.
- Players with a higher proportion of non-retail portfolio in the overall book will see the challenges mount further, steeply.

Note: Large and strong players: players with a book larger than Rs 10,000 crore and with a strong and committed parent, capital adequacy of more than 300-400 bps over the regulatory requirement and limited exposure to the wholesale business. PFC, REC not included. Source: RBI, NHB, company data, CRISIL Research.
Credit growth to plunge across segments, except loans against gold

<table>
<thead>
<tr>
<th>Segment</th>
<th>FY19</th>
<th>FY20E</th>
<th>FY21E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infra (exc PFC, REC)</td>
<td>8%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Housing</td>
<td>8%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Auto</td>
<td>15%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Wholesale</td>
<td>8%</td>
<td>-12%</td>
<td>8%</td>
</tr>
<tr>
<td>Microfinance</td>
<td>28%</td>
<td>25%</td>
<td>13%</td>
</tr>
<tr>
<td>MSME</td>
<td>15%</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>Gold</td>
<td>12%</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>CE</td>
<td>16%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>CD</td>
<td>24%</td>
<td>18%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Disbursement in the retail segment to be impacted on account of the lockdown and social distancing measures

Wholesale finance players to see intense growth slowdown with sharp increase in risk perception

Gold finance to remain relatively immune to the pandemic-driven crisis, supported by favourable ALM

ALM: Asset liability management

Source: RBI, NHB, company data, CRISIL Research

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### NBFC loan growth and asset quality to weaken sharply

<table>
<thead>
<tr>
<th>Non-banking segments</th>
<th>GNPA (%) FY18</th>
<th>GNPA (%) FY19</th>
<th>GNPA (%) FY20E</th>
<th>Asset quality outlook (FY21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale finance</td>
<td>1.0%</td>
<td>2.0%</td>
<td>4.0%</td>
<td>Red</td>
</tr>
<tr>
<td>Microfinance</td>
<td>3.2%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>Red</td>
</tr>
<tr>
<td>MSME finance</td>
<td>2.7%</td>
<td>3.3%</td>
<td>4.2%</td>
<td>Red</td>
</tr>
<tr>
<td>Auto finance</td>
<td>6.6%</td>
<td>5.2%</td>
<td>5.6%</td>
<td>Orange</td>
</tr>
<tr>
<td>Infrastructure finance</td>
<td>8.2%</td>
<td>8.4%</td>
<td>8.6%</td>
<td>Orange</td>
</tr>
<tr>
<td>Housing finance</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>Green</td>
</tr>
<tr>
<td>Gold finance</td>
<td>3.4%</td>
<td>2.1%</td>
<td>2.3%</td>
<td>Green</td>
</tr>
</tbody>
</table>

Note: Red represents a more than 200 bps deterioration in asset quality; amber represents more than 50 bps but less than 200 bps deterioration; green represents more than 0 and less than 50 bps asset quality deterioration

Source: CRISIL Research
With funding scarce, capital conservation to be top priority

Commercial paper issuances by amount

- Q1FY18: 3.1, Q1FY19: 2.7, Q2FY19: 3.4, Q3FY19: 1.8, Q4FY19: 1.5, Q1FY20: 1.9, Q2FY20: 1.3, Q3FY20: 1.7, Q4FY20: 1.0, Apr-20: 0.1

Mutual fund money deployment to NBFCs


Unique player-wise NCD issuance per quarter

- Large: Q1FY18: 19, Q2FY18: 17, Q3FY18: 15, Q4FY18: 10, Average: 13
- Medium: Q1FY19: 21, Q2FY19: 17, Q3FY19: 15, Q4FY19: 18, Average: 15
- Small: Q1FY20: 25, Q2FY20: 18, Q3FY20: 31, Q4FY20: 33, Average: 28

Note: Players with loan book greater than Rs 30,000 crore classified as large, those with loan book of Rs 5,000-30,000 crore as medium, and ones with less than Rs 5,000 crore as small.

Source: CRISIL Research
Higher yields indicate elevated risk perception; cost of funds to rise

MSME and wholesale segments see the highest spike

<table>
<thead>
<tr>
<th>Segment</th>
<th>August 2018</th>
<th>July 2019</th>
<th>April 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>1.1%</td>
<td>0.9%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Housing</td>
<td>2.7%</td>
<td>2.5%</td>
<td>4.6%</td>
</tr>
<tr>
<td>MSME</td>
<td>1.5%</td>
<td>1.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Wholesale</td>
<td>3.5%</td>
<td>3.8%</td>
<td>5.3%</td>
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<tr>
<td>Gold</td>
<td>1.9%</td>
<td>4.2%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Note: Data comprises ~20 NBFCs representing 50-55% of the overall NBFC loan book.

