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Cutting Commissaries: Approaches to Downsizing a Government Program

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INTRODUCTION

The U.S. military has a long-standing tradition of caring for its own. Since 1879, the Department of Defense (DoD) has supplemented military pay by operating commissaries that provide grocery, meat, and produce items at low cost to military personnel, retirees, and their families. The Defense Commissary Agency (DeCA), a component of the DoD, runs the commissary system, which serves all branches of the U.S. military.

“DeCA’s mission is to deliver a premier commissary benefit to the armed services community that encourages an exciting shopping experience; satisfies customer demand for quality grocery and household products; and delivers exceptional savings while enhancing quality of life; fostering recruitment, retention and readiness, and supporting warfighters’ peace of mind, knowing that their families have secure and affordable access to American products.”¹

COMMISSARY SHOPPING

Commissaries are typically located on or near military bases. Products offered include groceries, meat, produce, dairy, health and beauty aids, household products, and pet supplies. Patrons are active duty, Reserve and Guard members of the Uniformed Services, retirees of these services, authorized family members, DoD civilian employees overseas, and other authorized categories. Shoppers must present a special card issued by the DoD that shows they are eligible to purchase items from a commissary.

Commissary shopping is a significant non-pay benefit for military personnel because goods are offered at a low price. Commissaries sell *all goods* at purchase cost plus 5%,² while grocery stores typically mark up goods by 25% to as much as 70%. DeCA estimates that customers enjoy an average savings of 30% on commissary purchases as compared with commercial stores in the United States.³ Commissary shopping is an integral part of the overall military pay and benefits package.⁴

COMMISSARY OPERATIONS

DeCA operates a global network of 243 grocery stores. It is headquartered at Fort Lee near Petersburg, Va. The organization is structured into five geographical units. Three units administer operations in the continental United States and Puerto Rico. The other two units manage international operations in Europe, Africa, and Asia.

There are 176 domestic commissaries and 67 international commissaries. Twenty-two domestic commissaries are located in areas that the military has classified as “remote and isolated.” A remote and isolated location generally has no nearby town and usually has an extreme environment (for example, Fort Irwin in the Mojave Desert).⁵ The commissary is the only grocery option for military stationed at remote bases.⁶

The nature of the services provided by the international and the “remote and isolated” commissary locations is arguably different than the other domestic locations. International locations provide access to domestic products

that may not be typically available in international retail outlets or would only be available at excessive cost. Providing access to these goods through the commissary system is an important part of “enhancing the quality of life” of military personnel.⁷ Additionally, the locations in the remote and isolated sites provide access to retail services that would otherwise be unavailable in those markets.

Table 1 in the “CC Case Tables” Excel file accompanying this case contains the 2014 net cost of operations for DeCA broken down by U.S. domestic, U.S. remote and isolated, and international. The bottom line on the table, the net cost of operations, is the amount of the government appropriation necessary to fund the commissary system.⁸ This is equal to total program costs less the revenue from sales. The commissary system generated a little more than \$5.5 billion in sales revenue in 2014, with total domestic sales at approximately \$4.7 billion and international sales at \$820 million.

The costs of administering the commissary system can be divided into two categories: variable and fixed costs. The primary variable cost is the cost of goods sold (COGS). The regulations governing the pricing of commissary goods require prices to be set at a 5% mark up above COGS. This imposes a very tight relationship between the variable costs and revenues. The 5% mark up is dedicated to paying for a second type of variable cost, store maintenance and information technology expenses (M&IT). Fixed costs are store operating expenses and central operating expenses. These fixed costs are funded with tax-payer dollars.

The finances for DeCA’s activities are organized into two funds: commissary resale stocks and commissary operations. The inflows and outflows from these funds represent the financial impact of DeCA’s operations. Figure 1 illustrates the relationship between the financial figures listed in Table 1 (“CC Case Tables” Excel file) and the financial organization of DeCA’s dual fund system.

“Commissary Resale Stocks” in Table 1 reflects purchases of grocery, meat, produce, and other items for resale, as well as revenue from the sale of those goods. The inflows to this fund are the total revenues from sales. Outflows from this fund are COGS and M&IT. The 5% mark up, or surcharge, flows into the surcharge collections trust fund. For example, if an item is purchased for \$1 and sold for \$1.05, \$1 of the revenue goes to commissary resale stocks as COGS, and \$0.05 flows to the surcharge collections trust fund. Surcharge collections trust fund resources are used for store information technology, maintenance and equipment, and commissary maintenance and construction. Therefore, yearly variable costs are approximately equal to yearly sales, which means that the entire system operates at a

loss equal to the system-wide fixed costs.⁹

The government appropriation flows into the commissary operations fund. This fund finances the operating costs of commissary stores and administrative overhead at both the regional and headquarters levels of the organization. Store-level operating costs, captured in “Store Operating Expenses” in Table 1 in the “CC Case Tables” Excel file accompanying this case, include labor, utilities, and rent for each store. Regional divisions oversee the activities of the commissaries in their regions and handle region-level purchases, service contracts, and other support activities. Expenditures for the regional divisions and headquarters in Fort Lee are classified as “Central Operating Expenses.” DeCA does not allocate the central operating expenses as indirect costs across the individual store locations; therefore, it is only included in the first column of Table 1 and excluded from the other columns (see Figure 1).

