



Revenue Effect of GST Restructuring

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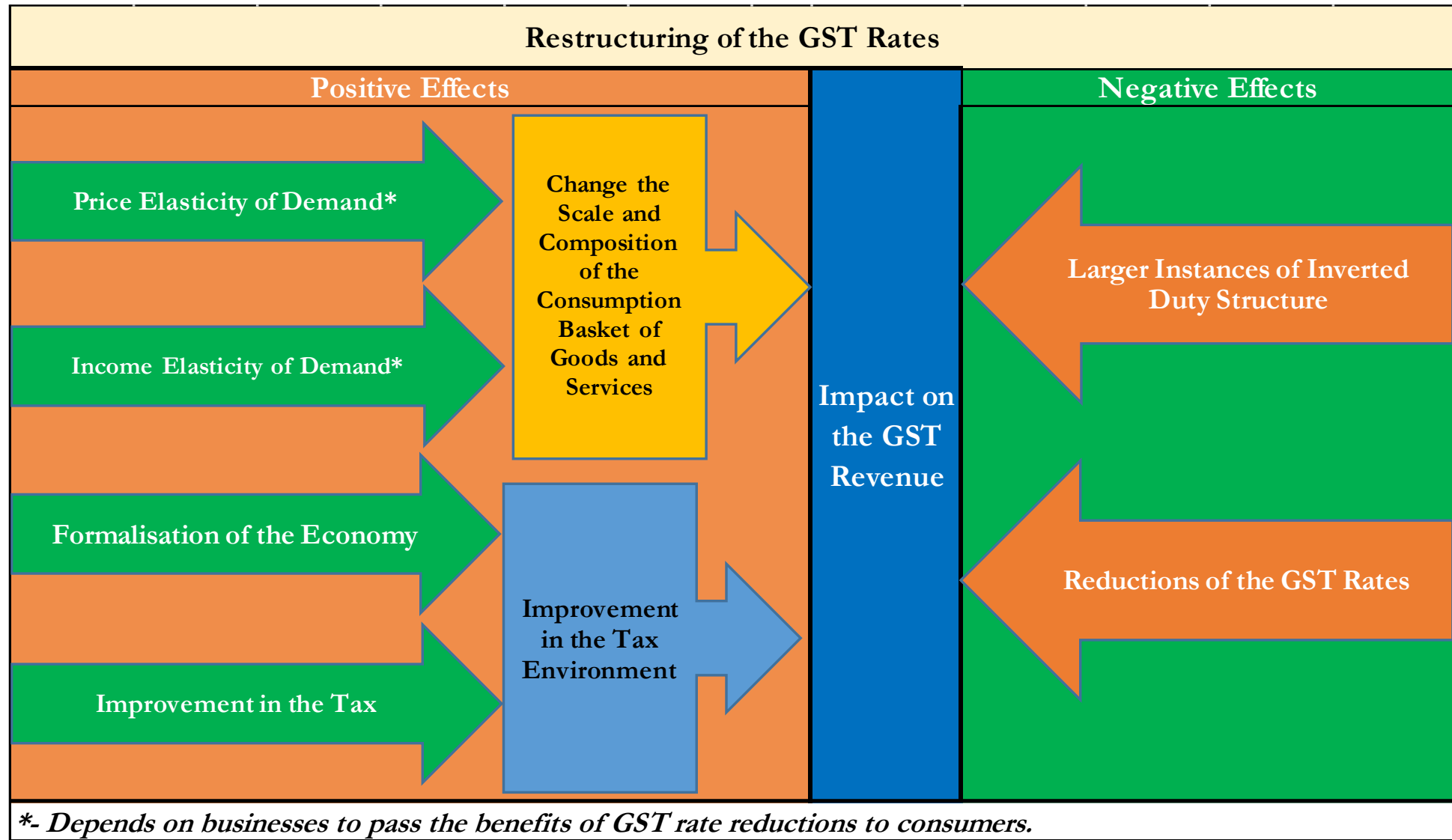
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Research Questions

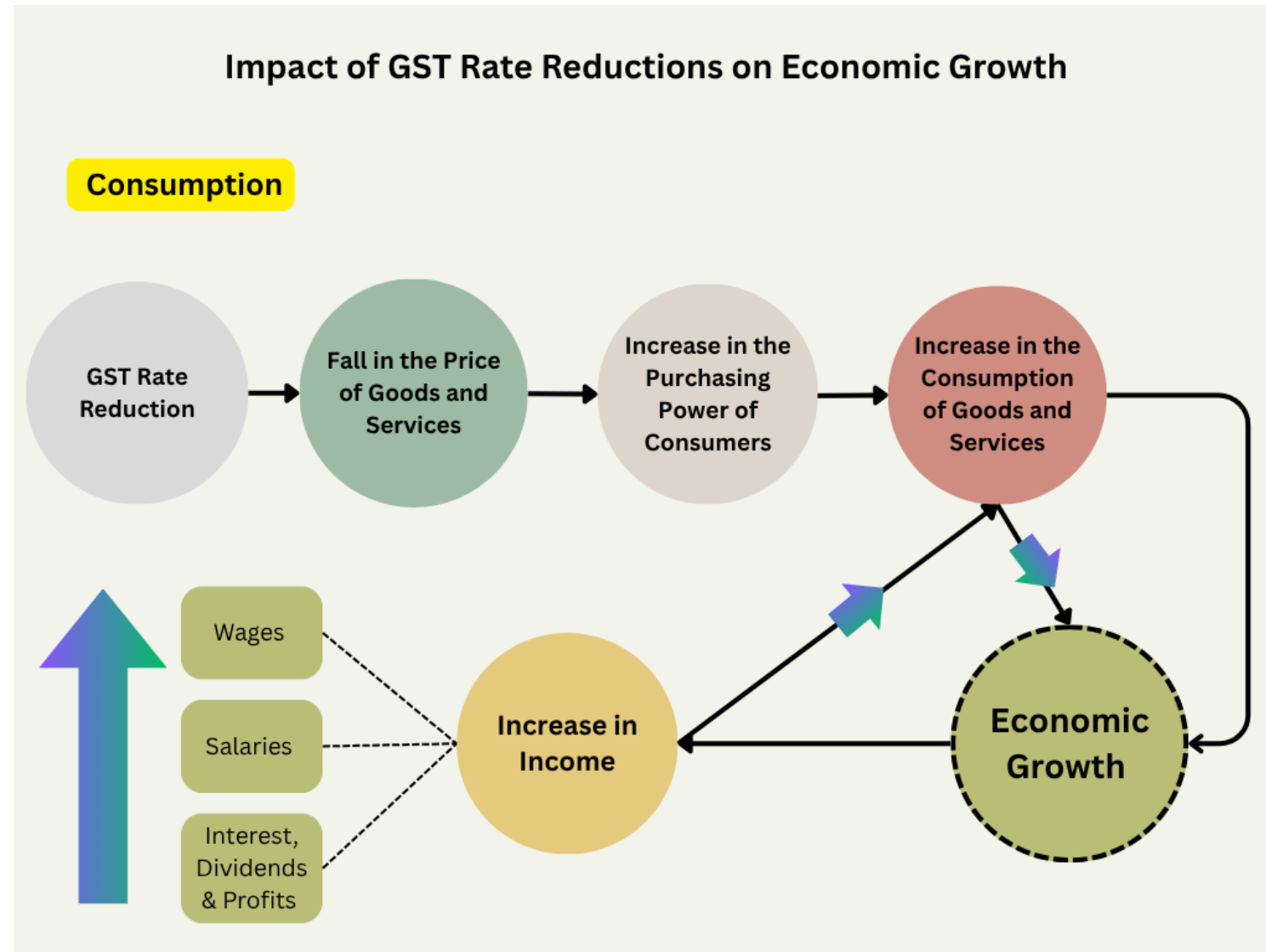
- What will be the likely impact of GST rate restructuring on the revenue mobilisation?