Note: Strong players are defined by their ability to raise funds from the debt capital market. Change in a player’s 3-year NCD spread over G-secs between September 2018 and September 2019 is considered for the same. Players with a 0-100 basis points change in spread are considered strong players. These players account for 61% of the overall NBFC market in fiscal 2019.

Source: RBI, NHB, company data, CRISIL Research

Spreads for both player groups on the rise

<table>
<thead>
<tr>
<th>Player Group</th>
<th>August 2018</th>
<th>July 2019</th>
<th>April 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong players</td>
<td>0.9%</td>
<td>1.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Other players</td>
<td>1.7%</td>
<td>5.4%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Note: Data comprises ~20 NBFCs representing 50-55% of the overall NBFC loan book.

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Source: RBI, NHB, company data, CRISIL Research
Capital market borrowings to fall, given lower ability to raise funds

Trend in resource profile of NBFCs

- Apart from direct lending, banks continue to increase their exposure to securitisation of loan pools
- This is beneficial to both banks (no ALM risk) and non-banks (access to funds)
Bank support will be critical in these tough times

Capital market borrowings for NBFCs up for redemption

Bank funding needs to continue supporting NBFCs

- Extended lockdown expected to sharply affect segments with high cash-based collections, especially for MSME, MFI, and commercial vehicle loans
- With redemption worth Rs 1.3 lakh crore coming up between April & August 2020 towards capital market, banking sector support to become critical
- While non-banks provide moratorium to their customers, uncertainty around their borrowing from banks & capital market could result in liquidity shortage

Note: Above data excludes state infrastructure finance firms
Source: RBI, NHB, company data, CRISIL Research
Annexure
Shape and timeframe of recovery remain uncertain
Early indicators for China show sharp supply-side push, but demand remains weak

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing PMI</td>
<td>49.5</td>
<td>49.2</td>
<td>50.5</td>
<td>50.1</td>
<td>49.4</td>
<td>49.4</td>
<td>49.7</td>
<td>49.5</td>
<td>49.8</td>
<td>49.3</td>
<td>50.2</td>
<td>50.2</td>
<td>50.0</td>
<td>35.7</td>
<td>52.0</td>
</tr>
<tr>
<td>New orders index</td>
<td>49.6</td>
<td>50.6</td>
<td>51.6</td>
<td>51.4</td>
<td>49.8</td>
<td>49.6</td>
<td>49.8</td>
<td>49.7</td>
<td>50.5</td>
<td>49.6</td>
<td>51.3</td>
<td>51.2</td>
<td>51.4</td>
<td>29.3</td>
<td>52.0</td>
</tr>
<tr>
<td>New export orders index</td>
<td>46.9</td>
<td>45.2</td>
<td>47.1</td>
<td>49.2</td>
<td>46.5</td>
<td>46.3</td>
<td>46.9</td>
<td>47.2</td>
<td>48.2</td>
<td>47.0</td>
<td>48.8</td>
<td>50.3</td>
<td>48.7</td>
<td>28.7</td>
<td>46.4</td>
</tr>
<tr>
<td>Finished goods inventory index</td>
<td>47.1</td>
<td>46.4</td>
<td>47.0</td>
<td>46.5</td>
<td>48.1</td>
<td>48.1</td>
<td>47.0</td>
<td>47.8</td>
<td>47.1</td>
<td>46.7</td>
<td>46.4</td>
<td>45.6</td>
<td>46.0</td>
<td>46.1</td>
<td>49.1</td>
</tr>
<tr>
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<td>49.9</td>
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<td>47.6</td>
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<td>Non-manufacturing business index</td>
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<td>54.3</td>
<td>54.8</td>
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<td>54.2</td>
<td>53.7</td>
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<td>53.5</td>
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<td>Crude steel production growth</td>
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<td>10.0</td>
<td>12.7</td>
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<td>4.0</td>
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<td>7.2</td>
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Source: National Bureau of Statistics of China, industry

Most supply-side parameters improved in March, but demand remained weak.
Commodity prices to remain low in 2020...

- Crude oil prices to drop in 2020, as the world grapples with the pandemic, leading to weak demand for crude oil and full capacity at refineries along with oversupply.

- Global economic slowdown, especially in leading importers such as China and India, coupled with limited supply disruption (as mining activities continue in most locations) to lower non-coking coal prices in 2020.
...because of weak demand

- Weak local demand and almost non-existent export market for Chinese steel to correct prices to $440-470 per tonne in 2020
- This follows 13% decline in steel prices in China in 2019

- Prices expected to drop 12-14% in 2020, on weak demand amid strong supply
- Prices are expected to rise from the third quarter as demand picks up with improvement in construction activity and higher auto production
For detailed sectoral analysis and Covid-19 impact assessments, please visit our website, www.crisilresearch.com