



October Missile Attack Proves Costly for Iranian Regime

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Iran has threatened another strike against Israel in recent days. While Iranian attacks impose significant costs on Israel by requiring the use of costly missile interceptors, they are even more costly for the Iranian regime. Iran's October 1 ballistic missile attack cost the regime around \$2.3 billion, at least four and six times the estimated cost (and at least 42 and 124 times more in terms of GDP per capita) for the United States and Israel, respectively, to defend against it.

[This version of the brief was updated on December 9th to reflect U.S. and Israel GDP per capita.]

This suggests that direct Iranian attacks using its most sophisticated weapons are far less advantageous to the regime than the asymmetric costs its proxies can impose on Israeli and U.S. defenses with more rudimentary projectile attacks. Iran's attack also incurred a strong Israeli response that knocked out the regime's main air defenses and elements of its ballistic missile and nuclear programs.

JINSA's analysis underscores that the cost curve is more favorable to Israel and the United States when it is Iran—not its proxies—forced to engage in the conflict, and bear its expenses, directly. Iran's strike also shows the Israel Defense Forces' (IDF) high degree of effectiveness in neutralizing Iran's proxy strategy, as Israel's degradation of Hamas and Hezbollah to unprecedentedly weak states ended Iran's longtime approach of staying at arm's length to inflict costs on Israel, instead forcing Iran to act—and absorb costs directly—on behalf of its proxies.

What Happened?


- On November 24, Ali Larijani, senior advisor to Ayatollah Khamenei, [stated](#) on Iran's state-run *Tasnim* outlet that Iran is preparing to “respond” to Israel. According to a *Tasnim* summary of his remarks, Larijani [said](#), “relevant officials [in Iran's] military and government are preparing measures to show [a] proper response to recent Israeli aggression against Iran.”
 - » Iran's previous direct attack against Israel—its October 1 missile strike—inflicted minimal damage despite Iran [launching](#) approximately 180 ballistic missiles into Israeli airspace.
 - According to media reports, 30 Iranian missiles impacted in Israel, including around 20 that [struck](#) Israel's Nevatim airbase; three that hit the Tel Nof base; two that landed near Gilot; and one that [hit](#) a school in Gedera. Israeli authorities said the strike [did not disrupt](#) Israeli Air Force operations.

Why Is It Important?

- The regional war of attrition started by Hamas's October 7 attack has put Israel and the United States on the wrong side of the cost-curve defending against aerial attacks by conventionally weaker Iranian proxies. That changed with Iran's October 1 missile attack

against Israel, which cost Tehran relatively more to execute than it cost Israel and the United States to defend against, while yielding minimal tactical or strategic success for the regime. In addition, the attack proved costly in tactical terms for Iran, yielding serious IDF blowback that compromised key elements of the regime’s nuclear programs and ballistic missile production programs, and took out the regime’s top air defenses.

- Israel, as well as the United States, has used sophisticated air and missile defense systems to blunt over a year of nearly continuous rocket, drone, and missile fire by Iran’s proxies and, in two incidences, by Iran itself. The incredible effectiveness of these systems is rivaled by their expense, particularly compared to the minimal cost of the thousands of projectiles launched by Iran’s proxies. This high relative cost of defense, coupled with limitations in production speed and capacity for U.S. and Israeli systems, has created an asymmetric advantage for Iran’s terror network.

 Iranian Proxies’ Asymmetric Warfare Cost			
Proxy Munition	Munitions Launched From 10/7 to Present (approx.)	Proxy Cost per Munition (est.)	U.S./Israel Minimum Cost Per Interceptor (est.)
Hamas Rocket	12,493	\$1,000	\$50,000+
Hezbollah Drone	745	\$2,000-10,000	Varies
Houthi Drone	357	\$2,000	\$1,800,000+

Source: [Institute for National Security Studies](#); [POLITICO](#); [Reuters](#); [Ynetnews](#); JINSA’s [Iran Projectile Tracker](#)