Revenue Impact Pathways of the GST Rate Restructuring



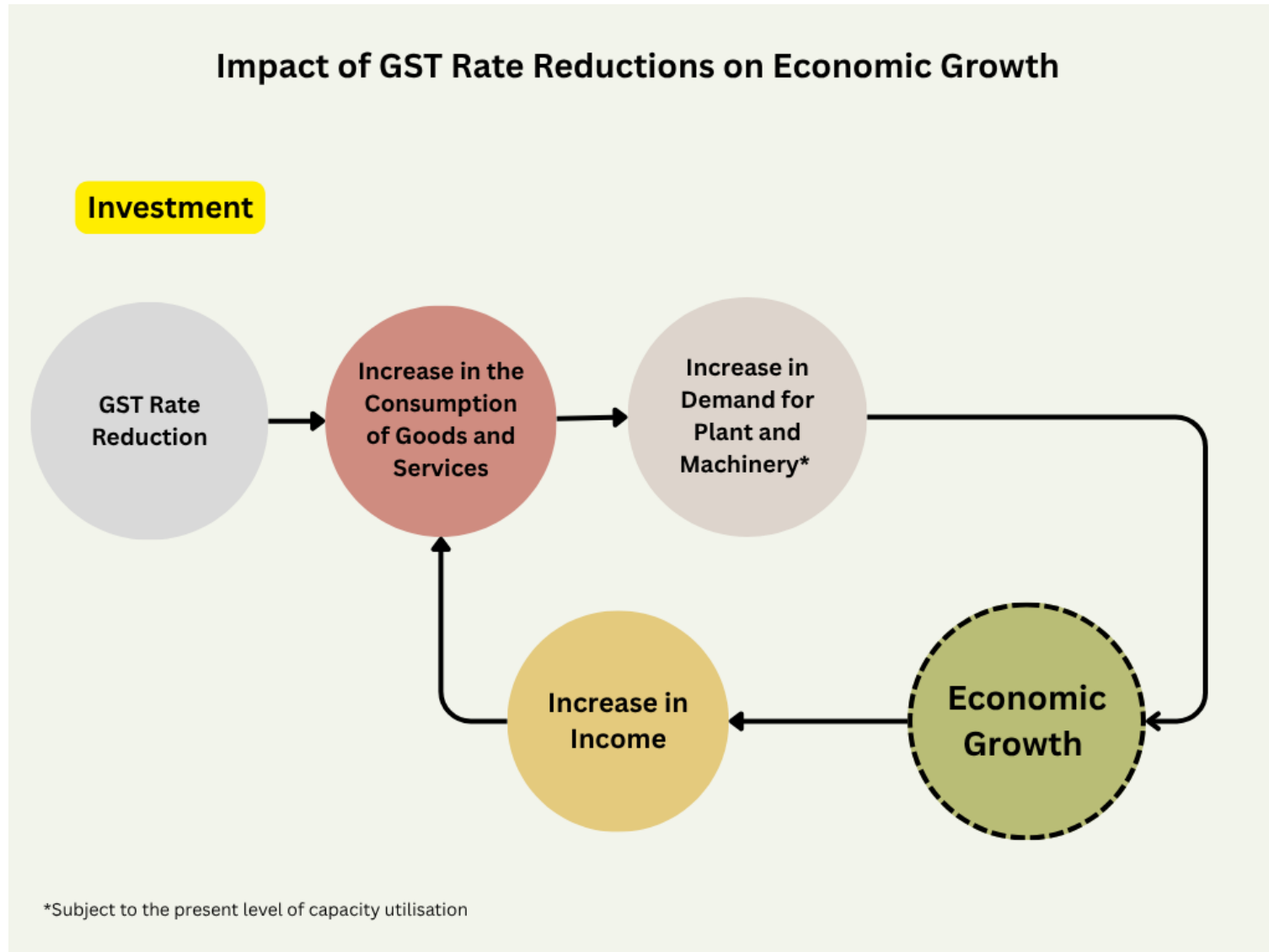
Pathways of Impact on Economic Growth: Consumption

