

The Techno-Economic Impact of the Israel-Hamas War on India

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I. Introduction

The 2023 Israel-Hamas war, which commenced following a large-scale Hamas attack on Israeli territory on October 7, 2023, had [claimed](#) at least 17,000 lives by December 1. While the war has sparked [commentary](#) on India's political alignment, there are fewer assessments of the potential impact of the Israel-Hamas conflict on India's defence and technology sectors, and its broader economy.

This paper attempts to make an appraisal of the potential techno-economic risks for India by considering four possible scenarios that could unfold over 2024. These scenarios are not meant to be forecasts, and actual outcomes may comprise elements from more than one of those outlined. Instead, the scenarios considered are meant to assess the risks in terms of probability and impact. The scenarios also help us identify enduring trends and interests that inform India's diplomatic approach to West Asia.

The remainder of this paper consists of three sections. The section that follows provides a brief overview of India's most pressing techno-economic interests in the region. The third section outlines the four scenarios and their potential impact. The fourth section draws conclusions on the techno-economic impact of the war.

II. India's Interests

India's ties to West Asia and North Africa are underpinned by a broad range of political, economic, and strategic interests. At present, India's interests are concentrated in two regions: Arabian Gulf (and Iraq) and Israel.

The Arabian Gulf and Iraq

India's key interests in this region are energy and its 9 million-strong diaspora. Other interests include investments, trade, transshipment, maritime security in the Western Indian Ocean Region (WIOR) and anti-terrorism efforts. We consider the two key interests below:

Energy: Iraq was India's chief source of crude oil and related products in the fiscal year 2022-23, with imports worth \$33.6 billion. Saudi Arabia was India's third largest supplier, slightly behind Russia, with imports [valued](#) at \$29.1 billion. Qatar remains India's largest natural gas supplier, accounting for about 39% of gas imports in FY 2022-23, valued at \$12.4 billion. The UAE is India's second largest source of natural gas, [making](#) up \$7.1 billion in imports. Together, the Gulf states and Iraq [accounted](#) for 57% of India's crude oil imports and 74% of its natural gas imports in FY 2022-23.

Diaspora: The Arabian Gulf alone accounts for about two-thirds of all Non-Resident Indians (NRIs). According to a government estimate, 8.8 million out of a total of 13.4 million NRIs were resident in six Gulf states. The UAE hosted 3.41 million Indians, while another 2.59 million Indians were resident in Saudi Arabia. The remaining 2.85 million [live](#) in Kuwait, Qatar, Oman and Bahrain.

The Gulf states are also India's largest source of inward remittances. In FY 2020-21, five Gulf states (the UAE, Saudi Arabia, Kuwait, Oman, and Qatar) were [responsible](#) for 29% of India's total remittances, amounting to about \$25.5 billion. The second largest source was the United States, which accounted for 23.4% of total remittances.

A major priority for India remains the well-being and safety of its citizens in the region. Besides regular issues such as worker safety and travel permits, India also has to be prepared to deal with contingencies that could put its citizens at risk. The Gulf region and Iraq have been a zone of regular conflict for nearly five decades. In 1990, India [airlifted](#) at least 110,000 of its citizens from Kuwait and Iraq, following Iraq's annexation of Kuwait. Indian foreign policy towards West Asia is shaped and sometimes constrained by its interest in ensuring its diaspora is welcome and safe.

Israel

Bilateral trade ties with Israel have [expanded](#) dramatically since the establishment of diplomatic relations in 1992, growing from \$200 million in 1992 to \$10.1 billion in FY 2022-23, excluding defence trade. Defence [remains](#) the most important aspect of India-Israel ties. In 2022, India and Israel sides adopted a "Vision of Defence

Cooperation” that [laid out](#) a 10-year roadmap with a commitment to focus on areas such as emerging technologies and defence co-production.

According to data from the Stockholm International Peace Research Institute’s (SIPRI) Arms Transfer Database, Israeli defence exports to India over the 11-year period from 2012 to 2022 amounted to \$2.9 billion. During this entire period, India was Israel’s single largest customer, with sales peaking at \$607 million in 2017. In 2022, India purchased defence products worth \$247 million, which [constituted](#) about 30% of Israel’s total defence exports for the year.

