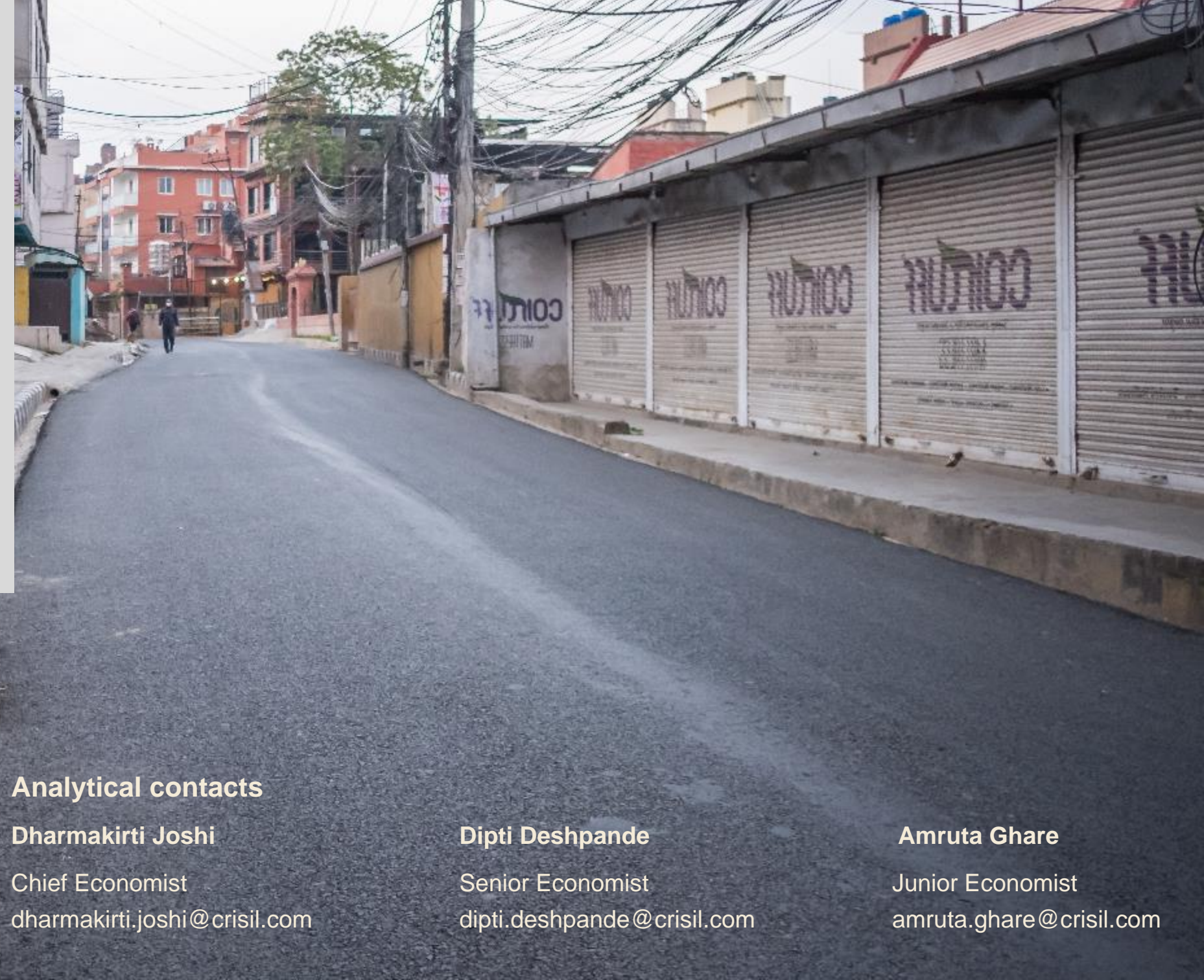


One pandemic Four lockdowns States of disarray

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Analytical contacts

Dharmakirti Joshi

Chief Economist
dharmakirti.joshi@crisil.com

Dipti Deshpande

Senior Economist
dipti.deshpande@crisil.com

Amruta Ghare

Junior Economist
amruta.ghare@crisil.com

Not all states are in the same boat

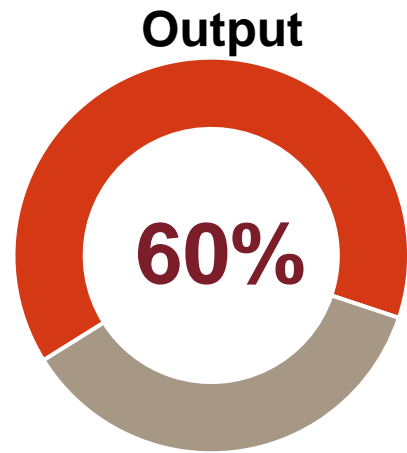
- India has entered the fourth phase of lockdown necessitated by the Covid-19 pandemic
- Lockdown 1.0 (March 25-April 14) and Lockdown 2.0 (April 15-May 3) were most stringent as 'non-essential' activities throughout the country came to a standstill. Lockdown 3.0 (May 4-May 17) allowed some easing with zones classified into red, orange and green as per the virus' spread. With lockdown 4.0 (from May 18-May 31), India is slated to go through **68 days of lockdown**
- At the all-India level, the virus spread and lockdowns, and restrictions have pummelled economic activity. While all states were near-uniformly hit during the first and second lockdown phases, the third and fourth would impact them differently
- There were – as per Lockdown 3.0 – **eight states** in which the share of districts classified under the red zone is higher than the national average*. These states account for **~60% of India's GDP** and **~58% of workforce**. Of these,
 - Maharashtra, Tamil Nadu and Gujarat, being most dependent on output from industry and services, are **more vulnerable to output losses** as they face restrictions
 - Andhra Pradesh, Rajasthan and Uttar Pradesh are **fiscally more vulnerable due to relatively higher debt ratios**. These states also have high dependence on revenue sources from petroleum, liquor and stamp duty
 - Andhra Pradesh, West Bengal and Tamil Nadu have higher share of informal workforce, which is **vulnerable to job losses**

Note: *Classification as per notification by Ministry of Health and Family Welfare dated 30 April 2020. National average is 17.7%

What does one more lockdown mean for the economies of states?

With states continuing to see a rise in cases, the restrictions have been extended. This is bound to slam the overall economy harder

Lockdown 3.0: Top eight pandemic-hit* states contributed to

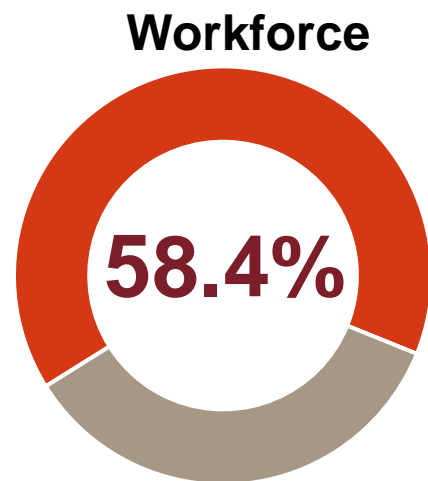


65.5% of manufacturing output

60% of construction output

53% of services

These sectors have been largely affected due to the lockdown. They are also highly labour intensive.



24% of these states' workforce is regular salaried

Of which, ~**43%** are without a valid job contract- *higher than national average of 38%*