- » According to JINSA’s [Iran Projectile Tracker](#), roughly 31,000 projectiles have been launched at Israel since the war began, only several hundred of which were fired by Iran. Most of these were extremely cheap to produce and fire.
 - Hamas has fired about 12,490 rockets, which are [valued](#) at under \$1,000.
 - Hezbollah has launched over 740 cheap drones—some [made](#) with rudimentary materials at minimal cost, estimated to be between \$2,000 and \$10,000.
- » To defend itself against this incessant barrage, Israel has relied on its Iron Dome system, which—while greatly effective at an interception [rate](#) of roughly 90 percent—has accrued high costs. The Iron Dome’s Tamir interceptors each [cost](#) an estimated \$50,000.
- » The same problem besets the United States in defending international shipping in the Red Sea from the Houthis’ attacks.
 - Explosive-laden Houthi drones, nearly 360 of which have been launched since last October, can [cost](#) as little as \$2,000.
 - Former Missile Defense Agency head Lt Gen Henry Obering, USAF (ret.) and JINSA Policy Analyst Yoni Tobin have [noted](#) that the U.S. military has “reportedly expended over 800 missiles, many costing over \$2 million apiece, to counter the Houthi threat.”
- The calculus is different, however, when it comes to Iran’s direct attacks on Israel. JINSA analysis shows that perpetrating the strike cost far more for Iran than defending against it cost the United States and Israel: measured in terms of GDP per capita, Iran spent an estimated 50 to 74 times more than Israel and 125 times more than the United States.
- On November 12, Israeli Prime Minister Benjamin Netanyahu [announced](#) that Iran’s October 1 missile attack cost the Iranian regime \$2.3 billion.

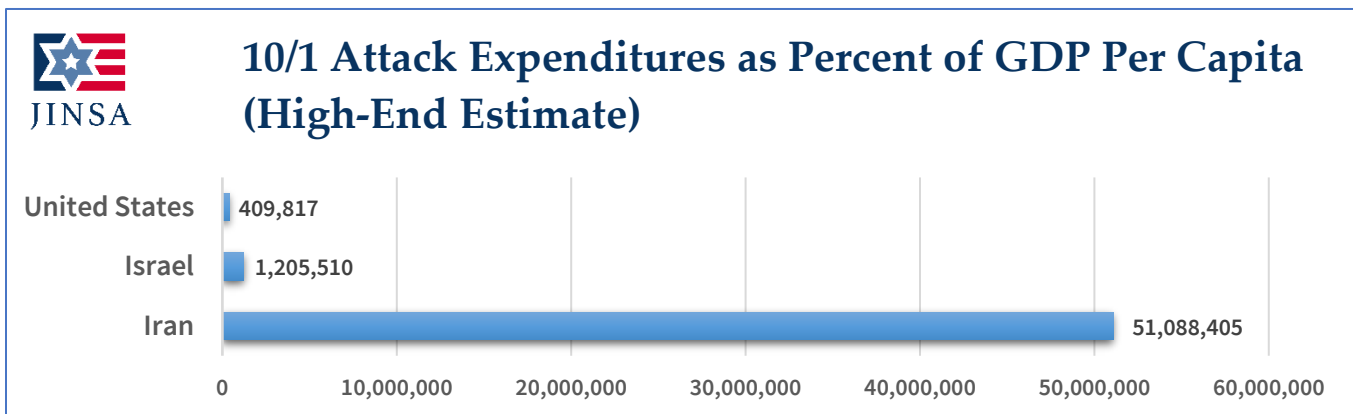
- » This amounts to roughly 51 million percent of its GDP per capita and an estimated 22 percent of Iran’s most recent defense [budget](#).
- » Assuming Iran fired 180 missiles and used similar missile variants in the attack, Israel’s figures demonstrate that Iran’s medium-range ballistic missiles (MRBMs) cost the regime at least \$12 million apiece—far costlier than previous [public estimates](#).

Costs of October 1 Missile Attack

JINSA	Israel	United States	Iran
Low-End Estimated Cost of Missile Attack	\$360,000,000	\$116,400,000	\$2,300,000,000 <i>(Number provided by Israel)</i>
High-End Estimated Cost of Missile Attack	\$630,000,000	\$334,000,000	
GDP Per Capita (2023 est.) World Bank Figures	\$52,260	\$81,695	\$4,502

