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Lessons from the North

Canada's Privatization
of Military Ammunition
Production

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Prepared for the Office of the Secretary of Defense

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Summary

Background

Industrialized, Western nations with modern armies typically get their military materiel, including ammunition, from private-sector providers. By contrast, the U.S. Department of Defense (DoD) spends about one-third of its ammunition dollars in plants that are either wholly owned and operated by the U.S. government or are owned by the government but operated by contractors.

Between 1965 and 1986, Canada transitioned from government to private ownership of its domestic ammunition-manufacturing base. Today, that domestic production base consists entirely of private production facilities that earn the bulk of their revenues from sales to other countries, while still providing the Canadian military with its needed munitions. The Canadian example raises the question of whether that nation's experience might offer some useful lessons for the United States.

DoD's selection of Canada for this case study is particularly apt. The successful privatization of the United Kingdom's industrial base has already been well documented. The privatization of Australia's ammunition base, while apparently successful, is more recent and therefore lacks the longer experience that Canada now has with privatization. Hence, the Canadian experience provides a useful case study because the privatization has had almost two decades to mature but has not received wide examination outside that country.

This Report

The following contains the results of a case study of the privatization of Canada's government-owned ammunition plants. It documents the long history of Canada's reliance on a mix of private and public munitions plants, culminating in complete privatization less than 20 years ago.

The case study was done at the request of the U.S. DoD to determine what lessons, if any, the Canadian experience might offer should the U.S. Army consider privatizing its government-owned plants. To complete the study, we drew on published documents as well as a series of interviews with officials from the Canadian government and from the commercial firms that now provide the Canadian military with its ammunition.

This report is a companion to *Rethinking Governance of the Army's Arsenal and Ammunition Plants*, a report published by RAND's Arroyo Center (Hix et al., 2003b). It should be read within the context of the earlier report, which is intended to be distributed with the report at hand.

We undertook the present research with a substantially documented conclusion from the companion report that privatization of the U.S. ammunition base offers a high likelihood of achieving substantial net benefits for the nation. Hence, we did not begin the research with a blank slate. Further, the research embraces the canonical approach to cost-benefit analysis that, in a capitalist economic system, private ownership of capital is to be preferred to government ownership unless it can be shown that government ownership yields greater long-term benefits than does private ownership. Therefore, while we entered the research at hand with open minds about the Canadian experience, we were appropriately informed by and grounded in the earlier research in Hix et al., 2003b.

Canada Is Not the United States—but Does It Matter?

Canada differs from the United States along many dimensions. One of the most obvious is in the size of its population and the corresponding size of its military. The Canadian military is about one twentieth the size of that in the United States, and Canada's defense expenditures are about one-fiftieth of those of the United States. Accordingly, Canada's defense industrial base is substantially smaller than that of the United States. Another significant difference is the focus of the respective militaries. The U.S. military has a global orientation. Canada, its commitments to the North Atlantic Treaty Organization notwithstanding, has more of a domestic focus.

Political differences are also large. The United States elects the members of both houses of Congress and the president directly (the latter through the Electoral College). By contrast, under Canada's parliamentary system, only the members of the lower house, the House of Commons, are elected directly. Members of the upper house, the Senate, are appointed for life. The prime minister and his cabinet are members of the House of Commons and are drawn from the majority party in power. The prime minister is the leader of the majority party and thus has considerable influence in the House of Commons, the source of legislative proposals. Furthermore, members of the Canadian lower house are subject to less frequent elections than are members of the U.S. House of Representatives. The conclusion is that the Canadian majority party has relatively more power than does its U.S. counterpart and, when elected on a broad mandate, is more capable of implementing its vision. This political setting posed no significant impediment to Canada's privatization.

Some would argue that these very substantial differences render the Canadian example moot. Our analysis suggests that this is not the case. While it is true that the U.S. ammunition base is much larger than that of Canada, in reality it employs a relatively small number of government workers, who operate only 3 of 14 ammunition plants. Government employment at the other plants is small, generally consisting of a handful of government employees who administer contracts and attend to safety and command and control matters. While

the process of privatization might be more complicated politically, the deliberate process Canada employed could also work in the United States. Furthermore, some of the same issues addressed in the Canadian privatization effort would have to be dealt with in the United States—e.g., employees with vested government benefits and environmental liabilities.

Insights from the Canadian Experience

The case study offers a number of insights of potential relevance to the U.S. industrial base.