26% of these states' workforce is employed as casual labour

50% is classified as self-employed

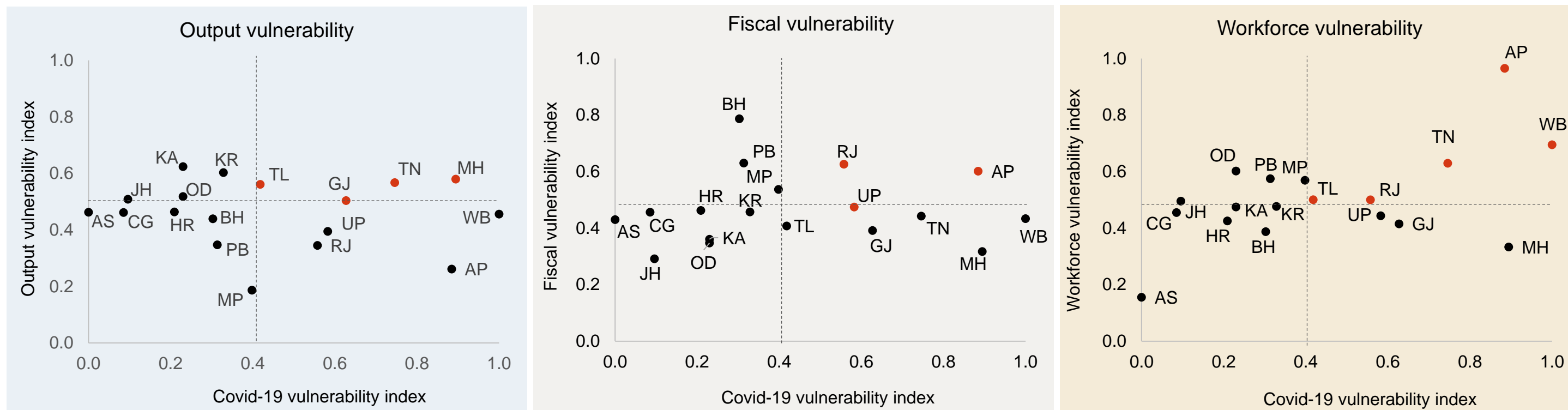
These sections of the workforce are vulnerable to job losses and/or loss in incomes as hit to economic activity continues

Note: *states having red zone classified districts higher than national average

Source: Ministry of Statistics and Programme Implementation (MoSPI), CEIC, CRISIL

Vulnerability matrices: a bird's-eye view of state-level risk

Output, fiscal and workforce vulnerability indices are calculated to understand states' vulnerability to the pandemic shock and ensuing lockdowns on economic activity. Higher index value implies increased vulnerability



Red dots are the more vulnerable states as per the respective matrix - - - - All-India average line