National Income Identity $Y \equiv C + I + G + (X - M)$



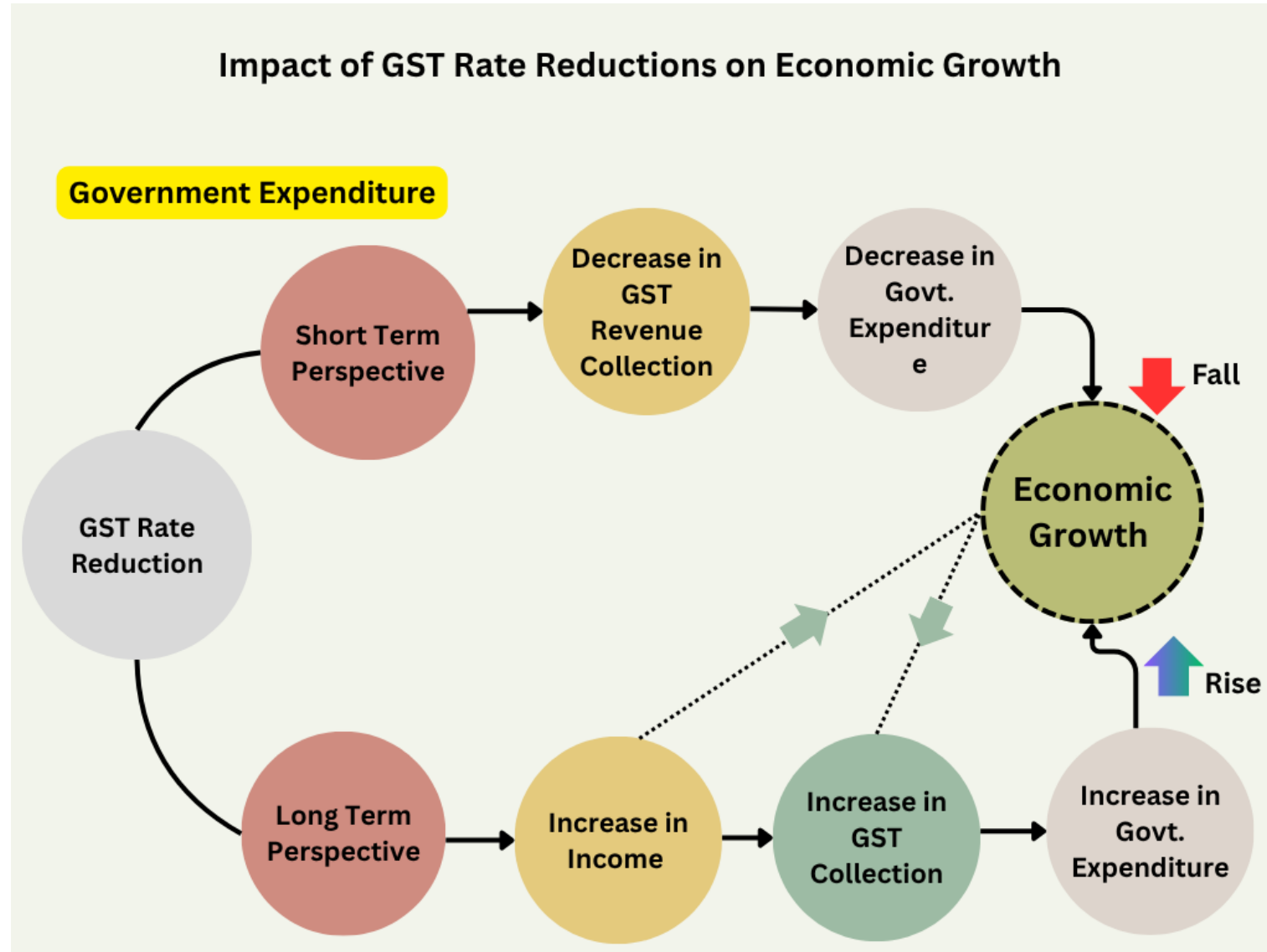
Pathways of Impact on Economic Growth: Investment