Israeli defence exports to India during this period are dominated by sensors, fire control systems, missiles, (including air defences), smart munitions, and uncrewed aerial vehicles (UAVs), according to data from SIPRI’s trade registry. Big ticket items [include](#) Barak air defences, Heron-TP UAVs, and the SPICE-series of guided bombs.

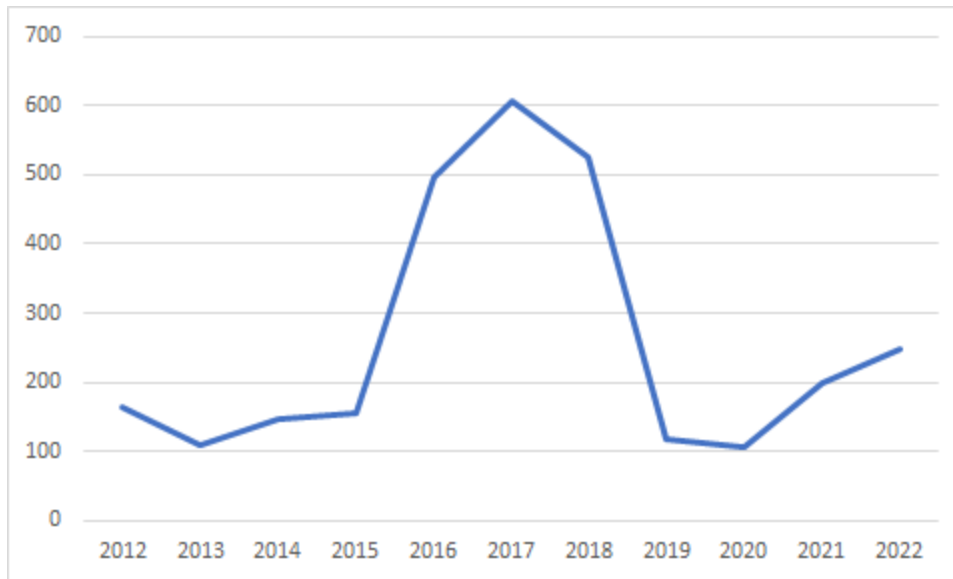


Figure 1: Israel's Arms Exports to India by Value (in millions of US dollars)

Source: SIPRI Arms Transfer Database

However, this data does not capture the full extent of India-Israel defence trade. There are also several joint ventures between Indian and Israeli companies including Astra Rafael Comsys (which makes communications systems), Adani Elbit (which will make the Hermes 900 UAV in India), and Kalyani Rafael Advanced Systems (which [has won](#) a contract to supply the state-owned Bharat Dynamics with kits for Barak 8 MR-SAM missile kits).

There is no evidence the Israel-Hamas war has slowed down such collaborations. In November 2023, Elbit Systems [entered](#) into an agreement to subscribe to a 44% stake in an Adani Defence Systems subsidiary. In October, the

brokerage house Nuvama [published](#) a report suggesting that the war may open up more business opportunities for some Indian companies with Israeli joint ventures.

Furthermore, Israel is also a global leader in several high-tech sectors, [including](#) semiconductors, and cyber capabilities. India's technology sector enjoys collaborations with Israeli companies and institutions, making it crucial to consider the potential impact of the Israel-Hamas war.

Inferences

While economic ties between India and Israel are [relatively minor](#) compared to those with the Arabian Gulf and Iraq, the war could still influence Indian exports indirectly by affecting the operational costs of Indian businesses in West Asia, and by impacting investment flows. Additionally, the conflict's broader regional implications could affect the Indian diaspora in the Middle East, potentially impacting remittances and energy supplies from the Gulf region, which are vital for India's economy.

III. Four Scenarios

Each scenario considered in this section represents a distinct potential trajectory in the ongoing war and enables a nuanced understanding of how varying causes and outcomes could influence India's defence, technology, and economic interests. This method also aids in strategic planning and preparedness. The four scenarios are:

- 1) Israel is politically discredited in the aftermath of the war. Partner countries, except the USA, distance themselves politically and economically to avoid getting tainted.
- 2) Israel enters a drawn-out war with Hamas, resulting in widespread internal instability, prolonged strife and terrorism across its entire territory.
- 3) The Israel-Hamas war spills over its borders, and a broader war is ignited, with multiple regional and international powers getting involved.
- 4) Israel wins decisively, ending the conflict quickly. The war ends with the installation of a pliable govt in Gaza.

