Growing the Defence Budget: What Would Two Percent of GDP Look Like?

by J. Craig Stone
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WHAT WOULD TWO PERCENT OF GDP LOOK LIKE?

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With the presentation of next year’s budget to Parliament expected in the coming weeks and the various items in the media over the past few months about the Canadian Armed Forces and defence spending, it seems timely to discuss what an increased defence budget might mean. What would increasing the defence budget to the NATO target of two per cent of GDP mean in terms of size and the discussion around Canada’s not meeting the agreed-upon target?

According to Canada’s Public Accounts, the budget for the Department of National Defence in fiscal year 2015/16 was $18.66 billion and Canada’s GDP for 2016, according to the fall economic update, is $2.019 trillion. Based on that update, defence spending is 0.9 per cent of GDP. Thus, the NATO target of two per cent of GDP would require Canada to have a defence budget in fiscal year 2015/16 of approximately $40 billion. Even growth to 1.5 per cent of GDP, which a number of individuals identified in the Defence Policy Review submissions as perhaps suitable for Canada, would require a defence budget of approximately $30.3 billion, significantly larger than the existing $18.6 billion.

The intent of this short commentary is to look at how the defence budget might grow to 1.5 or two per cent of GDP over time and what that growth could mean for the Canadian Forces. It is important to note that there is no viable economic reason for a nation to establish a defence budget based on its GDP. Nations should be establishing their defence budgets based on perceived threats to their security and their national interests. In addition, how much a nation spends on its armed forces as a percentage of GDP is not a good measure for determining actual military capability and effectiveness of operations. Canada’s military is far more capable than those of other nations that spend much more on defence as a percentage of GDP. Nevertheless, GDP measures are often referred to because they are useful for establishing, in comparison to others, how much of a burden a nation is placing on its society and its citizens to pay for its defence, particularly within the context of a defensive alliance like NATO.

Regardless of the issues raised above about the utility of using GDP as a measure, this commentary will do just that in order to deal with the dilemma facing the Canadian government, which agreed to a two per cent target. It would be useful to establish some assumptions at the outset. From those assumptions, an agreed-upon growth for Canada’s GDP can be established, and based on that GDP, an identified value for the defence budget can be determined based on the expected size of the GDP in a given year.

As a precursor to looking at how to increase the defence budget, it would be useful to first understand what is and is not part of the defence budget when comparing it with the NATO targets. In this context Canada is in fact short-changing itself in relation to its NATO allies because Canada does not include all of the things that some other nations include in the calculation of their defence budget submissions to NATO. What is the NATO definition of defence spending and why does Canada report different defence spending data in its own Department of Finance Fiscal Reference Tables, its Public Accounts and its annual reports on plans and priorities? Understanding why the numbers are different and why they are presented differently is not the intent of this commentary, but it is important to note that which set of
numbers someone is using is essential if one wants to have a meaningful fact-based discussion about defence spending.

NATO defines defence expenditures as “payments made by a national government specifically to meet the needs of its armed forces or those of its allies.” It’s a broad enough definition but the details matter. The definition allows for the inclusion of other forces such as “Ministry of Interior Troops, border guards, national police forces, customs, coast guard, etc.” and those “that are trained in military tactics, are equipped as a military force ... and can, realistically, be deployed outside national territory in support of a military force.” The inclusion of this as part of the definition raises the possibility of including Canada’s Coast Guard, the RCMP and to a lesser extent the Canada Border Services Agency as part of our reported defence expenditures to NATO. The NATO definition also allows for the inclusion of items like pension payments made to retired military and civilian employees, expenditures for peacekeeping and humanitarian operations paid by other departments, NATO common infrastructure, financial assistance from one Allied nation to another, and research and development costs. Canada includes some of these figures but not others.