Canadian Government Satisfied with the Results of Privatization

Privatization of Canada's ammunition industry has had positive economic results. Employment has increased at existing plants since privatization. While the prices the Canadian government pays for ammunition are not made public, the private owners of Canadian plants operate efficiently enough to thrive in international markets. Both government officials and private manufacturers report that prices have steadily declined since privatization. Interviews with government officials revealed no interest in returning to government ownership of plants. Despite sharp declines in government ammunition procurement, employment and production at all three plants that produce ammunition have increased since privatization, and the plants' global market share has increased dramatically. At the same time, plant productivity has improved, lowering prices to the government.

Nevertheless, lack of access to detailed cost and price data precludes a quantitative assessment of the precise extent of reduced cost to the government. That said, we found in interviews as well as the academic literature no enthusiasm for return to government ownership.

Canadian Experience Valid for the United States

The positive outcomes the Canadians report—increased employment and lower prices—resulted from the incentives private owners had

after privatization to expand their business base, not from the relatively small size of the base. In fact, the larger U.S. government procurement could provide even greater opportunities for efficiencies and savings than are possible in the relatively modest Canadian ammunition budget.

Preparation of Plants for Sale Enhances Their Attractiveness

In preparation for the 1986 privatization of the Canadian Arsenals Limited (CAL) plants, the crown corporation¹ undertook an eight-year program to streamline its operations, rejuvenate its management, increase its revenues, and improve its profitability. Between 1978 and 1985, the organization was able to turn annual losses into steadily increasing excesses of income over expenses and increase its income by more than tenfold. Without these preparations, the plants would have been more difficult to sell and, if sold, would have fetched a far lower price, consistent with the financial prospects of the plants. This lesson is most important to the U.S. government-owned, government-operated plants and arsenals. These entities, like CAL in the 1970s, now require substantial supplemental funding on top of customer revenues to break even. Accordingly, the transitional step of creating a federal government corporation to improve their business processes and financial picture before attempting to sell them could be helpful. For the government-owned, contractor-operated (GOCO) plants, whose operators are now profitable, the preparation problem is less significant. Before selling the GOCO plants, the government would need to concern itself with the condition of the physical plant, demonstrating the viability of tenant activities, and ironing out the transitional issues associated with the environmental liabilities, which need not be remediated before sale if the land is to be used for a like purpose.

¹ Crown corporations are analogous to federal government corporations (FGCs) in the United States. Like FGCs, crown corporations are organized and operated to execute national policy.

Potential Role of States in the Disposition of U.S. Ammunition Plants

Because the Canadian firm that bought the ammunition plants was reluctant to take on the environmental risk at one of the production sites, the Province of Quebec took ownership of the land from its former private owner as a way of ensuring continued production and employment at that environmentally mistreated property. While U.S. law precludes the same action, a state may share use of federally owned property.

Competition Matters

SNC Technologies, which bought the ammunition plants owned by CAL in 1986, enjoys a near-monopoly in providing munitions to the Canadian government. But it must also compete in often protectionist international markets. As a result, the Canadian government benefits from the increased productivity and efficiency that SNC achieves because of competitive pressures on its international sales. The size of the U.S. market and the number of U.S. manufacturers would likely result in competition even for U.S. government contracts after privatization of U.S. plants, thereby providing competitive incentives even if the plants were unable for some reason to compete internationally.

Privatization Does Not Relieve the Government of the Need for an Industrial Base Policy

Regardless of whether a domestic industrial base is public or private, so long as the government has an interest in its continued existence it needs a set of policies concerning the following:

1. Which items will be manufactured domestically?
2. To what extent will the base be subjected to competition?
3. To what extent will the government subsidize a privately owned base?
4. Will private firms in the base be permitted to fail financially?

The central point here is that privatization does not obviate the need for an industrial base policy. It does, however, obviate the need for government management of plants.

Bankruptcy of a Private Supplier Does Not Necessarily Create a Crisis for the Government

Despite the financial failures of private owners at Valleyfield, one of the privatized plants involved in Canadian ammunition production, government requirements continued to be met. Bankruptcies often mean only financial reorganizations from which the firm emerges stronger than before. Hence, fear of bankruptcy should not deter privatization. Virtually the entire U.S. industrial base is already privatized, including 70 plants that receive about two-thirds of U.S. ammunition dollars.

Selection of Buyers Matters

In 1986 when the Canadian government decided to privatize CAL, because of the lessons it learned from the earlier sale of its Valleyfield plant to disappointing owners, it invited only a handful of highly qualified firms to bid. It was more interested in ensuring reliable, responsible manufacturing than it was in generating the highest possible proceeds from an investor unschooled in the business. A similar approach might serve the United States as well in any future privatization.