DECA AND SEQUESTRATION

As part of the Budget Control Act of 2011, Congress enacted sequestration: automatic, across-the-board budget cuts triggered if Congress fails to reach a budget agreement. If the sequester is triggered, an automatic 9% cut is applied to all military programs, including the commissaries.¹⁰ This means that DeCA’s Congressional appropriation could be immediately reduced by 9%, or \$114.7 million. In this scenario, DeCA administrators would need to reduce the agency’s net cost of operations by that amount.

Given the very real possibility of a budget cut, consultants hired by the DoD have developed a contingency plan that presents two viable options. The first option is to eliminate regular (nonremote) domestic commissaries and instead give military personnel food vouchers that can be used at commercial grocery stores. The second option is to keep the U.S. commissary system largely intact and strategically close commissaries that provide the least benefit to the military community.

One constraint imposed on any cost-reduction strategy is that all international and remote U.S. locations must be retained. As discussed previously, the commissary plays a much more critical role in the well-being of military personnel in such locations than it does for personnel in domestic U.S. locations. In international and remote U.S. locations, patrons would not have access to domestic grocery products without a commissary. In non-remote U.S. locations, alternatives are readily available in the private sector. The commissary system simply provides those services at a lower cost.

OPTION 1

Under the first option, the DoD would eliminate all 154 domestic commissaries that are not located in remote and isolated areas. Similarly, the 67 international commissaries would also remain open because military personnel deployed overseas and their families have little or no access to basic American products to which they are accustomed.

All store-level costs, except COGS and M&IT, are fixed. That is, store staffing levels, utilities, and rent do not change with the amount of product sold by a particular store. If a store is closed, however, all COGS, M&IT, and operating expenses associated with that particular store would be eliminated.

If all domestic, non-remote commissaries are eliminated, DeCA estimates it will be able to reduce central operating expenses by 30%. The cost reduction will come from eliminating store administrators, logistics centers, and their associated overhead. DeCA headquarters in Fort Lee will take over direct support of the 22 remote commissaries and will also be responsible for administering the grocery voucher program. The divisions in the Europe area and Pacific area will be unaffected by the closure of domestic stores.

Eliminating all 154 domestic commissaries will reduce the net cost of operations by more than the \$114.7 million needed to meet the sequestration target. The excess in cost reduction, the amount more than the \$114.7 million target, will be used to fund the grocery voucher program.

OPTION 2

Under Option 2, the DeCA would close a subset of its 154 domestic stores. As with Option 1, the remote and isolated commissaries would remain open. By combining some of the domestic zones and through normal worker attrition, DeCA estimates that it would be able to reduce its labor force enough to achieve a 10% reduction in central operating expenses.

Table 2 in the "CC Case Tables" Excel file accompanying this case provides store-level information on all domestic regular commissaries. One of the key pieces of information in the table is size of the population eligible to shop at each commissary location. The population figures represent the number of eligible shoppers living within a 20-mile radius of each shopping location. While 20 miles may seem like a long way to go for groceries, the substantial price discounts drive sales. The 20-mile radius is also the measure used by DeCA for its decisions about where to locate its facilities.

To determine which stores to close, the stores will be ranked based on some measure of service provision. The lowest-ranked stores, such as the stores that provide the least amount of service, will be closed first. As each store is closed, its appropriation (government funding in support of

that store) is counted as savings toward the budget reduction target. Stores will be progressively shut until the 9% cost reduction target is met. Exhibit A illustrates the ranking procedure using sales per dollar of appropriation.

Exhibit A: An Illustration of the Store Ranking and Shutting Procedure

Suppose there are five stores with the sales and appropriations given below (sorted by shopper sales). DeCA management wishes to cut 20 in appropriation.

Store	Sales	Appropriation
1	450	10
2	500	10
3	600	15
4	1000	20
5	2000	30

If DeCA uses sales/appropriation as the metric, then store rankings are as follows:

Store	Sales	Appropriation	Sales/ Appropriation	Stores Cut
3	600	15	40	X
1	450	10	45	X
2	500	10	50	
4	1000	20	50	
5	2000	30	66.7	

Using the sales/appropriation metric, DeCA will begin by dropping store No. 3 and saving 15. But this savings is less than the 20 needed, and DeCA will then drop store No. 1 and save a further 10. Since the federal appropriation for DeCA has been reduced by 25, the target reduction of 20 has been met, and DeCA will not cut any more stores.