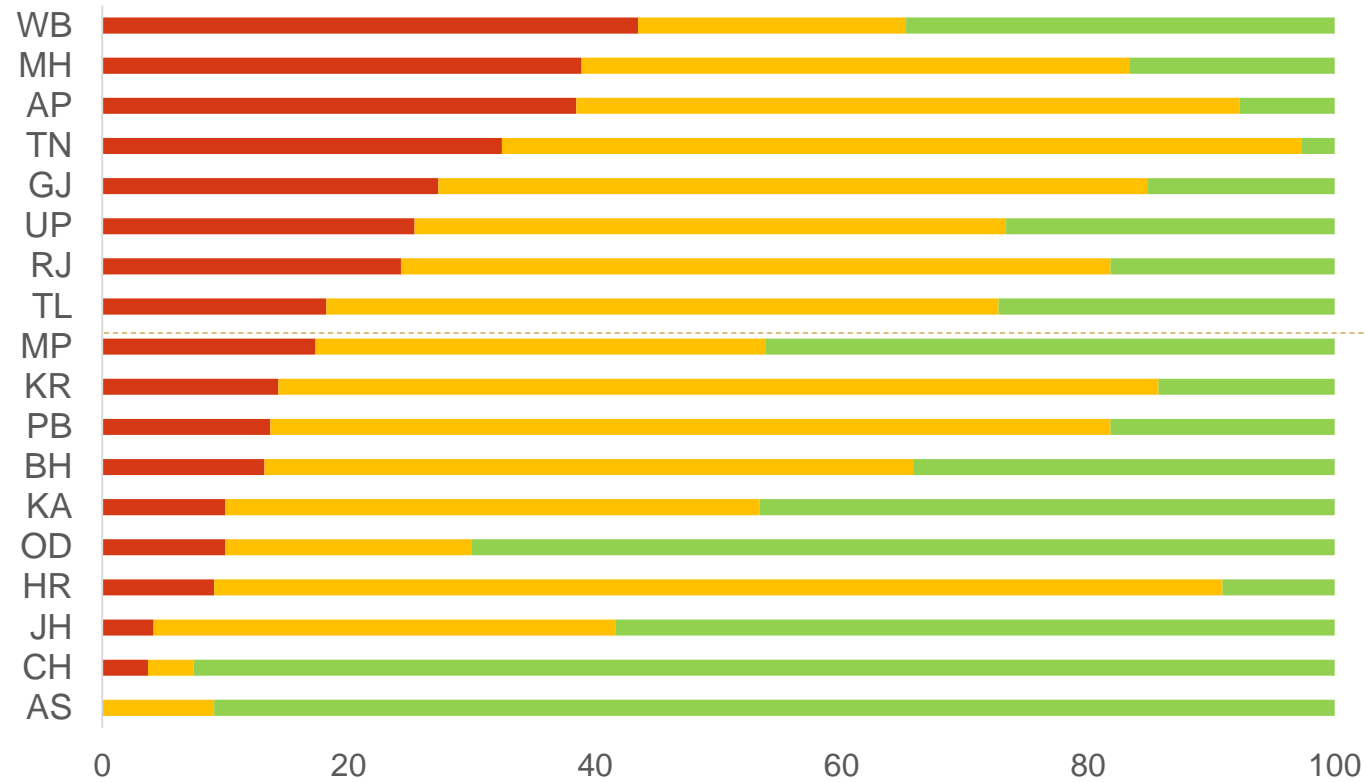
- **Output** vulnerability is defined basis share of affected sectors viz. industry and services in output. MH, TN, GJ and TL - relatively more industrialised and service dependent - may face output shocks with extended restrictions on economic activity
- RJ and AP have high dependency on revenue sources hit by lockdown. Further, their **fiscal** capacity to push growth is limited due to higher outstanding debt.
- Higher proportion of informal **workforce** in AP, WB, TN, RJ - make them susceptible to job losses