National Income Identity $Y \equiv C + I + G + (X - M)$



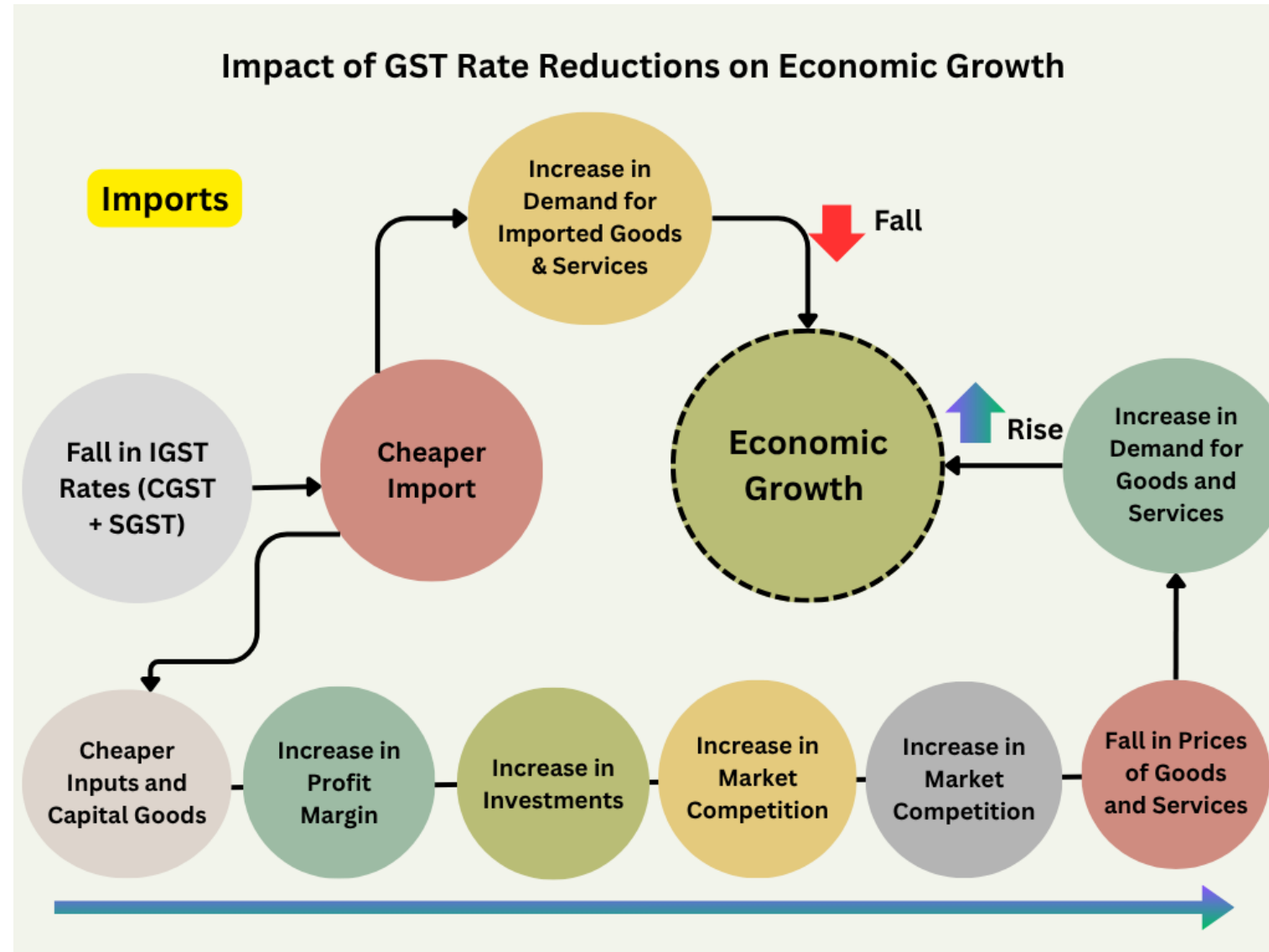
Pathways of Impact on Economic Growth: Investment

National Income Identity $Y \equiv C + I + G + (X - M)$



Pathways of Impact on Economic Growth: Investment

National Income Identity $Y \equiv C + I + G + (X - M)$



GST Rate Restructuring and the Tax Base

- We classify average MPCE on 390 items of goods or services, as available from the NSSO's HCES 2022-23, into GST rate categories for rural and urban areas across the Old and the New GST rate structures.
- We estimate the change in the structure of the average consumption basket across GST rate categories between the Old and the New GST rate categories.
- In a static framework[@], under the New GST rate structure, the composition of the average MPCE may shift from higher to lower GST rate categories.
- Exempting more commodities may reduce the tax base and therefore tax collection. It will also lead to greater cascading of taxes and higher production costs.
- Expanding the list of commodities under the Lower GST Rates may reduce the GST collection.
- The combined share of 'Exempt to Low (5%)' GST rate category has increased from three-thirds (65%) to three-fourths (75%) of the average MPCE between the Old and New GST rate categories. The share of all other GST rate categories has declined.

Change in the Share of Average MPCE across GST Rate Categories between the Old and New GST Rate Structure										
GST Rate Category	Average MPCE: Rural					Average MPCE: Urban				
	Old GST Rates	% Share in Total (A)	New GST Rates	% Share in Total (B)	B-A	Old GST Rates	% Share in Total (C)	New GST Rates	% Share in Total (D)	D-A
(i) Exempt	897	26.4	1,210	35.6	9.2	1,765	30.7	2,217	38.5	7.8
(ii) Very Low (Exempt to 5%)	791	23.3	540	15.9	-7.4	1,102	19.1	762	13.2	-5.9
(iii) Low (5%)	533	15.7	817	24.0	8.3	892	15.5	1,387	24.1	8.6
(iv) Lower Middle (5 to 12%)	383	11.3				549	9.5			
(v) Middle (12%)	93	2.7				187	3.2			
(vi) Upper Middle (12 to 18%)	79	2.3				140	2.4			
(vii) Lower Middle to Upper Middle (5 to 18%) (iv+v+vi)	555	16.3	397	11.7	-4.6	876	15.2	585	10.2	-5.1
(vii) Upper (18%)	512	15.0	378	11.1	-3.9	939	16.3	698	12.1	-4.2
(viii) High (28%)	42	1.2				70	1.2			
(ix) Very High (>28%)	69	2.0				114	2.0			
(x) High (viii+ix for Old GST) (40% for New GST)*	112	3.3	58	1.7	-1.6	184	3.2	108	1.9	-1.3
(xi) Out of GST	320		320		-	647		647		-
Total (without Out of GST)	3,400	100.0	3,400	100.0		5,757	100.0	5,757	100.0	
Exempt to Low (i+ii+iii)	2,221	65	2,567	75	10	3,759	65	4,366	76	11