In the remainder of this section, we assess the defence, technological, and economic risks associated with each scenario.

Scenario I: Israel is Politically Discredited and Isolated

Following a contentious war with Hamas, Israel faces widespread political discreditation. Key international allies, barring the United States, begin to withdraw their support, leading to Israel's growing isolation on the global stage. This scenario sees a shift in diplomatic ties, with many countries distancing themselves both politically and economically from Israel to avoid the repercussions of being associated with its now-controversial policies and actions during war-time. The scenario may also witness Israel facing condemnations in international forums, impacting its global influence and foreign policy.

Impact on India's Defence Interests

India's defence interests could be affected in two ways. One, the government may seek to reduce exposure to the Israeli defence industry by placing a temporary hold on negotiations for major deals. This would include the ambitious 10-year roadmap agreed upon in 2022. Two, Indian companies, especially publicly listed ones, may demur from entering into joint ventures or partnerships with Israeli companies. The results could be delays in defence acquisitions and fewer opportunities for the private defence sector in India.

The impact of this scenario on the defence sector will be limited by three factors. One, both India and Israel will seek to honour existing agreements. An isolated Israel will have incentive to prove its credentials as a reliable supplier, while there is likely to be less pressure on India to cancel deals that have already been struck. Two, India will enjoy greater leverage over an isolated Israel and may be able to pursue defence deals on more advantageous terms. Three, India and Israel can seek alternative mechanisms to continue their defence relationship, for instance by working through US subsidiaries of Israeli companies.

Impact on India's Technological Interests (Semiconductors and Cyber capabilities)

Israel's discreditation might significantly impact collaborative technology projects in semiconductors and cyber capabilities, where Israel is a global leader. These include initiatives like the MoU inked between India's Council of Scientific and Industrial Research and Israel's Directorate of Defence Research and Development in May 2023 for [research collaboration](#) in high technology, including semiconductors. Further, this would also [halt](#) India-Israel

cooperation through the I2U2 (India, Israel, the United Arab Emirates [UAE] and the United States) which aimed to develop resilient supply chains for emerging and critical technologies. India's technology sector, particularly start-ups and companies [engaged](#) in cybersecurity and semiconductor research, could lose access to Israeli expertise, technology, and investment. This loss could slow down the growth and development of these sectors, affecting India's digital infrastructure and cyber defence capabilities. For instance, collaborations in cybersecurity, such as threat intelligence sharing, could diminish, increasing vulnerabilities in India's digital space.

However, Israel's prominence in the cyber-surveillance and cyberwarfare suite industry is due to the discreetness and state-of-the-art capabilities offered by [companies like](#) the NSO group and the Mer group. These companies [reportedly](#) export spyware through shell companies registered outside Israel. It is therefore very likely that these surreptitious practices will continue even after Israel's discreditation, and that India has the option to procure offensive cyber-capabilities and spyware suites from them while maintaining deniability.

Impact on India's Economic Interests (Energy, Human Resources, Investments and Remittances)

In this scenario, there will be minimal impact on India's economic interests w.r.t energy, remittances, investments etc.

The Indian immigrant population in Israel, [primarily](#) caregivers to Israel elderly (~12467), is relatively small compared to the overall Indian immigrant population worldwide (13,459,195). Historically, Israel has not been a

sought-after destination for human capital movement from India. The flow of remittances from Israel is [minimal](#) given the miniscule size of the diaspora. Israel does not rank among the major sources of foreign capital for India, and it is not a significant trading partner. Specifically, India's [exports](#) to Israel represent only 1.8% of its total exports, while [imports](#) from Israel constitute just 0.32% of India's total imports (as of 2022-23). There is no notable reliance on Israel for any particular commodity.

Scenario II: Prolonged Conflict and Internal Instability

This scenario depicts a long and gruelling conflict between Israel and Hamas, which fails to resolve quickly and instead spirals into a protracted struggle. The persistent state of war leads to severe internal instability in Israel, with increased incidents of terrorism and civil unrest. The continuous strain of warfare exhausts Israel's resources and undermines its internal security and societal cohesion. This prolonged conflict scenario also potentially impacts Israel's economic stability and daily life, leading to significant economic and political challenges.