Note: Key to state abbreviations is given on slide 8

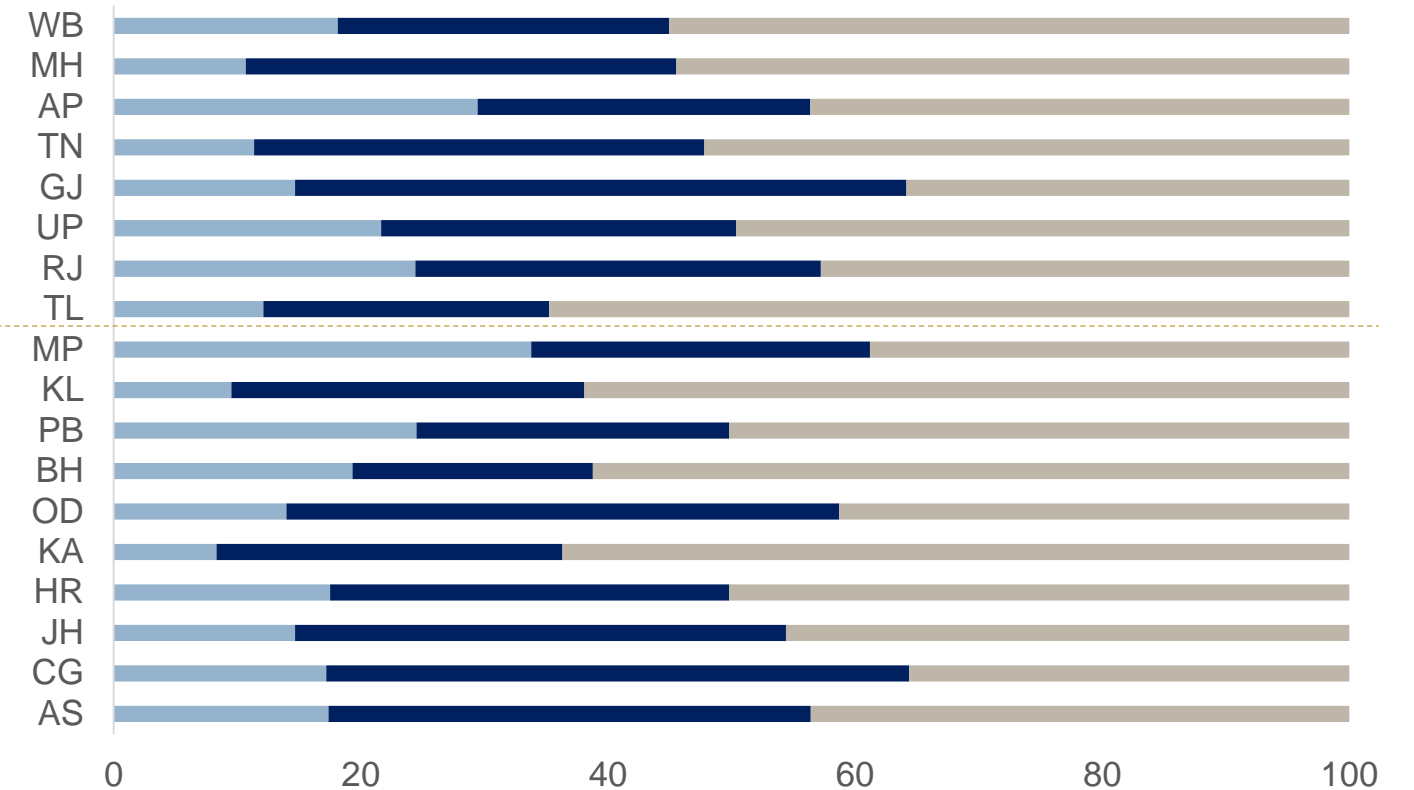
Source: Ministry of Statistics and Programme Implementation (MoSPI), CEIC, CRISIL

Which states have seen more restrictions on activity?

