

Fiscal Austerity Without Sacrificing Effectiveness:

IS VIRTUAL TRAINING THE ANSWER?





46

The aims of austerity are laudable, but we should question its efficacy... Cutting the budget and hoping for the best is not an effective way to generate superior outcomes.

— FPRI ¹

How Austerity Affects Defense Budgets

It is the government's mandate to ensure that their military is capable of defending the nation against internal and external threats. Defending one's country extends to <u>safeguarding the nation's strategic interests</u> and is recognized as one of the main functions of governments and a justification for reasonable taxation and massive budget allocations. ² In fact, total global military expenditure climbed to \$1.9 billion in 2020, a rise of 2.6% compared to the previous year, according to data published by the Stockholm International Peace Research Institute (see figure 1). ³

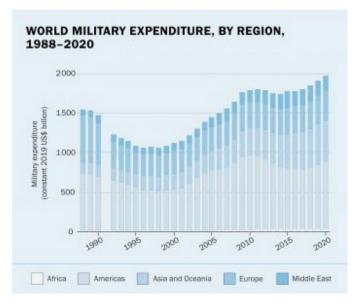


Figure 1: World Military Expenditure (by Region) from 1988-2020 Image Source: SIPRI 3

However, governments all over the world are now faced with increasing fiscal deficits and debt as they recover from the effects of the COVID-19 pandemic and the repercussions of the ongoing political tensions between Russia and Ukraine. Although the global economy is slowly and steadily bouncing back, the upturn will likely be long and volatile. For this reason, governments are called on to put austerity measures in place to revive their financial health and stability.

A 2020 study by the International Monetary Fund (IMF) reveals that based on their analysis of expenditure projections, budget cuts are estimated in 159 countries in 2022. This is expected to persist at least until 2025, with an average of 139 countries awaiting budget cuts every year. ⁴ Moreover, there has been a lot of debate over the military's massive budget allocation, with both politicians and citizens in various countries such as the <u>United States</u> ⁵, <u>Japan</u> ⁶, <u>South Korea</u> ⁷, and <u>the UK</u> ⁸ calling for cuts to their national security budgets in order to reallocate funds for more pressing matters and necessities.



The Cost of Military Training

There is an existing structure in military budgets that allows for the flexibility necessary to enforce reductions. McKinsey's analysis of defense spending across more than 30 countries reveals that defense budgets often have a sizeable fixed component, with only 25% of the budget flexible in the short term (see figure 2). This, in most cases, comprises training costs and other consumables. ⁹ When military administrators need to cut corners, these short-term variables are usually scaled down to save money.

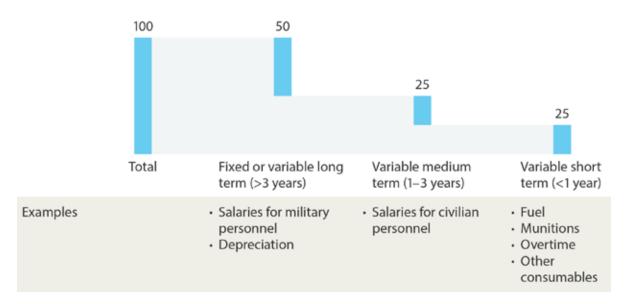


Figure 2: Typical Components of Defense Budgets Image Source: McKinsey 9

Military training, however, is very expensive. The <u>U.S. Army Training and Doctrine Command</u> estimated the cost to train a soldier to his/her first operational assignment to be at \$36,000 or \$200 (range \$100–\$400) per day for 180 days. ¹⁰ In the UK, it costs £38,100 per trainee to complete basic training alone, <u>according to its Ministry of Defence</u>. ¹¹ That figure does not cover advanced, specialist training, and combat exercises requiring more paraphernalia which can further raise expenditures.

Scaling down training expenditures might leave military personnel incapable of delivering combat power when necessary. Ongoing budget cuts and the ever changing nature of warfare itself pose significant challenges and threats to the military's ability to effectively provide the skills required to accomplish their missions in this new age of defense.