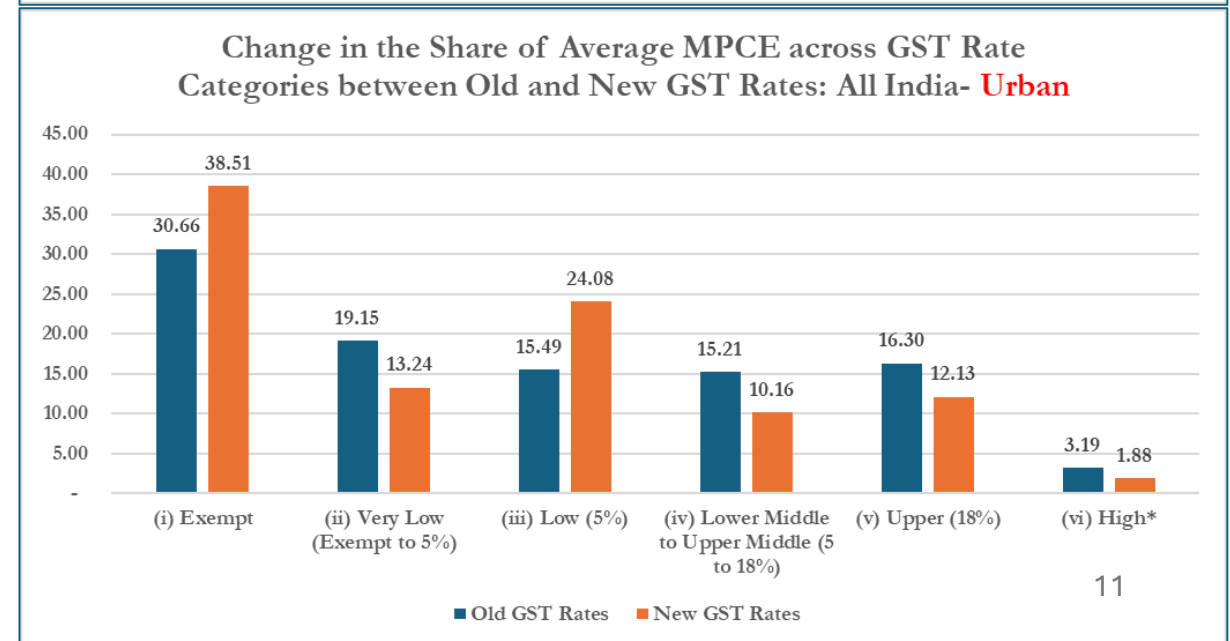
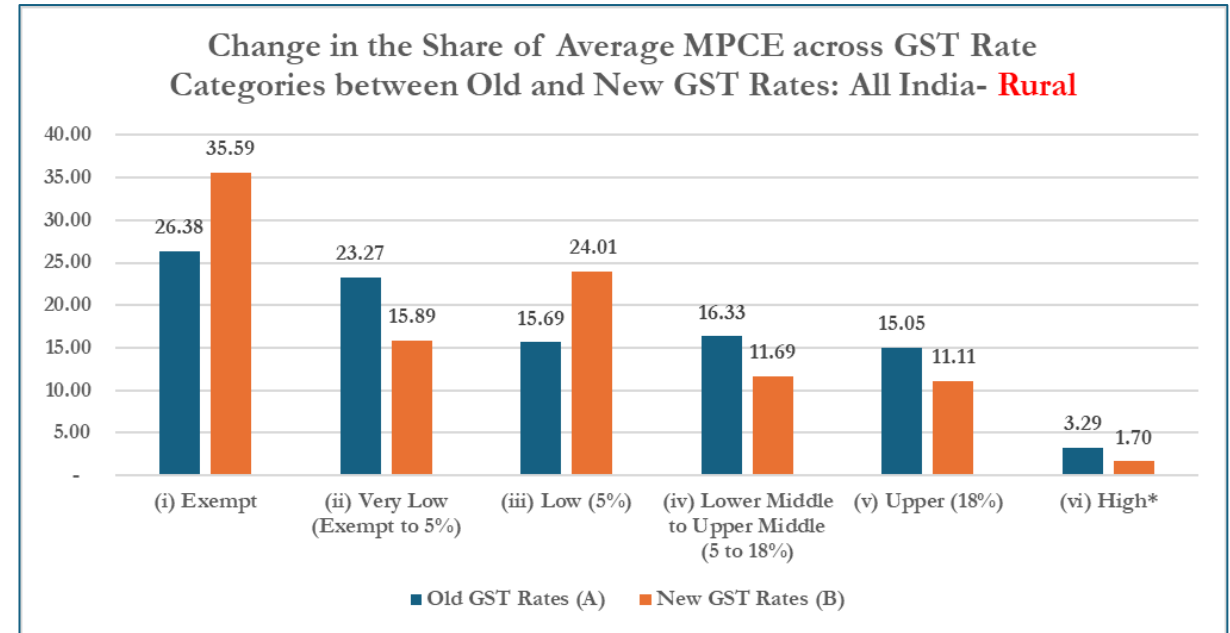
Notes: *-For the Old GST Rate, this category constitutes the GST Rate 28% and higher. For the New GST Rate, this category is subject to a 40% GST rate.

@- We assume that the scale and composition of Average MPCE across goods and services remain unchanged, as price and income elasticities are constants.

Change in the Composition of the Consumption Basket across Regions

- The shift in the composition of the consumption basket towards lower GST Rate Categories may have a revenue impact for the governments.
 - It will lower the **Output Tax Liability**.
 - It may **increase the eligible ITC** available for adjustments, and therefore reduce net GST collection.
- The revenue loss could be counterbalanced if price and income elasticities of demand play a positive role in boosting consumption.

International crude oil prices will likely remain stable for another 1 to 2 years.



Change in the Composition of the Consumption Basket across Regions and Fractile Classes

Change in the Share of Average MPCE across GST Rate Categories between Old and New GST Rates: All India (Rural)													
Fractile Class	0-5%	5-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-95%	95-100%	All
(i) Exempt	8.16	9.07	9.43	9.87	10.05	10.18	10.06	10.02	9.72	9.36	8.83	6.44	9.21
(ii) Very Low (Exempt to 5%)	-6.21	-7.08	-7.41	-7.85	-8.05	-8.18	-8.07	-8.10	-7.86	-7.58	-7.12	-5.07	-7.38
(iii) Low (5%)	7.78	8.01	8.02	8.15	8.27	8.31	8.50	8.73	8.70	8.74	8.48	7.49	8.33
(iv) Lower Middle to upper Middle (5 to 18%)	-3.23	-3.66	-3.91	-4.14	-4.31	-4.44	-4.67	-4.83	-4.91	-5.07	-5.00	-4.78	-4.64
(v) Upper (18%)	-5.50	-5.27	-4.94	-4.85	-4.73	-4.53	-4.40	-4.26	-3.97	-3.63	-3.24	-2.08	-3.94
(vi) High*	-1.00	-1.07	-1.18	-1.18	-1.22	-1.34	-1.43	-1.56	-1.69	-1.82	-1.95	-1.99	-1.58
Sum of (i) to (iii)	9.73	10.00	10.03	10.17	10.26	10.31	10.50	10.65	10.56	10.52	10.19	8.85	10.16