Impact on India's Defence Interests

Under this scenario, both India and Israel retain the intention to strengthen their defence relationship, but Israel's ability to honour agreements may occasionally be hampered. This can happen because:

(1) Israel diverts resources and personnel into the most pressing defence concerns such as infantry and armour requirements for the Israeli Defence Forces (IDF); and

(2) A worsened investment climate in Israel reduces the availability of skilled personnel.

Overall, the impact of this scenario on the defence relationship is likely to be minor and short-lived, with both sides staying committed to their long-term partnership.

Impact on India's Technological Interests (Semiconductors and Cyber capabilities)

Internal instability in Israel could disrupt the regular functioning of its tech industries. Given Israel's status as a significant player in the global semiconductor technology markets, a disruption could lead to a shortage of critical components and technologies. Israel's semiconductor industry is strongly focused on the design stage of the global semiconductor value chain, hosting around 8 per cent of the global chip design workforce and R&D entities. A few [companies](#) also focus on semiconductor manufacturing equipment alongside a handful of fabrication facilities.

As violence and instances of domestic terrorism increase, the talent and labour required for the operation of this industry will suffer casualties due to the mobilisation of IDF reservists. Constant blockades will also disrupt supply chains, and transportation will also contribute to this shortage of personnel as well. The focus of the Israeli state will shift from ensuring the industry's flourishing to survival instead. At the same time, violence will also mean the shutdown for operations of chip production facilities like those of Intel's in Givat Shmuel, and [shuttering](#) of proposed projects at Kiryat Gat. Intel's production facilities are key to maintaining its supply of chips meant for the global consumer and enterprise market, which will undoubtedly hit India as well. However, as with the global

market, Indian entities will shift to players like AMD to meet their demands quickly. Like in Scenario I, Indo-Israeli collaborative projects will likely be on the backburner indefinitely.

India's procurement of Israeli spyware and cyber-surveillance suites may still continue via Israeli companies based outside Israel, given the covert nature of these transactions. The situation at the Israeli home-front would likely not affect this possibility. However, Indian companies relying on Israeli cyber technologies to safeguard critical infrastructure could find themselves in a precarious position, needing to find alternative solutions or enhance indigenous capabilities quickly.

Impact on India's Economic Interests (Energy, Human Resources, Investments and Remittances)

India has a [positive](#) balance of trade with Israel (i.e India exports more than it imports). A prolonged conflict and internal instability in Israel will imply that Indian exporters will have to pay higher insurance premiums and higher shipping costs. The increased cost of trade would lead to reduced profits for Indian exporters, prompting exploration of alternative export destinations. India primarily [exports](#) diamonds (\$1.4 billion) and refined petroleum (\$582 million) to Israel. These sectors are likely to be disrupted the most.

Despite the cumulative foreign direct investments from India to Israel [totalling](#) \$383 million between April 2000 and August 2023, this amount is relatively small compared to India's global investments. A protracted conflict in Israel would adversely affect the returns on these investments.

As India is not dependent on Israel for its energy requirements, the prevailing circumstances are unlikely to impact India's energy security.

Scenario III: Spillover of Conflict and Broader Regional War

The conflict between Israel and Hamas escalates beyond their borders, igniting a larger regional conflict that involves multiple neighbouring countries and international powers. This scenario transforms the initially localised conflict into a major regional war, drastically altering the political and military dynamics of West Asia. The involvement of additional countries like Iran, and external forces complicates the situation, culminating in a complex network of alliances and hostilities. Widespread instability, large-scale military engagements, and significant geopolitical shifts in the region characterise this scenario.

Impact on India's Defence Interests

This is the worst possible scenario for the India-Israel defence relationship, since it would both raise the associated political costs and damage Israel's ability to honour its commitments.

No matter what the political alignments may be, a general war in West Asia will raise the political costs of doing business with Israel. By buying arms from Israel, India could antagonise Iran, or worse, key partners such as the UAE and Saudi Arabia. Given that India's stakes in the Arabian Gulf and Iraq are much greater than those with Israel, India may have to suspend defence ties with Israel for years.

