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CRISIL Opinion

GST to cut logistics costs

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GST to cut logistics costs by upto 20%

Complete phasing out of CST and dismantling of check-posts key to realising full benefits

The rollout of goods and services tax (GST) – intended from April 1, 2016 – will lead to a substantial reduction in logistics costs for manufacturers of non-bulk goods. Firms paying central sales tax at 2% of sales will benefit directly from its phasing out , while those who had set up warehouses to avoid the levy will benefit from lower logistics costs following the shutdown/ consolidation of some warehouses. However, to maximise benefits from the rollout of GST, it is imperative that the central sales tax (currently paid on inter-state movement of goods) is completely phased out and state-level check posts are dismantled.

If these steps are taken, we expect logistics costs of key sectors to drop by up to 1.5-2.0% of sales over a 3-4 year period post introduction of GST, a reduction of about 20% from current levels. The cost savings are, however, more likely to be back-ended as corporates will take a while to realign their logistics systems – the changes will likely be gradual to minimise the possibility of disruption in supply chain. Among the key sectors we have analysed, consumer durables will see the maximum drop in logistics costs. In comparison, FMCG and pharmaceutical sectors will have to tread a thin line to optimise logistics costs as a relatively decentralised warehousing network would still be required to minimise the risk of stockouts at retail level.

New regime to drive efficiency in logistics, yield tax savings

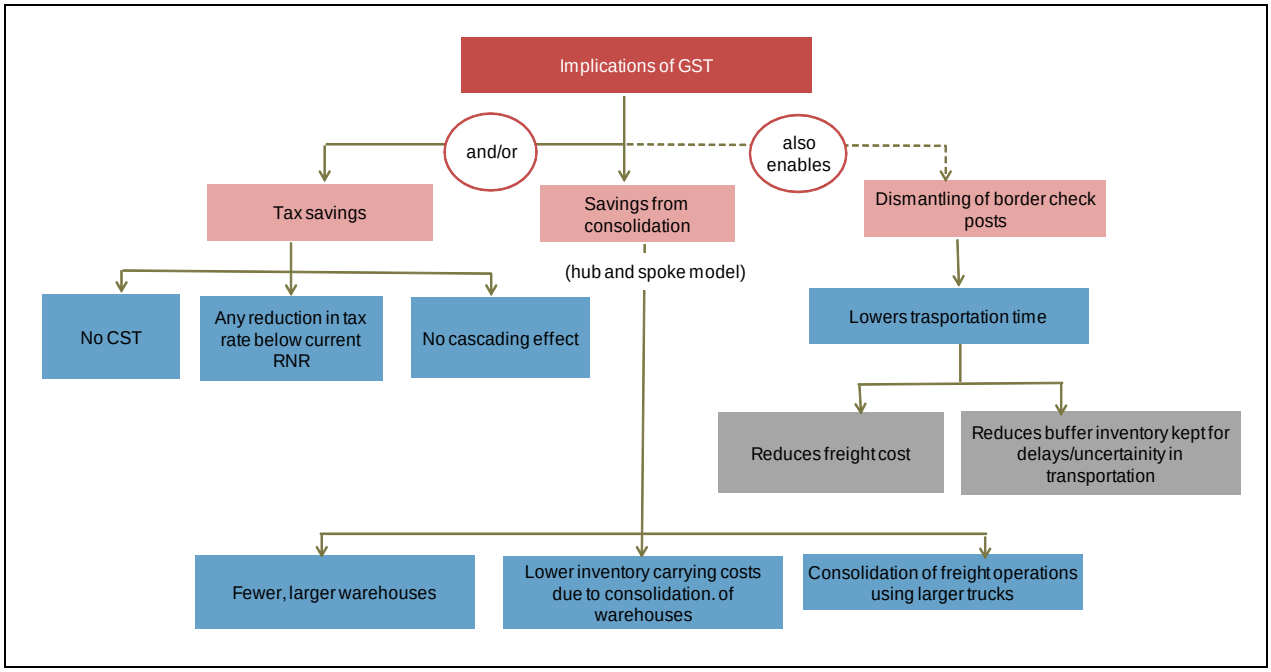
Complex and cascading indirect taxes have been one of the key reasons impacting the competitiveness of Indian manufacturers over the years. Alongside operational efficiency, tax avoidance has influenced the supply chain decisions of corporates, resulting in small and inefficient warehouses and high logistics costs.