Based on the above information, the question becomes what could Canada’s defence expenditures be if all of the possible data were reported? For example, adding the costs of the Coast Guard and the RCMP information from the Public Accounts to the defence data would increase the budget from $18.6 billion to $23.6 billion ($2.2 billion and $2.8 billion for the Coast Guard and RCMP respectively) or 1.4 per cent of GDP. It would, of course, not be as straightforward as just taking the total from the Public Accounts because not all of the expenditures captured in the Public Accounts can be directly attributed to the possible military-related costs. For example, the Coast Guard’s 2015-2018 Integrated Business and Human Resources Plan indicates a funding allocation of $855 million for 2014/15 and the Fisheries, Oceans and Coast Guard Report on Plans and Priorities indicates funding of $1.1 billion in fiscal year 2016/17 for secure and safe waters, a primarily and solely Coast Guard function. This highlights the importance of understanding which numbers are being used, but the relevant point for this commentary is that Canada could improve the level of defence spending for NATO purposes by including all of the activities it is allowed to include based on the NATO definition. It might not be 1.4 per cent of GDP but it would be more than 0.9 per cent.

The issue in deciding what and how much to add is how genuine the notion is that Canada’s Coast Guard and RCMP are trained as military forces and/or could be deployed outside national territory to support military operations. Canada has not deployed its Coast Guard outside national territory and it is not trained as a military force, but Canada has sent RCMP abroad to assist with peace support operations. Also, the military assists the Coast Guard with Fisheries patrols. Could those be considered military operations for the purpose of calculating NATO defence expenditures? There is clearly some room to maneuver to more accurately reflect our defence spending within the context of NATO’s definition. However, regardless of how much of the Coast Guard and RCMP budgets are included in the calculation, Canada would still not reach the required target of two per cent, so additional funding is still needed if Canada is to achieve this goal. We will now discuss how it gets to that level.
Figure 1 shows the defence budget growing to 1.5 per cent and two per cent of GDP by increments of either 0.1 per cent or 0.05 per cent of GDP. In other words, the defence budget would grow from 0.9 per cent of GDP to either 1.0 per cent or 0.095 per cent in the next year followed by a budget of 1.1 per cent or one per cent the subsequent year until the two per cent target is achieved. There is no policy or economic reason for this other than mathematical simplicity and a recognition that any increase in Canada’s defence budget would have to be done gradually. No government would raise the budget from 0.9 per cent to 1.5 per cent or two per cent of GDP in a single year. Consequently, the gradual increase of 0.1 per cent or 0.05 per cent a year provides a reference example of two possible gradual increases to the NATO target. Increasing or slowing the pace of growth would fit somewhere on either side of the results shown in Figure 1, but ultimately the two per cent of GDP in 2026 or 2036 would result in the same value. The data are based on two key assumptions.

First, the fall economic update for GDP is utilized out to 2021 which has GDP growing at 1.8 per cent and 1.9 per cent in the years from 2017 to 2021. An optimistic GDP growth of two per cent is utilized beyond 2021. Second, a decision by government to grow the budget as a percentage of GDP over a period of time to reach 1.5 per cent or two per cent negates the requirement for the three per cent nominal growth to the defence budget that currently exists. For comparative purposes, that three per cent nominal growth is also shown to highlight the significance of the difference over time.
Two key issues come out of the data shown in Figure 1. First, increasing the defence budget by 0.1 or 0.05 percentage points of GDP per year over time will grow the defence budget from the existing 0.9 per cent of GDP to the two per cent target between 2022 and 2036 depending on which growth path is chosen. Table 1 provides the key macro level data reflected in Figure 1. Second, targeting defence budget increases as a percentage of GDP will increase the defence budget significantly more than the three per cent nominal growth that the government is committed to in the current budget framework. By 2036 the defence budget would be approximately $59.6 billion at two per cent of GDP or approximately $33.7 billion with the three per cent nominal increase, a difference of $25.9 billion.