Change in the Share of Average MPCE across GST Rate Categories between Old and New GST Rates: All India (Urban)													
Fractile Class	0-5%	5-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-95%	95-100%	All
(i) Exempt	9.13	9.55	9.70	9.87	9.59	9.30	8.96	8.53	8.06	7.38	6.60	4.76	7.84
(ii) Very Low (Exempt to 5%)	-7.16	-7.59	-7.75	-7.82	-7.58	-7.22	-6.95	-6.53	-6.09	-5.43	-4.66	-3.09	-5.90
(iii) Low (5%)	7.94	8.33	8.65	8.70	8.97	9.05	9.07	8.89	9.03	8.85	8.51	7.35	8.60
(iv) Lower Middle to Upper Middle (5 to 18%)	-3.78	-4.08	-4.48	-4.68	-4.91	-5.08	-5.15	-5.13	-5.33	-5.40	-5.42	-4.82	-5.05
(v) Upper (18%)	-5.12	-5.16	-5.00	-4.88	-4.89	-4.84	-4.67	-4.43	-4.19	-3.96	-3.49	-3.01	-4.17
(vi) High*	-1.01	-1.06	-1.12	-1.19	-1.17	-1.21	-1.27	-1.33	-1.48	-1.45	-1.54	-1.19	-1.31
Sum of (i) to (iii)	9.91	10.29	10.60	10.75	10.98	11.13	11.08	10.89	11.00	10.80	10.46	9.02	10.53

- The shift in the composition of the consumption basket towards lower GST Rate Categories will be for all fractile classes.
- The share of the average MPCE increased under 'exempt' to 'Low (5%)' GST Rate categories by, on average, 10 percentage points between the old and the new GST rate structure.

Change in the Composition of the Consumption Basket across States and Regions

- Scale and composition of the consumption basket differ across states.
- More than three-fourths of the average MPCE falls under 'exempt' to 'Low (5%)' GST rate categories.
- The shrinking share of consumption, except for 'exempt' and 'Low (5%)' GST rates, may have a revenue impact.
- The revenue impact of the GST rate restructuring will differ across states.

Change in the Distribution of Average MPCE between Old and New GST Rate Structure across Selected States: Rural												
GST Rate Category	Bihar			Chhattisgarh			Goa			Tamil Nadu		
	Old GST (A)	New GST (B)	B-A	Old GST (C)	New GST (D)	D-C	Old GST (E)	New GST (F)	F-E	Old GST (G)	New GST (H)	H-G
(i) Exempt	25.9	36.4	10.5	29.9	35.2	5.4	31.3	36.0	4.7	28.8	34.8	6.02
(ii) Very Low (Exempt to 5%)	24.5	16.3	-8.2	16.5	13.5	-3.0	17.0	13.5	-3.4	21.4	17.2	-4.16
(iii) Low (5%)	16.4	23.8	7.4	17.9	27.0	9.1	13.4	26.8	13.3	15.6	24.2	8.56
(iv) Lower Middle to Upper Middle (5 to 18%)	15.1	10.9	-4.2	15.6	11.4	-4.2	13.1	8.1	-4.9	15.1	10.6	-4.44
(v) Upper (18%)	15.5	11.0	-4.5	16.4	11.0	-5.4	21.5	13.2	-8.3	16.0	12.1	-3.96
(vi) High*	2.5	1.6	-0.9	3.8	1.9	-1.9	3.7	2.4	-1.3	3.1	1.0	-2.01
Average MPCE (Rs.)**	3,197	3,197		2,089	2,089		6,240	6,240		4,650	4,650	
Sum of (i) to (iii)	66.9	76.5	9.6	64.2	75.7	11.5	61.7	76.3	14.6	65.8	76.2	10.4

Change in the Distribution of Average MPCE between Old and New GST Rate Structure across Selected States: Urban												
GST Rate Category	Bihar			Chhattisgarh			Goa			Tamil Nadu		
	Old GST (A)	New GST (B)	B-A	Old GST (C)	New GST (D)	D-C	Old GST (E)	New GST (F)	F-E	Old GST (G)	New GST (H)	H-G
(i) Exempt	26.6	36.2	9.7	28.5	35.0	6.5	31.2	36.1	4.9	35.2	40.8	5.57
(ii) Very Low (Exempt to 5%)	22.1	14.5	-7.5	17.2	12.9	-4.3	16.1	12.7	-3.4	17.9	14.1	-3.71
(iii) Low (5%)	16.7	24.5	7.8	18.2	26.6	8.4	17.5	29.6	12.1	15.5	23.7	8.17
(iv) Lower Middle to Upper Middle (5 to 18%)	15.2	10.6	-4.6	15.5	11.2	-4.3	13.4	8.1	-5.3	13.5	9.2	-4.30
(v) Upper (18%)	17.0	12.6	-4.4	17.5	12.6	-4.9	19.5	12.4	-7.1	15.3	11.1	-4.19
(vi) High*	2.5	1.5	-0.9	3.0	1.6	-1.4	2.3	1.0	-1.3	2.5	0.9	-1.55
Average MPCE (Rs.)**	4,468	4,468		3,844	3,844		7,531	7,531		6,806	6,806	
Sum of (i) to (iii)	65.3	75.3	10.0	64.0	74.5	10.5	64.8	78.5	13.6	68.6	78.7	10.0

Revenue Impact of the GST Rate Restructuring

- GST Liability Rate may fall in the New GST Rate Structure compared to the Old GST Rate Structure.
- In a static framework, GST liability may fall by 14% to 20% of the estimated GST liability of 2022-23.
- If tax savings are fully used for consuming commodities attracting 18% GST, the estimated shortfall would vary from 11% to 16%