Once the GST is introduced, 'tax avoidance' will no longer influence decisions concerning distribution network and total warehouse space can be reduced partially.

Savings will accrue in three forms:

- Tax savings
  - Elimination of cascading effect of taxes as comprehensive input tax credit becomes available
  - Phasing out of the 2% CST for companies who move goods across state borders for sale
- Logistics cost savings
  - Optimisation of warehouses and consolidation of inventories for companies which historically choose to set up multiple warehouses across states so as to avoid paying CST
- Elimination of check posts offers additional cost savings
  - While most states have replaced the octroi gates (on city borders) with a local body tax (LBT), it has still not reduced the waiting time for vehicles. Similarly, at check posts on state borders, different requirements for documentation and tax payment lead to considerable delays. While the GST will subsume taxes such as octroi and LBT, a parallel dismantling of check posts too will ensure faster transit of goods and in turn, reduce companies' need to maintain buffer inventories.

The many benefits of GST



Note: 1) Dotted line denotes indirect impact.

2) RNR denotes the revenue neutral rate or implicit rate of taxation, which was estimated at about 27% for 2011-12

Source: CRISIL Research

Drop in warehousing and inventory carrying costs to shore up logistics cost savings

Our analysis and interactions with key players across four key sectors – consumer durables, FMCG, pharmaceuticals and automobiles – indicates the GST rollout will help them save up to 1.5-2.0% of logistics costs as a percentage of sales over a 3-4 year period, with the benefits likely to be back-ended. This amounts to a reduction of upto 20% in the logistics bill.

A drop in warehousing and inventory carrying costs would account for a bulk of the savings. Transportation costs are likely to drop only marginally, as savings in the primary leg — by consolidating larger truckloads — would be offset by a rise in costs in the secondary leg, where lead distances will increase. In the secondary leg, costs could be reduced only by servicing multiple consumption centres using a smaller fleet.

The rollout of GST will mainly impact the supply chains of 'non-bulk'[1] (low-volume, high-value goods) sectors, which have a relatively larger network of warehouses. Textiles, consumer durables, IT hardware, FMCG, pharmaceuticals, automobiles and auto components are a few prominent examples.

Consumer durables to benefit the most, followed by FMCG and pharma

Among the sectors analysed, the consumer durables sector is expected to witness the maximum drop, potentially saving 30% of logistics costs from current levels of 7-8% of sales. In comparison, the FMCG and pharma sectors have many warehouses built for both tax and logistical considerations and therefore savings

[1] Non-Bulk comprises of all goods besides the primary 7 bulk commodities transported by Railways (Coal, Iron Ore, Cement, Steel, Foodgrains, Fertilizers and POL)

may be relatively lower at 15-20%. Given the need for quick replenishment of stocks, we expect the process of consolidation to be much more calibrated in these sectors. To start with, they could combine/ consolidate several warehouses near state borders for easier distribution.

Sector-wise savings in logistics costs on GST implementation

	FMCG	Consumer durables	Pharma	Automobiles (MHCVs)
Parameters as a percentage of sales:				
Current logistics costs	8-9%	7-8%	5.5-6.5%	5-6%
Direct logistics cost reduction post GST	0.8-1.2%	1.5-1.9%	0.5-0.9%	0.1-0.5%
Additional savings in logistics costs with checkpost dismantling	0.6-0.7%	0.5-0.6%	0.4-0.6%	0.5-0.7%
Total potential savings in logistics costs	**1.4-1.8%**	**2.1-2.5%**	**1.0-1.4%**	**0.7-1.1%**
Assessment of typical logistics parameters:				
Typical no. of warehouses for leading companies*	50-60	25-30	25-35	20-25
No of warehouses post likely consolidation	35-45	10-12	17-27	15-20

Note: * (1) Leading company is one which has a significant market share or a pan-India presence.
(2) Only the warehouses which are owned and/or controlled by the company in the supply chain are considered. CFA-owned warehouses have been included in pharma.

Source: CRISIL Research

Consumer durables: The sector has the most number of warehouses set up solely to avoid paying the CST and hence offers the maximum scope for consolidation. As most consumer durables (televisions, refrigerators, washing machines and air conditioners) have a higher brand recall and longer shelf life, they cannot be easily substituted. This incentivises players to consolidate loads by setting up large warehouses.

FMCG: Timely delivery requirements and availability of substitutes make the case for a relatively decentralised supply chain. The degree of consolidation would be restricted by the need for faster replenishment of products on the shelf. Personal care and household products may see more consolidation, given the additional time for replenishment, as compared to food & beverages.