Classification of districts as per red, orange and green zones



States' share in GSVA by agriculture, industry and services

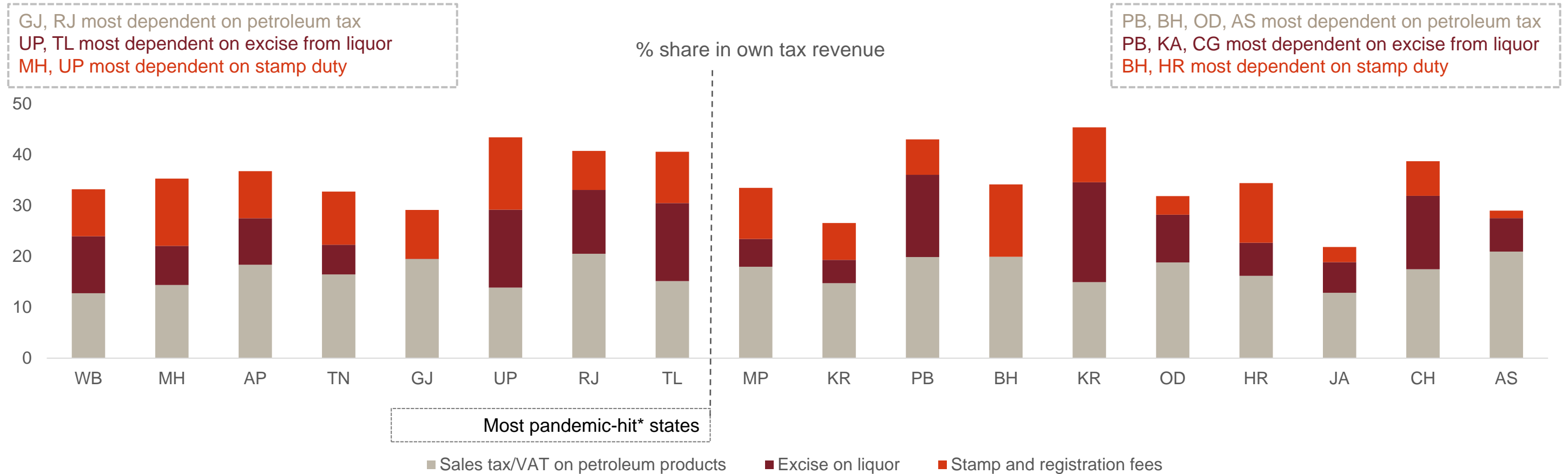


- Output could be more affected more in the eight most pandemic-hit* states as they face restrictions. Overall, the share of gross state value added (GSVA) from these states is ~64% in agriculture, ~63% in industry and ~53% in services in India. Those with higher dependence on agriculture – AP, RJ, UP and WB - could fare better as a normal monsoon is expected to support it.
- Among the relatively less-hit states, restrictions on economic activity could hurt KA and KR – where share of industry and services is higher, while in others like MP, PB and BH, a higher share of agriculture could cushion the economy this year

