Quarterly Review of the Economy, 2020:1Q
in Coronavirus times

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QRE Team

Team Members

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Outline

I. Performance of the Real Economy and Trade
   A. Real Sector Trends
   B. Demand-side Trends
   C. Business Sentiments
   D. Price Trends

II. Policy Simulations

III. Macroeconomic Policies
   A. Fiscal Policy
   B. Monetary Policy and Credit
Sustained declined in GDP Growth since 2016-17 before coronavirus crisis

Real GDP Growth

Legend: _ Annual; _ Quarterly and _ projections.
Source: MoSPI and NCAER Estimates.
Sharp decline in agricultural growth since Q4: 2017-18

GVA Growth Agriculture

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<tbody>
<tr>
<td>2015-16</td>
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<td>2016-17</td>
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<tr>
<td>2017-18</td>
<td>6.8</td>
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<td>2018-19</td>
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<td>2.4</td>
<td>2.3</td>
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<tr>
<td>2019-20</td>
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<td>2020-21</td>
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</table>

% change

Legend:  Annual;  Quarterly and  projections.
Source: MoSPI and NCAER Estimates
Steep Decline in Industrial Growth since Q1: 2018-19

Expected decline of (-)27% in 2020-21 and (-)54% in Q1: 2020-21

Growth in Industry GVA

Legend:
_ Annual; _ Quarterly and _ projections.

Source: MoSPI and NCAER Estimates
IIP confirms continuing industrial slowdown

Growth (%) in IIP General

Growth (%) in IIP Manufacturing

Legend:  _ Annual;  _ Quarterly and  _ projections.
Source: MoSPI and NCAER Estimates
Sharp decline in services growth projected for 2020-21

Growth in GVA Services

Legend:  Annual;  Quarterly and  projections.
Source: MoSPI and NCAER Estimates
Cargo and passenger traffic continue to decline

Revenue Earning Goods Traffic and Cargo Handled at Major Ports

Air Passenger and Cargo Traffic

Legend: _ Annual and _ Quarterly
Note: The data for Air traffic are from January-February 2020.
Source: CMIE and Airports Authority of India.
Consumption demand declining sharply

Growth in IIP Consumer Durable and Non-durable Goods

Source: MoSPI
Investment demand falling sharply

Growth in Real Government Fixed Capital Formation

Legend: _ Annual and _ Quarterly
Source: MoSPI
Government Expenditure compression reversed after Q1: 2019-20

Real Government Final Consumption Expenditure

Legend: _ Annual and _ Quarterly.
Source: MoSPI.
Exports and imports growth declining since Q2: 2018-19, now negative

Growth of Exports of Goods and Services (Rs terms, %yoy)

Legend: _ Annual and _ Quarterly

Source: Ministry of Commerce and RBI.
Business and Political Confidence Indices (NCAER) continue declining in April 2020

Source: NCAER
Nikkei PMI dropped sharply in April 2020

Indices April 2018 to April 2020

Source: Nikkei PMI
Inflation trends

CPI and WPI

Source: MoSPI and Office of Economic Advisor
## Baseline Assumptions about Disruptions in Key Sectors

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<tbody>
<tr>
<td>Agriculture</td>
<td>0.0</td>
<td>0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Industry</td>
<td>0.7</td>
<td>-54.2</td>
<td>-27.0</td>
<td>-27.0</td>
<td>0</td>
<td>1.4</td>
<td>-27.1</td>
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<tr>
<td>Services</td>
<td>5.3</td>
<td>-16.3</td>
<td>-8.0</td>
<td>-8.0</td>
<td>0</td>
<td>5.8</td>
<td>-8.1</td>
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<tr>
<td>GVA</td>
<td>3.0</td>
<td>-25.7</td>
<td>-12.3</td>
<td>-12.3</td>
<td>0.5</td>
<td>4.4</td>
<td>-12.5</td>
</tr>
</tbody>
</table>

- Negative growth to continue until Q3: 2020-21 and recover modestly to 0.5% in Q4
- For the whole year, GDP growth expected to be (-)12.5%
- These are based on assumption of no policy stimulus (either monetary or fiscal)
- What could be the impact of various stimulus measures undertaken till now?
- Alternative fiscal policy simulations and their impact are assessed using policy simulations model
About the policy simulation model

• Core model has 31 equations
  – 21 behavioral equations and 10 identities
• Simple model, cause effect relationships are transparent
• It is a demand side model with four major blocks: Income, fiscal, monetary and external
• Follows eclectic approach
• Flexible, easily adaptable to address different questions
• Present version is used for working out macro-fiscal relationships for the 15th FC
• A negative growth of -12.5% for 2020-21 is imposed on the model to derive deficit conditions for the base case
• In addition, four possible policy scenarios are simulated to derive GDP growth, FD, Inflation and CAD
Policy Simulations: Four Scenarios

Scenario 1
• Starting with the base case, revenue and capital expenditures are increased as per the 2020-21 (Budget Estimates).

Scenario 2
• Increase public expenditure by 1% of GDP
• Reduce Repo Rate

Scenario 3
• Increase public expenditure by 3% of GDP

Scenario 4
• Increase public expenditure by 5% of GDP
## Policy Simulation Results

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>GDP growth (%)</th>
<th>Inflation (%)</th>
<th>Fiscal Deficit (as % of GDP)</th>
<th>CAD (as % of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case</td>
<td>-12.5</td>
<td>4.5</td>
<td>6.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Scenario-1</td>
<td>-4.1</td>
<td>6.6</td>
<td>7.4</td>
<td>2.3</td>
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<tr>
<td>Scenario-2</td>
<td>-1.9</td>
<td>7.4</td>
<td>7.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Scenario-3</td>
<td>1.2</td>
<td>8.9</td>
<td>8.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Scenario-4</td>
<td>3.6</td>
<td>10.1</td>
<td>9.4</td>
<td>3.6</td>
</tr>
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</table>
Key Takeaways: Facing Stark Choices

- Fiscal stimulus of 3% (Scenario 3) is enough to generate positive GDP growth

- 5% fiscal stimulus (Scenario 4) generates 3.6% growth
  - This is closest to Government stimulus package.
  - However, there are trade-offs: this results in double-digit inflation with unsustainable CAD of 3.6%.