- Given that around 180 missiles [entered](#) Israeli airspace in the attack, the maximum conceivable cost for Israel to defend against Iran’s October 1 attack—assuming a ratio of one interceptor fired per inbound missile—was significant but smaller than Iran’s: between \$360 million and \$630 million, according to JINSA estimates.
 - » The cost difference is even more pronounced when compared in relative terms. Israel’s defense cost between roughly 689 thousand and 1.2 million percent of its GDP per capita, or between 1.3 and 2.3 percent of its estimated [defense budget](#).
 - » A maximum—though unlikely—effort by Israel to intercept all inbound Iranian projectiles including those which struck Israel, assuming one interceptor fired per missile, would have seen Israel launch 180 interceptors at a cost of between \$360 and \$630 million.
 - Each interceptor in Israel’s Arrow system, the top layer of its air defenses, [costs](#) between \$2 million and \$3.5 million, per [public estimates](#).
 - » JINSA’s cost calculus does not account for a number of other variables, including:
 - The fact that some of the missiles that Iran fired likely did not make it into Israeli airspace. According to a U.S. official [cited](#) by *The New York Times*, a sizable number of Iran’s missiles either failed on launch or crashed before reaching Israel.
 - That up to a dozen inbound missiles may have been intercepted by the U.S. Navy, which [fired](#) 12 interceptors to help defend Israel in the attack. U.S. officials have not specified how many Iranian missiles were intercepted.
 - That the attack caused an estimated \$40 million to \$53 million in [property damage](#) to various sites across Israel. According to public reporting, there were around 30 missile impacts across Israel, including at the IDF’s Nevatim airbase and other sites.
 - » Israel’s cost to fire interceptors to defend against the attack also imposed a quantitative cost on its interceptor arsenal, highlighting a broader issue: Israel’s diminishing interceptor stockpiles after facing daily salvos of projectiles for over a year.
 - Israel “faces a [looming shortage](#)” of interceptor missiles and has to ration its existing stocks, including “having to choose which areas to protect over others,” according to an October 14 *Financial Times* article citing industry experts and former officials.

- JINSA estimates the United States spent between \$116.4 and \$334.8 million defending against Iran’s attack. This represents between 142 thousand and roughly 410 thousand percent of its GDP per capita or between .014 and .04 percent of its defense [budget](#).
 - » The U.S. Navy’s SM-3 interceptors each [cost](#) between \$9.7 million and \$27.9 million, depending on the variant, and 12 such interceptors were [fired](#) to defend against the attack.
- Iran likely spent over 51 million percent of its estimated GDP per capita to conduct the attack. According to JINSA analysis factoring in high-end estimates for U.S. and Israeli costs to defend against Iran’s attack, this figure would represent approximately 42 times more as a proportion of its GDP per capita compared to Israel’s cost as a proportion of its GDP per capita, and 125 times higher than the U.S. cost as a percentage of its GDP per capita.



- JINSA’s analysis shows that when Iran is forced to use its own military assets, the United States and Israel can make the conflict costly for Tehran directly, rather than the countries primarily facing indefinite asymmetric battles against Iran’s proxies and their large reserves of cheap munitions.
 - » History shows that Iran adopts a much more risk-averse posture when faced with direct costs to the regime’s personnel and assets.
 - Credible U.S. military pledges to respond to Iranian aggression have compelled changes in Iranian regime behavior, including using strikes and the threat of further force to [end](#) Iran’s naval mining and attack on ships in the Persian Gulf in 1988, and getting Iran to [downplay](#) its threats to close the Strait of Hormuz in early 2012.
- In addition to Iran’s billions of dollars in expenditures to conduct the attack, the strike caused Iran to sustain major tactical and strategic costs by incurring a direct Israeli response against it, rather than its proxies.
 - » Israel’s wide-ranging October 26 kinetic response reportedly [involved](#) some 100 aircraft, [targeted](#) over 20 sites, [took out](#) key elements of Iran’s ballistic missile program—including planetary mixers used to make solid fuel for MRBMs—and neutralized Iran’s primary air defenses, leaving Iran’s core assets vulnerable to future strikes.
 - » As former Commander of the Israeli Air Force and JINSA distinguished fellow IDF MG (ret.) Amikam Norkin noted in an October 27 JINSA [webinar](#), Israel neutralized all of Iran’s advanced Russian-made S-300 air defense batteries in the operation. According to MG Norkin, the operation left Iran with “no strategic air defense capabilities ... they [now] cannot defend themselves with the ... advanced Russian system[s].”
 - » The Israeli operation demonstrated the positive effects of the IDF largely incapacitating Iran’s two primary proxies on Israel’s borders. Forcing Iran to directly strike Israel rather

than use its proxies led the regime to expend large sums of capital to launch an attack which yielded extremely limited tactical success and a highly damaging Israeli response.