Pharmaceuticals: Consolidation here will be slow and gradual, as players shift from dealing with multiple carrying and forwarding agents (CFAs) (who also manage inventory and provide warehousing services) to a smaller group. However, in doing so, they will also have to consider key hurdles such as timely deliveries to retailers, substitutability and storage of products under regulated conditions.

Automobiles: Currently, given a paucity of warehouses, most original equipment manufacturers (OEMs) prefer to 'directly ship' their goods to dealers. Hence, there is no opportunity to consolidate warehouses, save in one segment: commercial vehicles, where MHCV manufacturers have 'state-wise' stockyards as they need larger space to park the large vehicles. Even among these, only those set up to avoid the CST would consolidate once the GST regime kicks in. Industry interactions suggest that OEMs would continue shipping

directly to dealers until 'dedicated rail freight corridors' are commissioned by 2018-19. This would give OEMs an incentive to use cheaper rail transport and adopt a hub and spoke model for transporting goods via warehouses.

Table 1: Main factor leading to setting up of warehouses

Industry	Purpose of setting up warehouses
FMCG	To save CST and need to be closer to retailers
Consumer Durables	Most setup to save CST
Pharmaceuticals	To save CST and need to be closer to retailers
Automobiles	Most setup for logistical reasons

Source: CRISIL Research

(For a detailed list of factors influencing consolidation of warehouses in each sector, refer to the annexure 2)

Dismantling of check posts to boost logistical gains

Estimates suggest that a quarter of the journey time is typically spent at check posts, state borders, city entrances, and other regulatory stoppages. This adds to the cost of transporting goods and forces companies to maintain buffer inventories. Dismantling of check posts is critical to maximise benefits from the GST rollout. Such a move will structurally benefit firms, especially those which have a large, pan-India distribution network.

To ensure faster transit of goods through check posts, implementing e-permit/e-tolling systems could be one alternative. Such systems work on radio-frequency identification technology, where the tax status of goods being transported is automatically scanned as the vehicle passes through the check post. Pilot studies are already being conducted in states like Haryana and Gujarat. The relevance of automation is also highlighted by some stark statistics: While vehicles at one of India's major check post (Walayar, Kerala) spend at least 6-8 hours in transit (going up to a full day if traffic is heavy), Karnataka provides a breather by allowing vehicles to be moved in less than an hour by opting for online declaration of goods and electronic scanning of vehicles.

Broadly, CRISIL Research believes that eliminating check-post delays will cut transportation costs by 10-15% and trim inventory carrying costs, owing to more certainty in transit times. This will result in additional savings of 0.4-0.8% of net sales for players across sectors. This, including the direct cost savings, will take the overall logistics costs savings to upto1.5-2.0% of sales for companies. However, the proposed additional tax of 1% by states on supply of goods in lieu of CST for 2 years could delay dismantling of check-posts.