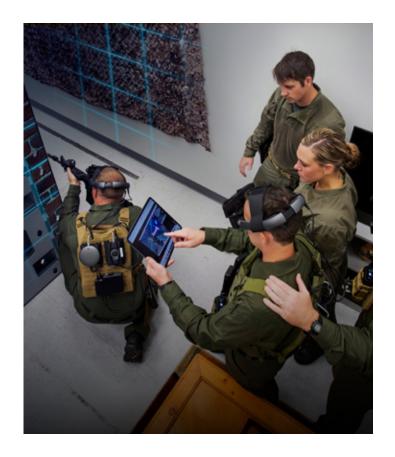
While practicing austerity measures is important, there is, however, no justification for trading off national security for fiscal recovery. It is essential to strike a balance between reducing government expenditures and safeguarding the nation's security. <u>Decisions about the allotment of limited resources</u> among various viable options to realize organizational goals are of prime importance. ¹²



Virtual Training as a Cost-Effective Option

According to a study conducted by the Government Business Council, incorporating more virtual simulation into the military's training programs could lower training costs and better equip soldiers for new challenges and threats ahead. Integrating virtual training can help minimize spending by reducing maintenance costs and contracting costs of logistics related to implementing multifaceted live exercises. ¹²

Virtual training enhances soldiers' skills by simulating actual vehicles, soldiers, enemies, and other elements in the environment. It also provides them a safe environment where they can practice operating dangerous weapons and vehicles without endangering their lives. Moreover, virtual training makes it possible for trainers to objectively measure individual progress over time. The program can document trainees' every action and decision which can be monitored and become a reliable basis for feedback.



Taking Military Training to Another Level with InVeris' SRCE™

(See, Rehearse, Collectively Experience)





Integrating advanced virtual training technology is essential to ensure military training realizes its full potential. It is also important to utilize a platform with a high simulation fidelity, one that can provide the most realistic training experience for trainees.

InVeris' SRCE™ (See, Rehearse, Collectively Experience) enables operators and trainees to see, rehearse and collectively experience future missions at the objective location or virtually with a new level of realism and performance assessment to aid in perfecting critical engagement techniques. It enables trainers and trainees to:



Experience virtual training in real environments

SRCE is the only untethered AR training solution on the market—and it includes real-time location, movement, orientation and bio-signal sensing in a shoot house environment. SRCE blends real physical environments, obstacles and live team members with Computer Generated Imagery (CGI) virtual characters, avatars, and assets for an unparalleled training experience. Trainees see their own hands, feet, weapons, teammates and surroundings as well as CGI elements enabled by SRCE's augmented reality (AR) / mixed reality (MR) headset and system.



Customize training for their needs

SRCE allows up to four participants to train with simulated weapons and tactical gear that possess a high degree of physical fidelity in form, fit and function—which reinforces muscle memory for live field action. Additionally, real and digital environments can be customized to emphasize various training techniques or to support specific scenarios.



Review data in real-time

SRCE delivers training performance data immediately—allowing trainers and trainees to see the after-action review (AAR) in real-time. The AAR provides instructors and trainees the ability to see progressive improvement for individuals and teams while conducting urban operations training. SRCE records and assesses performance, including shot placement of each trainee, in real-time. This establishes a baseline that allows instructors and trainees to accurately assess performance down to the second.

SRCE's environment scanning and replication capability also allows training sessions to be held in almost any indoor location. This enables instructors and trainees to be geographically separated in remote locations yet interact as if they were together for coordinated actions. This significantly reduces the cost of transporting and housing large groups and equipment for an on-site rehearsal and enables training at the point of need.



Conclusion

Virtual Training's potential for successfully cutting costs is substantial and its capacity to effectively improve training is without question. While cutting costs is one of the key reasons for militaries to fully embrace virtual training, the extent to which it can improve the skills of military personnel may be even more significant. For this reason, choosing the best technology to effectively train your troops is crucial.

Leveraging InVeris' SRCE enables governments to address shrinking defense budgets and practice austerity measures without compromising the quality and standards of military training.



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