Even if a general war does not result in Israel and key Gulf states being on opposite sides, Israel may not be in a position to honour its commitments. For instance, a general war may see the Israeli Air Force engaged in both ground attack and air superiority missions, while the Israeli Navy may be engaged in littoral operations, particularly against targets in southern Lebanon. Under such circumstances, the Israeli government is likely to prioritise urgent domestic requirements over exports. Given that the bulk of Indian purchases from Israel involve air and naval capabilities, ties are likely to be severely hampered, pushing India to seek alternatives.

Impact on India's Technological Interests (Semiconductors and Cyber capabilities)

As was the case in Scenarios I and II, a regional conflict involving Israel could lead to significant disruptions in the semiconductor and cyber technology sectors, critically affecting India. The spreading conflict would impede Israel's capacity to maintain its industrial output, leading to shortages in critical electronic goods, components and technology. This would impact Indian industries relying on Israeli technology, especially in [sectors](#) such as telecommunications and IT.

The spillover of conflict and its escalation into a regional war would likely disrupt the operations of key technology companies in Israel, including Intel. In the short to medium term, this could lead to significant shortages in consumer and enterprise semiconductor supplies for Indian industry, hampering its technology sectors. Indian IT

companies, though not having a significant presence in Israel or Palestine, are cautious about the escalating tensions in West Asia, recognising that adversities in the region [could affect](#) their existing and potential business prospects. Companies like Wipro are prepared to activate business continuity plans in case of further escalation. The conflict's economic fallout could deter foreign investments and exacerbate economic crises in the region, potentially leading to increased unemployment and further instability. The scale, duration, and international reactions to the conflict would largely determine the extent of the impact on the demand for Indian IT services.

The focus on regional conflict might also limit the availability of Israeli offensive cyber capabilities, adversely affecting India's cyber warfare and intelligence strategies. As mentioned earlier in Scenario I, Israeli companies based outside the region can continue to fulfill this requirement. However, the Israeli government may decide to suspend sales of Israeli spyware for the duration of the conflict to prevent the possibility of diversion risks of its enemies deploying the same against Israeli interests.

Impact on India's Economic Interests (Energy, Human Resources, Investments and Remittances)

Approximately [one-third](#) of India's oil imports are sourced from Bahrain, Kuwait, Qatar, Oman, Saudi Arabia, and the UAE. Qatar is also a leading supplier of Liquefied Natural Gas (LNG). Any disturbance in the Gulf region has the potential to raise oil and gas prices. Since India is a net importer of crude oil, an extended conflict could result in an increased import bill. Prolonged conflicts may lead to elevated petrol and diesel prices, inflationary pressures,

higher fiscal deficits, currency depreciation, and possibly reduced economic growth in India. For every \$10 rise in Brent futures, the Current Account Deficit [increases](#) by 0.5%. Higher international oil prices will imply losses in gross refinery margins for oil marketing companies. UAE, Saudi Arabia, Kuwait, Oman, Qatar, and Bahrain are [home to](#) 65% of the non-resident Indians (8,888,733 of the 13,601,780 spread out globally). UAE, Saudi, Kuwait, Oman, Qatar [account](#) for 28.6% of remittances flowing into India. Instability in this region will impact the security and safety of Indians in this region. Deteriorating economic conditions will diminish employment opportunities, resulting in lower remittances to India and a decline in immigration from India to Gulf countries. This could [exert](#) additional pressure on the Indian economy to generate more jobs. Remittances play a vital role in supporting families and addressing the current account deficit. With India experiencing a [decrease](#) in exports, remittances become even more crucial.

In 2022-23, 7.4% of [FDI](#) flow to India was from the UAE. A prolonged regional conflict can reduce these flows potentially impacting investments in the power, infrastructure sectors, and startups.

The scheduled rollout of the India-Middle East-Europe Economic Corridor (IMEC) — first proposed in September 2023 during the G20 Summit in New Delhi — is set to face delays. This setback will adversely affect Indian domestic railway companies, which were initially [expected](#) to secure orders.