Sales of high-tonnage, high-performance trucks to get a fillip

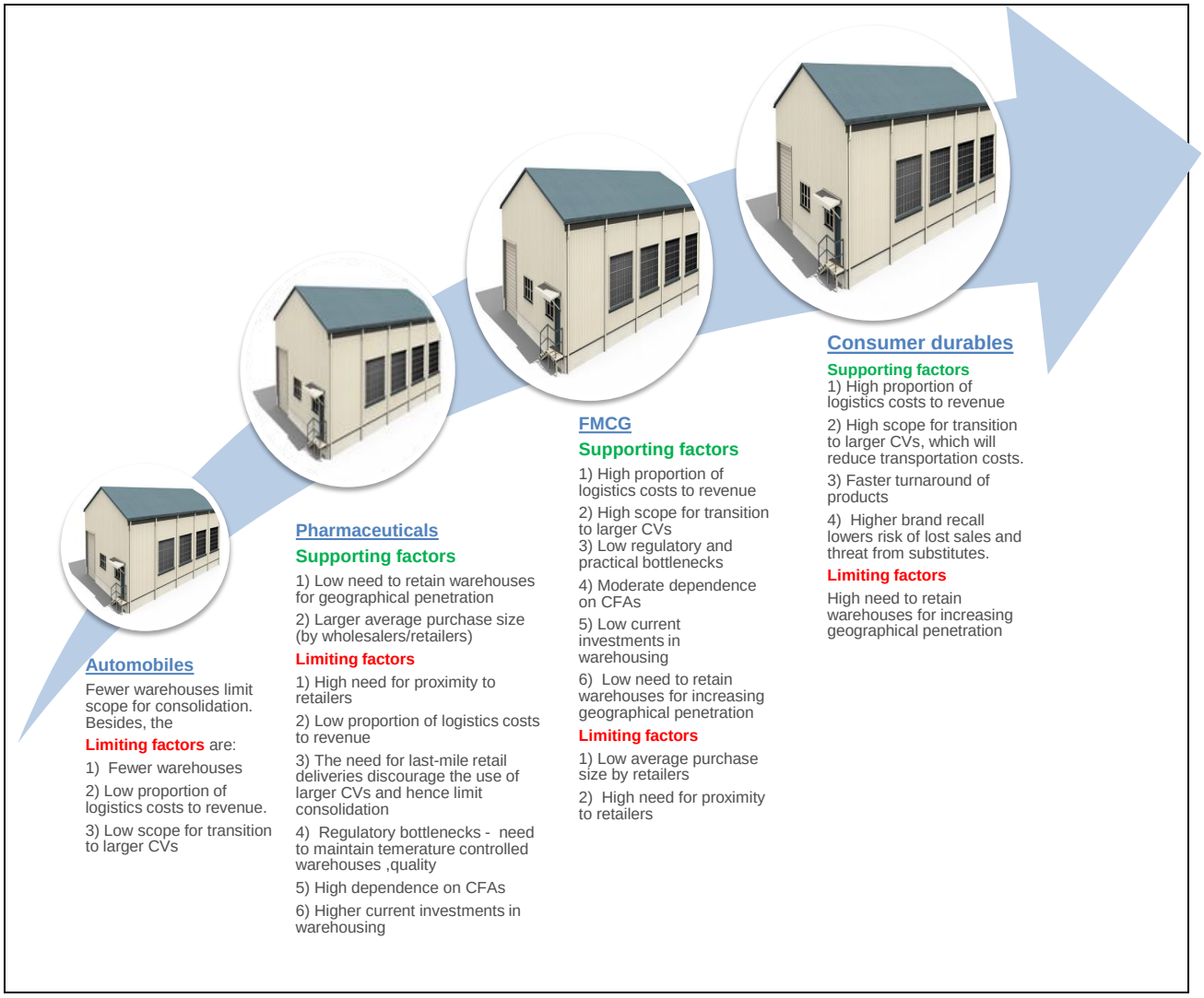
Realigning supply chains and dismantling of check posts is expected to take at least 2-3 years after GST is implemented. This will drive demand for larger, more efficient trucks such as multi-axle vehicles and tractor-trailers as loads consolidate on primary routes. These vehicles will carry heavier cargo per trip and reduce overall shipment costs for companies on primary routes. Accordingly, we envisage a faster shift to 31-tonne MAVs from 25 tonne MAVs and to 40 tonne trailers from 35 tonne trailers.

We also expect players to shift from traditional, low-cost trucks to slightly mid-premium trucks (higher-powered trucks with better cabin comfort that cost at least 15% higher but aid in faster turnaround times). While most commercial vehicle manufacturers began launching mid-premium and premium trucks 4-5 years ago (like Tata's *Prima* series, Mahindra's trucks, Eicher's *Pro* range, etc), these models failed to gain significant market share (they still comprise just 5-7% of total revenues in the MHCV segment) as faster transportation was required to make these models a viable option. Consolidation of truck loads and dismantling of check posts can aid seamless transport and drive demand for such trucks.

Annexure 1: Approach & methodology

CRISIL Research has undertaken detailed interactions with logistics/supply chain departments of corporates and third-party logistics players. Insights from these interactions and our in-house understanding on various sectors form the basis of our assumptions and conclusions. We have estimated the number of warehouses of leading companies and the scope for rationalisation post GST rollout based on interactions with 3-5 leading players in the FMCG, pharmaceuticals, automobiles, and consumer durables sectors. We also interacted with 3PL players to gain critical supply chain insights and understand procedures, time lost 'in-transit' at check posts, scope for trimming inventory costs, and implications for 3PL players.

Annexure 2: Factors influencing consolidation of warehouses post GST



(Please note that the views expressed here are those of CRISIL Research and not of CRISIL's Ratings division. CRISIL Research operates independently of and does not have access to information obtained by CRISIL's Ratings Division.).

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