Contract Types Matter

After the 1986 privatization of ammunition production, the Canadian government continued with cost-plus contracts that lacked incentives for improved productivity (so that profits were shielded to a large extent from competitive cost pressures). When government purchases declined, the firm that bought the ammunition plants realized it needed to compete internationally to grow its business and survive in the face of sharply declining government purchases. Accordingly, it and the government agreed to new contract vehicles that provided incentives for the firm to become more efficient and share in the rewards of improved productivity.

The Congeniality of the Canadian Political System to Privatization

As discussed above, the parliamentary system of Canada generates less organized local political opposition than is the case in the United

States, making U.S. privatization more difficult and possibly explaining in part the continued government ownership of the U.S. base.

Advantages of Gradual Privatization

The sequential privatization followed by the Canadian government enabled it to learn from each prior experience and provided long-term lessons. Most important, because of its experience with privatization, the government restricted its 1986 solicitation to only a handful of stable, reliable, experienced Canadian firms. Further, the early experience mitigated any residual anxiety in the Canadian Department of National Defence (DND) and in the Canadian forces about privatization. This aided the political process.

Providing for Affected Employees Is Essential

In the 1986 privatization, the government worked closely with the commercial firm that took over the ammunition production to ensure that employees would not lose vested benefits as a result of privatization.

Final Words on the Relevance of the Canadian Experience for the United States

Opponents of privatization of U.S. Army plants typically offer variations on one or more of the following three arguments in favor of the status quo: The private sector will not respond to the competition for sale of government ammunition plants, privatization will increase costs to the government, and private ownership is too risky.

With respect to the first argument, a potential lack of responsiveness on the part of ammunition manufacturers, the Canadian experience is instructive. Lack of private interest was simply not a problem. In the 1960s, private Canadian firms initiated purchase offers for three CAL plants that at the time the government had not even yet decided to sell. And in the government-initiated privatization of the remaining CAL plants in 1986, five invited firms and even

one uninvited firm responded with offers. At least two firms have made overtures to the U.S. Army about buying two of its plants. Nevertheless, one cannot predict in advance of actual offers the extent of competition for U.S. plants if the government offers them for sale. But the government bears no financial risk in offering the plants for sale; it need not accept unattractive offers. The uncertain demand for plants reinforces the need for a gradual approach to privatization, such as the one the Canadians employed.

The second argument, increased costs, has not been borne out in the Canadian experience. Canadian government officials report improved productivity and lower prices, particularly in the 1986 privatization. SNC's competitive position in the international ammunition market reinforces the value of the incentives competition provides to improve a firm's efficiency. Today, the U.S. government-operated ammunition plants lack such incentives, as do the contractors who operate government plants under long-term facility-use contracts. While Canada lacks domestic competition for SNC, the firm prospers under the competitive pressures of international markets.

The Canadian story bears directly on the third argument, the risks of private ownership. At one of SNC's current plants, Valleyfield, two prior owners went bankrupt without significant production failures. SNC is now bringing that plant into a more competitive position. Certainly, private ownership entails a risk that government ownership avoids. But government ownership forgoes the largely positive results privatization can bring. The Canadian experience illustrates that a firm's financial failure need not equate to substantial risk to national security. If such fears were valid, one might expect the U.S. Army to propose nationalizing the assets of the 70 or so completely private plants that consume about two-thirds of the Army's ammunition dollars.

The research cannot and was not intended to prove that privatization of U.S. plants would achieve similar results. What the research does demonstrate, however, is that Canada, with a long history of government ownership of much of its ammunition manufacturing base, was able to successfully privatize its entire base with positive outcomes and with no apparent regrets. The Canadian government

reports a private domestic base that is competitive in international markets while offering reduced ammunition costs to its government. Despite early financial failures at one privatized plant, the base is now in the hands of financially sound owners.

In sum, while there are no guarantees that the United States can successfully privatize its existing government-owned plants, the Canadian experience provides cause for optimism. The risks of privatizing the U.S. base appear limited and manageable. The Canadian success is reinforced by all of the United States' major allies' continuing reliance on private ammunition manufacturing. Finally, the United States itself already successfully relies on the private sector for most of the dollar value of its ammunition and components. Collectively, these international and domestic policies give cause for optimism that a measured approach to privatization of the U.S. base could bear similar fruit. They do not, however, prove the case.

The Canadian experience offers numerous useful insights into the privatization process. If the United States decides to pursue a similar course, it would do well to study the Canadian experience in detail.