Scenario IV: Decisive Israeli Victory and Quick Resolution

In this scenario, Israel quickly and decisively defeats Hamas, bringing a swift end to the conflict. The rapid conclusion of hostilities leads to the establishment of a new government in Gaza that is more aligned with Israeli interests. This outcome stabilises the region and reinforces Israel's military and political position. The quick resolution minimises prolonged conflict damage, allowing for a faster return to normalcy within the region. This scenario might also influence regional politics, with Israel consolidating its power and possibly reshaping its relationships with neighbouring countries and international allies.

Impact on India's Defence Interests

This scenario will leave the India-Israel defence partnership unharmed. It is also possible that Israeli success will help bolster its partly tacit alignment with Saudi Arabia and Israel. This will make it easier for India to further build its defence partnership with Israel.

Impact on India's Technological Interests (Semiconductors and Cyber capabilities)

A decisive Israeli victory leading to regional stability could bolster India's technological ties with Israel. This scenario would likely lead to a continuation or even enhancement of joint ventures in critical technological domains like semiconductors and high technology. India could benefit from uninterrupted collaboration in semiconductor research, development, and manufacturing, accelerating its ambitions to develop a self-reliant semiconductor industry.

There would be no significant change in terms of technological impact on India compared to a pre-conflict scenario.

Impact on India's Economic Interests (Energy, Human Resources, Investments and Remittances)

There will not be much change from the pre-conflict scenario, i.e., India enjoys a positive trade balance and continues to import goods that are strategic in nature (i.e., defence goods). Human capital movement and remittances are unlikely to change dramatically.

IV. Conclusion

The four scenarios considered above indicate the potential for major impacts on Indian interests. Scenarios I, II and III are likely to have negative impacts on India. Scenario III — involving a general war — is the worst possible outcome as it would hamper crucial energy and defence interests. Scenario IV causes almost no negative impact overall.

Potential Consequences

We summarise some of the potential consequences from the four scenarios below.

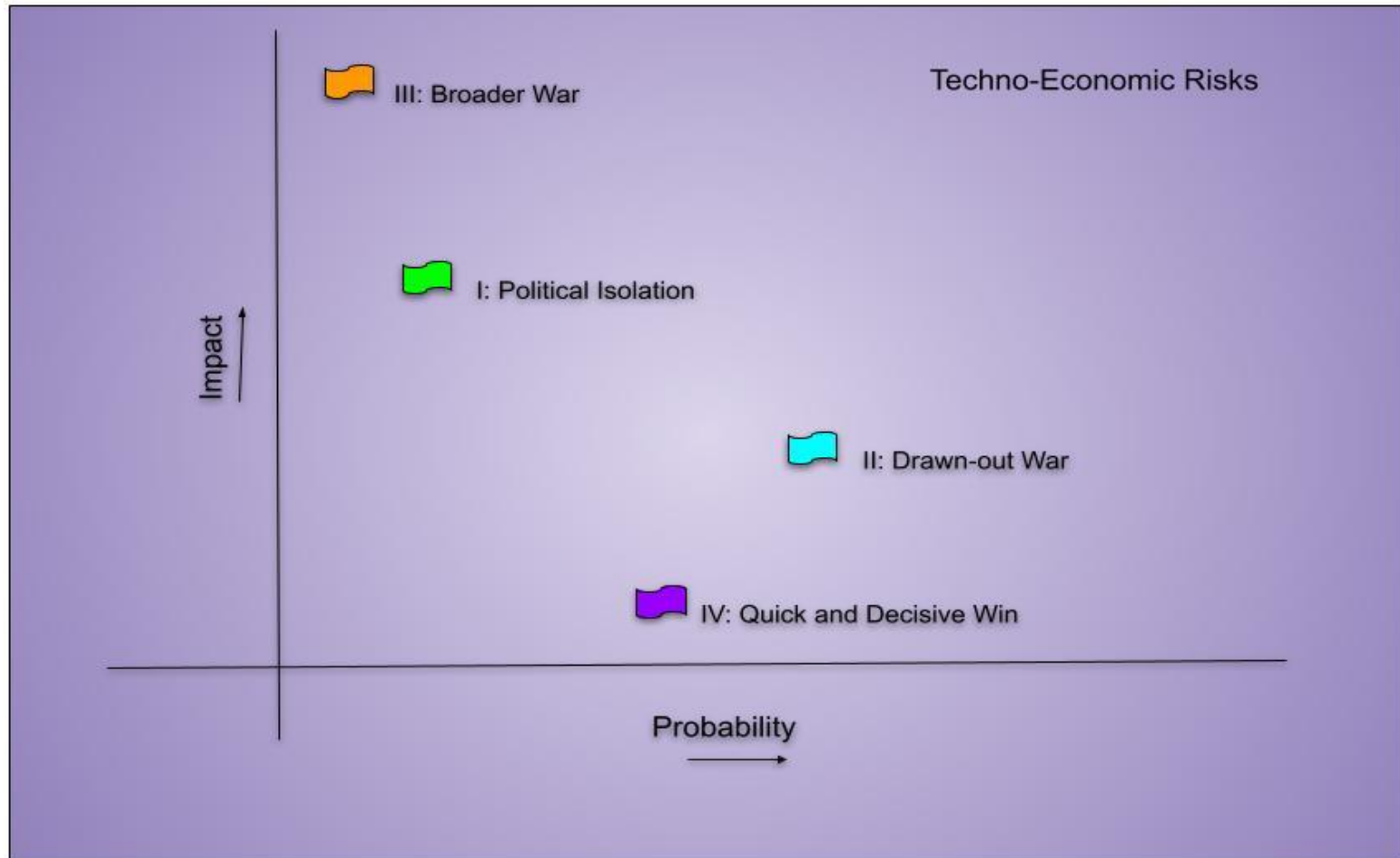
Disruption in Collaborations: Across Scenarios I, II, and III, there's a consistent theme of potential disruption in Indo-Israeli collaborations in technology, particularly in the semiconductor and cybersecurity sectors. This includes joint ventures and research projects spearheaded by the respective governments as well as private enterprises.

