



Inventory Reduction Without Regret

Balancing Storage and Rebuy Costs

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RAND Arroyo researchers rebut the notion that the Army’s currently high (relative to demand) parts inventory is necessarily a source of waste, showing instead that disposing of too much inventory can increase costs in the long run. The authors maintain that the Army should assess the cost of inventory not on its total dollar value but instead on long-term factors such as storage costs, repair costs, and the risk of rebuy.



RESEARCH QUESTION

- Will reducing the Army’s currently high parts inventory save money?



KEY FINDINGS

- For a variety of reasons, including military readiness, the Army is more likely than industry to have surplus inventory.
- Aggressive disposal of surplus inventory can lower future readiness and lead to costly repurchases, resulting in higher long-term costs.
- The Army currently assessed the cost of inventory based on its total dollar value, calculated as the purchase price times the quantity on hand. A better metric is the long-run cost of inventory (LRCoI)—which includes the net present value of storage costs, repairs and washout rates for reparable, obsolescence risk, disposal, and expected purchases.



RECOMMENDATION

- The Army should assess the cost of inventory based on the LRCoI already purchased. RAND has developed formulas to estimate LRCoI that are more likely to result in lower long-run costs than the current metric of total inventory value.



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