The central task for Option 2 is to develop measures of service provision that achieve the budget reduction goals, while minimizing the adverse effects of the service reductions on the active duty military and their families. There are two different perspectives about what it means to provide services. One perspective is that stores that sell more are providing a greater service. Stores that sell more, however, generally have larger appropriations. Closing these larger and higher volume locations would enable the military to reach its target of a 9% reduction in appropriations by closing fewer stores. The second perspective is that providing service should take into account how intensively each location is used by its eligible population.¹¹ A small

amount of eligible shoppers who each purchase large quantities from the commissary is qualitatively distinct from a large amount of eligible shoppers who each make relatively small or infrequent purchases. The first case indicates a small number of people are highly dependent on the store, while the second suggests a large number of people obtain a minor benefit from the store.

Observing which commissaries are used more intensively may also indicate the quality of alternative shopping options in the area. If private grocery stores are able to offer goods at competitive prices, then military shoppers would likely use the commissary less often. This helps differentiate the level of benefit provided across commissary locations.

While we have mentioned DeCA and the DoD, Congress is a major factor in implementing any change. Congress can overrule both the DoD and DeCA if it does not like the contingency plan. From Congress' perspective, the most important part of any change is the impact on voters. All else equal, the more voters negatively affected by a change, the less likely Congress will allow the change to go forward.

The laws that govern the commissary's administration require DeCA to only consider the welfare of active duty military personnel and their families. This explicitly excludes retirees that are also eligible to shop in commissary locations. Realistically, however, the members of Congress who would ultimately have to approve a given set of cuts may take into account the impact on the retired population near each store.

USING THE PERSPECTIVE OF THE DOD, PLEASE PREPARE A REPORT ANSWERING THE FOLLOWING QUESTIONS.

Question 1. Calculate the net cost of operations if the DoD chooses Option 1. Which costs are removed, which are reduced, and which are unaffected by the change? How much will the DoD save over and above the targeted 9% reduction in costs, that is, how much money will be available for grocery vouchers?

Question 2. In your opinion, who should be eligible to receive the grocery vouchers described under Option 1? Should they go only to active duty members of the military? Should they go to active duty members and dependents? Should they go to all eligible members? Given your choice, what is the value of each voucher?

Question 3. Suppose the DoD chooses Option 2. Create a metric that captures the idea that stores providing greater benefit per appropriation dollar are more important. Using this metric, rank the stores. Which stores are cut? How many active duty service members and dependents lose the shopping benefit? How many total eligible members (active duty service members and dependents plus retirees and dependents) lose the shopping benefit?

Question 4. Suppose the DoD chooses Option 2. Create a metric that captures the idea that stores providing greater benefit per potential customer (active duty and dependents) are more important. Using this metric, rank the stores. Which stores are cut? How many active duty service members and dependents lose the shopping benefit? How many total eligible members (active duty service members and dependents plus retirees and dependents) lose the shopping benefit?

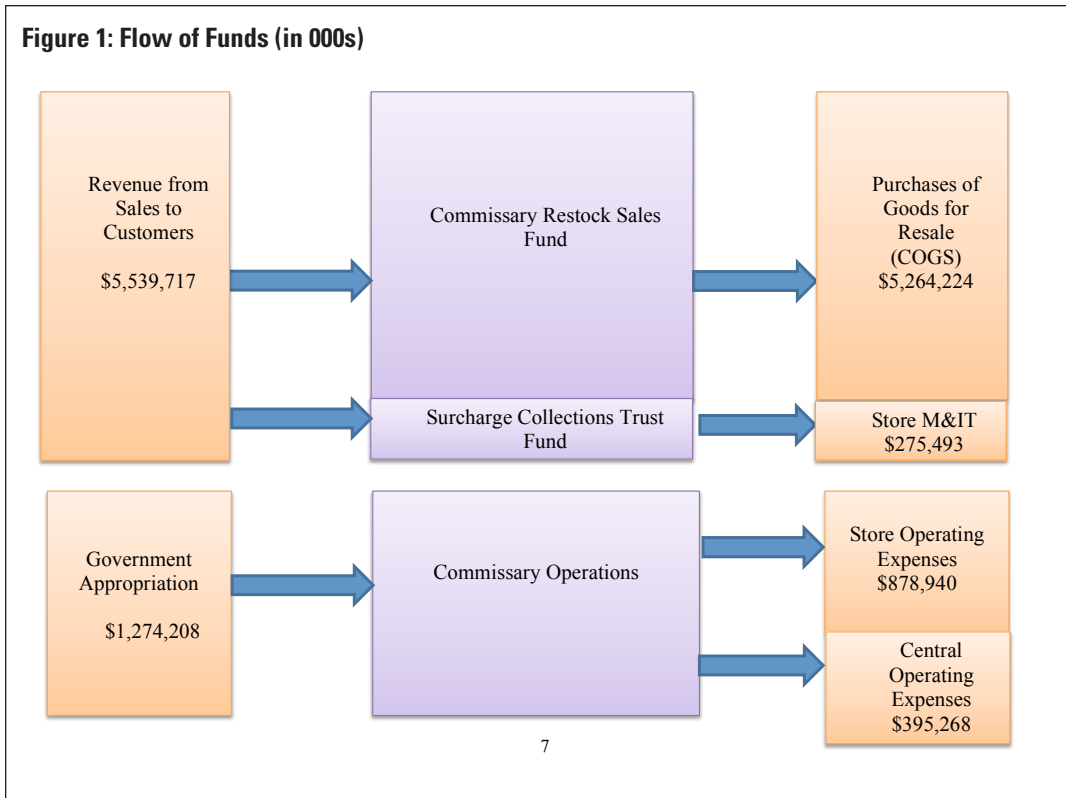
Question 5. In your opinion, what are the most important factors to consider when designing a ranking strategy under Option 2? Why? How do you balance the organizational goals with financial considerations? Which of the two metrics you developed in Questions 3 and 4 would you use to guide the budget reductions? Why?