Table 1: Defence Budget Growth to Reach Two Per Cent of GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP ($T)</th>
<th>0.1% GDP Growth ($B)</th>
<th>0.05% GDP Growth ($B)</th>
<th>3% Nominal Growth ($B)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.02</td>
<td>18.6</td>
<td>18.6</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>2.36</td>
<td>33.9</td>
<td>29.4</td>
<td>22.3</td>
<td>1.5% of GDP reached for 0.1% increase</td>
</tr>
<tr>
<td>2026</td>
<td>2.44</td>
<td>46.4</td>
<td>36.7</td>
<td>25.1</td>
<td>2% of GDP reached for 0.1% increase</td>
</tr>
<tr>
<td>2036</td>
<td>2.98</td>
<td>59.6</td>
<td>59.6</td>
<td>33.7</td>
<td>2% of GDP reached for 0.05% increase</td>
</tr>
</tbody>
</table>

Increasing the defence budget to the scale shown in these data would allow the CAF a variety of options for utilizing the increased funding, including some combination of growing the size of the force and spending more on capital investment. Any combination of the two would provide the government with more flexibility and options for deploying the military in support of its foreign policy goals. The difficulty for the government in the current economic climate is that it cannot really afford to increase the defence budget without running a larger deficit or finding other ways to increase revenue.

The obvious question is: Does any of this matter? Yes, it does. In the NATO context, there is room for the government to add additional activities to its level of defence spending so that the comparison is more defensible. However, it must avoid including unrealistic items; for example, the entire Coast Guard and RCMP budgets should not be included. To do so would just create an environment whereby the spending levels are meaningless and unbelievable for those who need to be convinced that the government is at least trying to move towards the two per cent target.

The other issue that is clear from this very simple example of growth is that the three per cent nominal growth of the defence budget will grow it as a percentage of GDP over time but will take generations to get to the two per cent target. It only reaches 1.3 per cent by 2050. Perhaps the other more important issue is that none of these data have been adjusted for inflation, likely business cycles and economic downturns, etc. They are based on an optimistic picture of GDP growing by two per cent from 2021 to 2036, something highly unlikely to occur.
Increasing the defence budget to the NATO target would mean a significantly larger budget that provides the CAF and the government with more flexibility and military capability options to deal with the government’s foreign policy goals. In 2036, $60 billion rather than $33.7 billion will provide for significant capability and readiness enhancements. This number would be less if the government includes additional expenditures that fall within the NATO definition and would get to two per cent before 2036, but it would still be a substantial increase.

1 The defence policy review, operations against ISIS, an upcoming peacekeeping mission somewhere in Africa, procurement requirements, veterans’ health care, NATO defence spending levels and the Trump administration’s comments about nations not meeting their defence spending obligations are just a few of the issues that have been in the media over the last few months.

2 Canada, Public Accounts Table 3 and Statistics Canada National Accounts. It is worth noting that the national accounts for Statistics Canada have GDP in October 2016 estimated at $1.669 trillion and at the end of fiscal year 2015/16 at $1.67 trillion. The differences are explainable, but for the purposes of this commentary, the important issue is consistency of sources — Public Accounts or Stats Can, but not both together.

3 Two per cent of $2.019 trillion is $40.3 billion and extrapolating $18.66 billion as .9 per cent to two per cent is $41.3 billion.


5 Ibid.

About the Author

Dr. Craig Stone holds a BA in Economics from the University of Manitoba and an MA and PhD in War Studies (Defence Economics) from the Royal Military College of Canada. Dr Stone joined the academic staff at Canadian Forces College (CFC) as an Assistant Professor in the summer of 2005 after 29 years in the Canadian Forces, the last five at CFC in the Strategic Studies Directorate. He teaches Strategic Resource Management and Formulating National Security Strategy on the National Security Programme, and Defence Management on the Joint Command and Staff Programme. Dr Stone was a member of the Department of National Defence Defence Industrial Advisory Committee from 2009 until 2014, a member of the Interim Board of Directors for a new Defence Analysis Institute in 2014, and served as both the Director of Academics, Canadian Forces College from December 2008 until June 2015 and the Head of the Department of Defence Studies and then Associate Dean of Arts Royal Military College of Canada during the same time period.

As a military officer for 29 years in the Royal Canadian Artillery, Dr Stone served in a variety of regimental positions in the First and Third Regiments, Royal Canadian Horse Artillery in Lahr, Germany, and Shilo, Manitoba. Employment outside the Artillery included a variety of staff positions at the Brigade, Area and National Defence Headquarters levels. Dr Stone is a graduate of Canadian Land Forces Command and Staff Course 8801, and Canadian Forces Command and Staff Course 21.
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