- The model suggests aggregate demand responds faster to stimulus than aggregate supply, hence, the rise in inflation

- Any improvement in supply side could moderate inflationary pressures, but this needs broader policy interventions.
Fiscal Outlook

• Great deal of uncertainty about economic activity, revenue, expenditure, deficits etc. in 2020-21

• Budgets of Central and State governments now mostly of academic interest, will need revision through supplementary budgets

• Assessments of fiscal outlook have to be largely based on judgments and assumptions

• Our assessment of fiscal outlook draws on the model based simulations presented earlier
<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 4</th>
<th>Scenario 3</th>
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<tbody>
<tr>
<td>• Assumes expenditure levels as in Central and State budgets</td>
<td>• Assumes a high expenditure stimulus of 5% of GDP over and above the budgeted levels for 2020-21</td>
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<tr>
<td>• GDP still declines by 4%</td>
<td>• Generate 3.6% GDP growth</td>
<td>• Assumes a smaller expenditure stimulus of 3% of GDP additional spending over budgeted levels for 2020-21</td>
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<tr>
<td>• With extra borrowing to compensate for the consequent revenue shortfall Fiscal Deficit rises to 6.6%</td>
<td>• However, this comes along with a large Fiscal deficit (9.4%), double digit inflation (10.1%) and an unsustainable Current Account Deficit (3.6% of GDP)</td>
<td>• Positive GDP growth of 1.2%</td>
</tr>
<tr>
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<td>• A lower inflation (8.9%), a smaller Fiscal deficit (8.8% of GDP) and smaller current account deficit (3% of GDP) as compared to Scenario 4</td>
</tr>
<tr>
<td></td>
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<td>• <strong>Preferred Scenario</strong></td>
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</table>
Fiscal Outlook

• On 12 May the Prime Minister announced a massive stimulus package of Rs 20 trillion (10% of GDP)

• This includes both monetary and fiscal stimulus measures
  ❖ RBI liquidity infusion of Rs 8 trillion (4% of GDP)

• Netting out the liquidity component, the remaining headroom for additional borrowing to finance Covid-19 related expenditure out of the Rs 20 trillion envelope is Rs 12 trillion (6% of GDP)
  ❖ This includes the additional borrowing of Rs 5.9 trillion (3% of GDP) already announced before 12 May
Fiscal Outlook

• This huge expenditure stimulus even exceeds the expenditure stimulus of 5% of GDP in our Scenario-4
• This would lead to even higher growth but also higher inflation and a larger Fiscal Deficit and Current Account Deficit than in Scenario-4, where these were already too high
• It is therefore suggested that this stimulus package be spread over two years: 2020-21 and 2021-22.
• Options for financing this massive additional borrowing on top of the earlier budgeted borrowing are discussed in the next section on monetary policy.
Weak Transmission

Repo Rate, WALR and Term Deposit Rate
April 2018 to February 2020

Source: RBI
Transmission still weak for 10 year G-secs but strong for shorter maturity govt. bonds

Repo Rate and yield on Domestic bonds of various maturities (%), (April 2019 to April 2020)

Source: RBI
Non-food credit growth very weak

Non-food Credit

Source: RBI.
Credit growth depressed for all segments except personal loans

Growth Rate of Bank Credit by Sectors (% y-o-y)

Source: RBI
Rising Risk Aversion and Stalled Bank lending

• Rising risk aversion against lending to NBFCs even prior to Covid19 crisis due to several scams like IL&FS
   but NBFCs main source of credit for MSMEs
   TLTRO 2 of ₹25,000 crores, intended for directing credit to NBFCs remained only half subscribed.

• Similar rising risk aversion to lend to MSMEs.

• Such risk aversion likely to increase under Covid19 crisis
   MSME borrowers also averse to borrowing under present conditions
   Credit flow to MSMEs has virtually dried up
   Need credit guarantees or partial credit risk guarantees

• Measures just announced on 13 May do include these provisions
   Government credit guarantee for MSMEs
   RBI Partial credit guarantee
Challenge of Massive Government Borrowing post Rs 20 trillion stimulus package

• Including ₹12 trillion additional borrowing to finance fiscal component of ₹20 trillion stimulus package, total government borrowing program of over ₹17 trillion (8.5-9.5 of GDP)

• Government borrowing on such a scale unprecedented in India, not clear if financial system can cope

• Multiple channels need to be used to face this massive demand for sovereign loans
Challenge of Massive Government Borrowing post Rs 20 trillion stimulus package

- Possible channels for financing government borrowing
  - Commercial bank lending, beyond a point will raise yields and crowd out private borrowers
  - Re-purposing and further liberalisation of ‘Ways and Means' advances, allowing much larger advances for up to 1 year, then converting advances to dated securities
  - Direct monetisation of residual deficit by RBI, lender of last resort, through private placements
- Finally, it would be more prudent to spread this borrowing over two years, 2020-21 & 2021-22
  - This would help to revive the economy while maintaining financial stability.
Thank You!