Estimation of GST Liability under the Old and New GST Rate Structure based on Average MPCE: All India - Rural										
GST Rate Category	Old GST Rate Structure					New GST Rate Structure				
	Average MPCE (Rs.)	GST Rates (%)		Estimated GST Liability (Rs.)		Average MPCE (Rs.)	GST Rates (%)		Estimated GST Liability (Rs.)	
		Scenario I	Scenario II	Scenario I	Scenario II		Scenario I	Scenario II	Scenario I	Scenario II
(i) Exempt	897	Exempt	Exempt	0	0	1,210	Exempt	Exempt	0	0
(ii) Very Low (Exempt to 5%)	791	Exempt	5	0	38	540	Exempt	5	0	26
(iii) Low (5%)	533	5	5	25	25	817	5	5	39	39
(iv) Lower Middle (5 to 12%)	383	5	12	18	41					
(v) Middle (12%)	93	12	12	10	10					
(vi) Upper Middle (12 to 18%)	79	12	18	8	12					
(vi*) Lower Middle to Upper Middle (5 to 18%)						397	5	18	19	61
(vii) Upper (18%)	512	18	18	78	78	378	18	18	58	58
(viii) High (28%)	42	28	28	9	9					
(viii*) High (40%)						58	40	40	17	17
(ix) Very High (>28%)	69	28.5	35	15	18					
(x) Out of GST	320					320				
Total	3,720			165	231	3,720			132	199
Total - (x)	3,400					3,400				
Estimated GST as % of Av. MPCE#				5	7				4	6
Estimated Fall in the GST Liability (%)**									20	14

Notes: *-This is under the New GST Rate Structure.

** -Estimated Fall in the GST Liability (%) = (New GST Liability – Old GST Liability) / Old GST Liability*100

#-Excluding Average MPCE on 'Out of GST'

Market value of consumption (PmQ) = Pp(1+t)Q

Tax Liability = PpQt = (PmQt)/(1+t)

Where, Pm is the Market Price of the commodity, Pp is the Producer's Price of the commodity, and t is the GST rate of a commodity

Revenue Impact of the GST Rate Restructuring

- **GST Liability Rate** may fall from 5 to 7% in the Old GST Rate Structure to 4 to 6% in the New GST Rate Structure.
- In a static framework, GST liability may fall by 14% to 19% of the estimated GST liability of 2022-23.
- **If tax savings are fully used for consuming commodities attracting 18% GST, the estimated shortfall would vary from 12% to 16%.**

Estimation of GST Liability under the Old and New GST Rate Structure based on Average MPCE: All India - Urban										
GST Rate Category	Old GST Rate Structure					New GST Rate Structure				
	Average MPCE	GST Rates (%)		Estimated GST		Average MPCE	GST Rates (%)		Estimated GST	
		Scenario I	Scenario II	Scenario I	Scenario II		Scenario I	Scenario II	Scenario I	Scenario II
(i) Exempt	1,765	Exempt	Exempt	0	0	2,217	Exempt	Exempt	0	0
(ii) Very Low (Exempt to 5%)	1,102	Exempt	5	0	52	762	Exempt	5	0	36
(iii) Low (5%)	892	5	5	42	42	1,387	5	5	66	66
(iv) Lower Middle (5 to 12%)	549	5	12	26	59					
(v) Middle (12%)	187	12	12	20	20					
(vi) Upper Middle (12 to 18%)	140	12	18	15	21					
(vi*) Lower Middle to Upper Middle (5 to 18%)						585	5	18	28	89
(vii) Upper (18%)	939	18	18	143	143	698	18	18	107	107
(viii) High (28%)	70	28	28	15	15					
(viii*) High (40%)						108	40	40	31	31
(ix) Very High (>28%)	114	28.5	35	25	30					
(x) Out of GST	647					647				
Total	6,404			287	383	6,404			231	329
Total - (x)	5,757					5,757				
Estimated GST as % of Av. MPCE#				5	7				4	6
Estimated Fall in the GST Liability (%)**									19	14

Revenue Impact of the GST Rate Restructuring across States

- GST liability may fall by 14% to 20% of the estimated GST liability of 2022-23 for all India.
- For all India, GST liability rates may fall from 5-7% in the Old GST rate structure to 4 - 6% in the New GST rate structure.
- GST Liability rates differ across states depending on the composition of the average MPCE across GST rate categories.
- GST liability rates are likely to fall across all states due to GST rate restructuring.
- Fall in the estimated GST liability will differ across states.

State	Region	GST Liability Rate (%)*				Estimated Fall in the GST Liability (%)**	
		Old GST		New GST			
		S-I	S-II	S-I	S-II	S-I	S-II
Bihar	Rural	4.7	6.7	3.8	5.7	19.1	14.2
	Urban	5.0	6.8	4.0	5.8	18.8	14.1
Chhattisgarh	Rural	5.2	6.8	4.0	5.9	22.1	13.8
	Urban	5.2	6.8	4.2	6.0	19.6	12.5
Goa	Rural	5.7	7.1	4.4	5.9	23.5	18.0
	Urban	5.3	6.7	4.0	5.4	24.9	18.5
Tamil Nadu	Rural	4.9	6.6	3.8	4.9	21.9	26.0
	Urban	4.6	6.1	3.5	4.5	22.6	25.7

Notes: GST Liability Rate = (Estimated GST Liability/Average MPCE)*100

Average MPCE excludes consumption of 'Out-of-GST' goods.