Note: *states having red zone classified districts higher than national average

Source: Ministry of Health and Family Welfare (MoHFW), CEIC, CRISIL

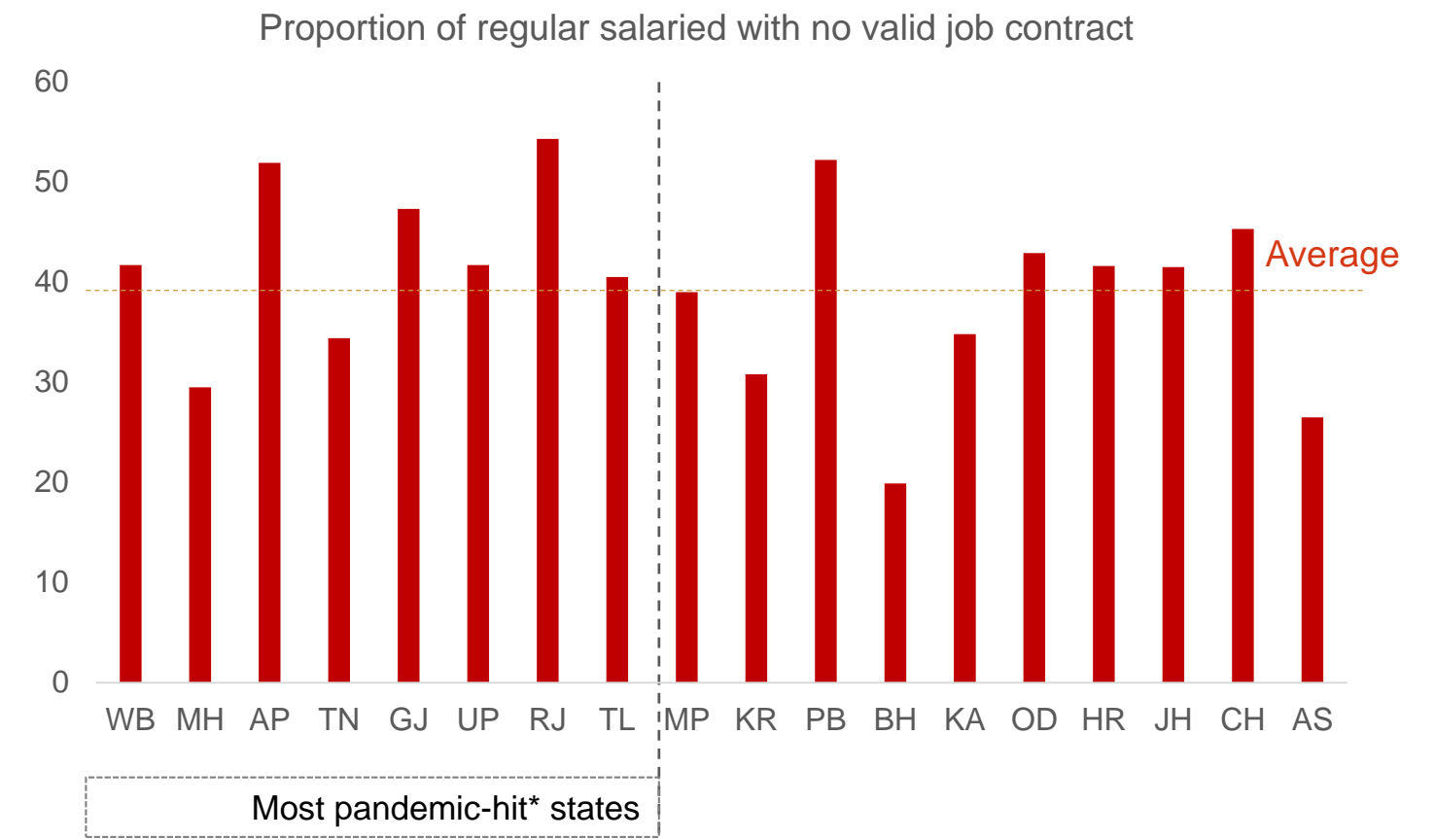
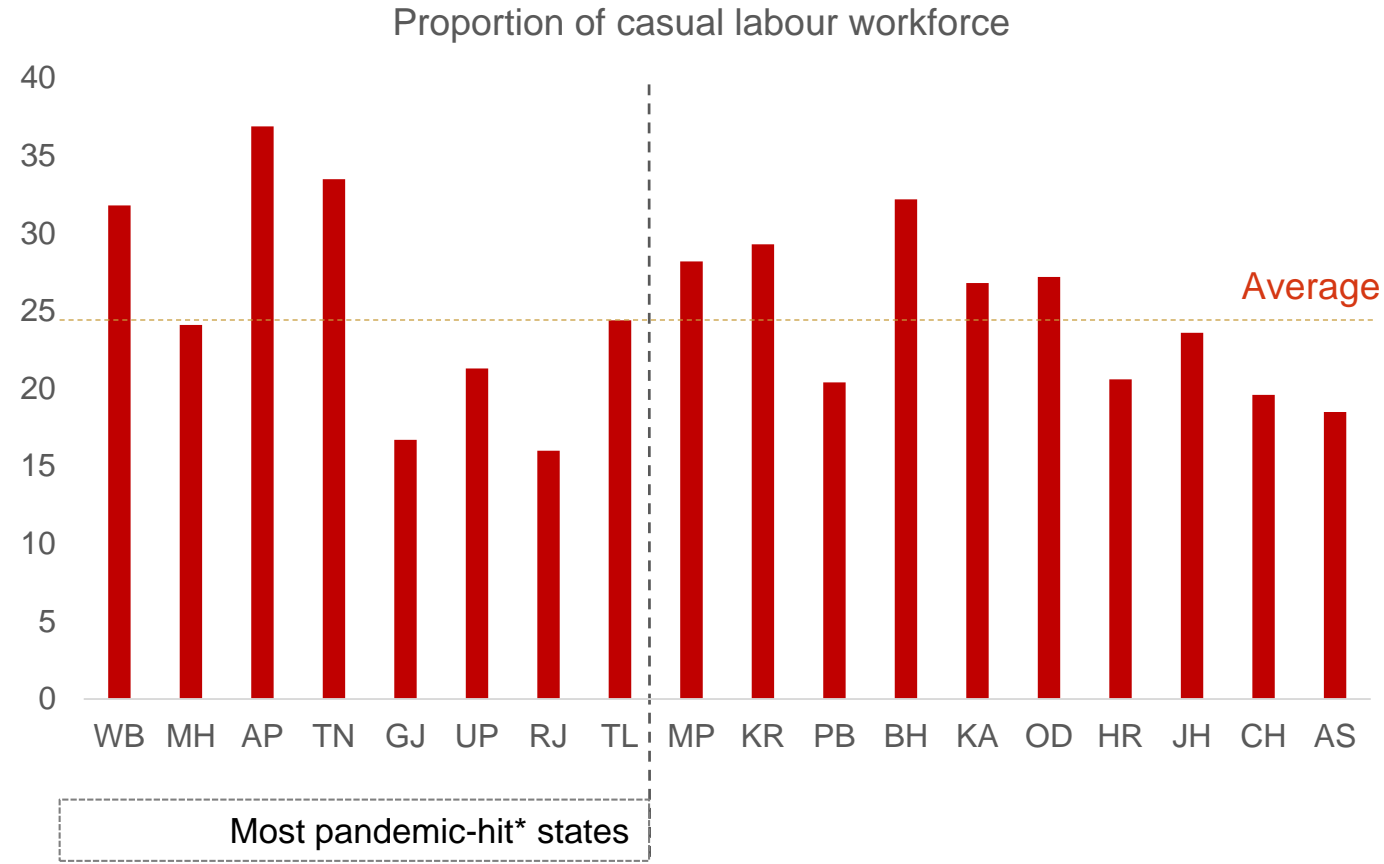
States most dependent on fuel and liquor taxes, and realty duty at peril