Question 6. Compare Option 1 with your preferred method under Option 2 on the following criteria:

- The complexity of administering the new program.
- Impact on active duty and retirees.
- Impact on the quality of life for active duty personnel and their families.

Question 7. Given your answer to Question 6, how many eligible shoppers (in other words, voters) are likely to be affected by your change? Is Congress likely to support this change or would they prefer another option?

Figure 1: Flow of Funds (in 000s)



END NOTES

¹Defense Commissary Agency, Annual Financial Report Fiscal Year 2014, 2015, p. 46, note 1.

²Sales prices of goods are required by law to be set at the actual cost of the goods plus the cost of transportation to the first destination plus the estimated cost of shrinkage, spoilage and pilferage. Section 2484 also states that a 5% surcharge shall be collected on the sale of all goods. This surcharge is used only to fund construction, repair, improvement, and maintenance. See: “Commissary Stores: Merchandise That May Be Sold; Uniform Surcharges and Pricing,” 10 U.S.C. § 2484, 2010.

³Defense Commissary Agency, Annual Financial Report Fiscal Year 2015, 2016, p. 31. Savings are tracked using a comprehensive database of actual prices of items sold and scanned by DeCA and competition grocery and supercenter chains using standard industry procedures. A market basket sample approach is used to compare non-scannable or non-standardized items like produce and meat (Defense Commissary Agency, Annual Financial Report Fiscal Year 2014, 2015, p. 32).

⁴In 2014, the average U.S. resident had spent \$4,000 on groceries. If they had shopped exclusively at the commissary, they would have saved roughly $0.3 \times 4,000 = \$1,200$.

⁵Department of Defense, Instruction Number 1015.10, Enclosure 7, “Military Morale, Welfare, and Recreation (MWR) Programs,” July 6, 2009. This instruction document provides a list of situations that can lead to a site being considered remote and isolated. Military bases must submit documentation to the Principal Deputy Under-Secretary of Defense for Personnel in order to be eligible for the remote and isolated classification.

⁶Active duty military assigned to the base always have the option of eating in the mess hall on base.

⁷For example, there were approximately 50,000 troops, along with approximately 40,000 dependents, stationed in Japan in 2014. The typical Japanese grocery store does not carry American staples such as coffee, peanut butter, or breakfast cereal.

⁸An appropriation refers to the legal authority to spend tax dollars on a specific budgetary purpose. In this setting, it refers to the federal budget line item in support of DeCA that is targeted for reduction.

⁹Proceeds from sales in one period are used to purchase inventory and fund M&IT expenditures in the next period. The time between the sale and subsequent expenditure of the proceeds from the sale is relatively short because inventory turns over 13 times per year.

¹⁰Only military pay and the Department of Veterans Affairs are exempt from the cuts.

¹¹The number of eligible shoppers for each store only counts those potential shoppers permanently stationed at the base. For most commissaries, this is an excellent estimate of the number of shoppers. But some commissaries, like those with a major military airport or that provide short-term training, may have a significant number of transient shoppers. A significant amount of transient shoppers will raise the average sales per eligible shopper.

¹²Congressional Budget Office, “Estimated Impact of Automatic Budget Enforcement Procedures Specified in the Budget Control Act,” September 12, 2011, <https://www.cbo.gov/publication/42754>.

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