** - Estimated Fall in the GST Liability (%) = (New GST Liability – Old GST Liability) / Old GST Liability*100

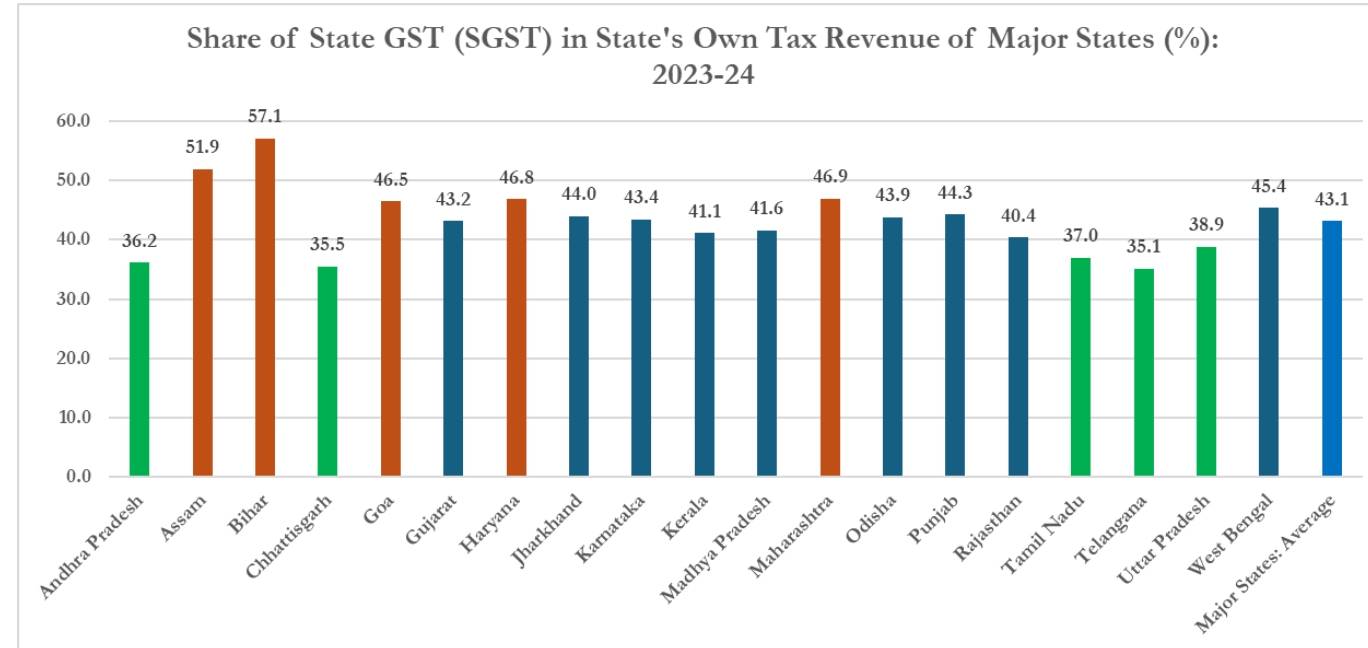
Revenue Impact of the GST Rate Structuring: Available Evidence

- Given the uncertainty, it is difficult to estimate the likely revenue impact (loss) of the GST rate restructuring.
- Available estimates vary from Rs. 3,700 crore to Rs. 1,80,000 crore (1 crore=10 million).
- In the new GST rate structure, the tax base would be lower due to extending the list of exempted commodities.
- Cascading of taxes would be higher in the new GST rate structure compared to the old GST rate structure.

Estimated Revenue Loss on Account of GST Rate Restructuring: 2025-26		
Institute / Authority / Individual	Estimated GST Revenue Loss (Rs. Crore)	Remarks
Government of India	48,000	Based on the Consumption Pattern of 2023-24 (no document/ report is available in the public domain)
Government of India	60,000	As reported in the Financial Express
State Bank of India	3,700	All India
Commercial Tax Department, Government of Karnataka	15,000	This pertains to Karnataka only
Chief Minister, Government of Karnataka	17,000	This pertains to Karnataka only
Jefferies (brokerage firm)	22,000-24,000	All India
Systematix Research	1,20,000	All India
UBS	1,10,000	All India
Government of West Bengal	20,000	This pertains to West Bengal only
Pranjul Bhandari, Chief India and Indonesia Economist, HSBC	1,50,000	All India
Finance Minister, Government of Kerala	8,000-10,000	This pertains to Kerala only
Government of Punjab	4,000	This pertains to Punjab only
Government of Jharkhand	2,000	This pertains to Jharkhand only
Government of Himachal Pradesh	1,000	This pertains to Himachal Pradesh only
Government of Telangana	7,000	This pertains to Telangana only
S. C. Garg (Former Finance Secretray, GoI)	2,00,000	All India
Ambit Capital	70,000-1,80,000	All India
Source: Compiled from Newspapers/ Media stories.		

State Finances: Options for Adapting to the GST Revenue Shortfall

- **Spillover Effect:** States may have to face a revenue shortfall on account of State GST (SGST) collections, including lower collection of IGST from imports, and also lower tax devolution on account of lower CGST collection.
- Any revenue uncertainty related to SGST may affect state finances differently, as states with a lower SGST share in OTR may be better able to manage it than those with a higher share.
- States will have an additional revenue on account of raising the highest GST rate from 28% to 40%. Unlike GST compensation, this **extra revenue will be collected and retained by those states where the consumption of 'sin' goods and purchases of luxury cars are higher.**
- States may have to look for additional revenue mobilisation (**front-loading**) from available tax handles, e.g., state taxes on alcoholic beverages, state sales tax on non-GST petroleum products, crude petroleum and natural gas, passenger and goods tax (PGT), and electricity duty.
- Consolidation of public expenditures (**back-loading**) could be the last option to sustain the fiscal consolidation path, if revenues cannot be augmented.



Thank You

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Distribution of Items across GST Rate Category			
GST Rate Category	Old GST Rates (A)	New GST Rates (B)	B-A
(i) Exempt	90	93	3
(ii) Very Low (Exempt to 5%)	64	62	-2
(iii) Low (5%)	40	102	62
(iv) Lower Middle (5 to 12%)	34		
(v) Middle (12%)	21		
(vi) Upper Middle (12 to 18%)	28		
(vi*) Lower Middle to upper Middle (5 to 18%)	83	38	-45
(vii) Upper (18%)	87	74	-13
(viii) High (28%)	4		-4
(ix) Very High (>28%)	10		-10
(ix*) High (40%)		9	
(x) Out of GST	12	12	0
Total	390	390	