- States are heavily dependent on petroleum, liquor and stamp duty for their own tax revenue. With the lockdown, revenues from these sources have dried up
- Taxes on petroleum, stamp duties and registration are dependent on economic activity and usually tend to dip during slowdowns
- But the fall in excise from liquor - a relative inelastic source of revenue accounting for 10% of the own tax revenue of states - will diminish states' coffers. This could otherwise have helped during a downturn

Note: Data is for FY19. In the absence of detailed data on sales tax collection from liquor, which accounts for large proportion of states' own tax revenue, only excise from liquor is considered.
 Source: Reserve Bank of India (RBI), Petroleum Planning & Analysis Cell, states' finance accounts, CRISIL

Higher the share of informal workforce, bigger the job-loss risk



- Among the most pandemic-hit states* - WB, AP, TN have **higher proportion of casual labour workforce**. Among the ones facing the brunt of restrictions (but with low Covid-19 cases), BH, KR, KA and OD need to worry the most
- AP, RJ and GJ have **higher proportion of regular salaried workforce which do not have a valid job contract**. Among the less Covid-19 hit states, PB, CG, JH, HR and OD face the risk of large job losses

Note: *states having red zone classified districts higher than national average, ^Includes proportion of regular salaried not eligible for paid leave, with no written job contract, without social security benefits

Source: Periodic Labour Force Survey, 2017-18, MOSPI, CRISIL

Annexure

State acronyms					
AP- Andhra Pradesh	CG- Chhattisgarh	JH- Jharkhand	MP- Madhya Pradesh	PB- Punjab	TL- Telangana
AS- Assam	GJ- Gujarat	KA- Karnataka	MH- Maharashtra	RJ- Rajasthan	UP- Uttar Pradesh
BH- Bihar	HR- Haryana	KR- Kerala	OD- Odisha	TN- Tamil Nadu	WB- West Bengal

Construction of the vulnerability index

For each dimension, the constituent indicators are normalised. Normalisation rescales the indicators in the range [0, 1]. Score on a particular dimension is computed by taking the average of the normalised scores of its constituent indicators.

Vulnerability index	Constituent indicators
Output	<ul style="list-style-type: none"> Share of industry, Share of services in gross state value added (GSVA)
Workforce	<ul style="list-style-type: none"> Share of casual labour, Share of regular salaried workforce with no written job contract, ineligible for paid leave and no social security benefits in total workforce
Fiscal	<ul style="list-style-type: none"> Ratio of outstanding liabilities to gross state domestic product (GSDP) Ratio of fiscal deficit to GSDP (3-year average) Share of petroleum, liquor taxes and stamp duty in own tax revenue
Covid-19	<ul style="list-style-type: none"> Share of red zones in total number of districts in the state. Classification as per notification by Ministry of Health and Family Welfare dated April 30, 2020

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