Alternative Solutions and Adaptation: Scenarios I, II, and III suggest India needs to adapt quickly by seeking alternative suppliers or enhancing indigenous technological capabilities, especially in the face of disruptions in Israeli technology industries. This will likely be achieved incidentally as global market forces revamp supply chains due to disruptions caused by the conflict.

Continued Cyber-Surveillance Dealings: Despite varying degrees of conflict intensity, India's procurement of Israeli cyber-surveillance suites and offensive cyber capabilities seems likely to continue, albeit through indirect channels or Israeli companies outside Israel.

India's Energy Security Concerns: India's economic concerns are likely to experience minimal impact in Scenarios I, II, and IV. However, in Scenario III, where the war escalates to involve multiple regional actors, India's economic interests, particularly concerning energy security, are likely to be significantly affected. One potential solution to mitigate this risk is by establishing an "insurance" in the form of strategic petroleum reserves. While the government has commenced the construction of these reserves, further efforts are needed to formalise the mobilisation process, enhance diversification, and address other related aspects.

India's Defence Collaboration: The potential negative impact of Scenario II is likely to be limited, while Scenario IV would result in no perceptible negative impact. However, Scenario I (an isolated Israel) would raise the costs of doing business with Israel and likely result in the defence relationship declining until Israel manages to end its isolation. Scenario III is the worst possible outcome, increasing the costs of the defence relationship and reducing Israel's ability to honour its commitments.



The Political Context of Techno-Economic Impacts

The Israel-Hamas war is a stress test for India's West Asian foreign policy. Even if the war were to end quickly, it would have succeeded in raising the costs for India's simultaneous engagements with the Arab Gulf monarchies on the one hand and Israel on the other. Indian foreign policy towards the region is predicated on the assumption that Saudi Arabia, the UAE, and Israel will remain broadly aligned, or will at least seek to work with each other. This unlikely alignment between conservative Arab monarchies and a Zionist republic is the product of both a mutual fear of Iran and the potential for economic cooperation.

As India's own economic and technological engagement with these three states has grown, they have been encouraged to consider ambitious connectivity programmes such as the IMEC. Indian engagement has also enabled the creation of groupings such as [I2U2](#) (India, Israel, UAE, United States), which seeks to encourage investments in sectors such as water, energy, food security, transportation, and space.

While this foreign policy has great potential for India, it was always clear it came with one significant trade-off and one significant risk. The trade-off was that India's ties with Iran would weaken. The risk was the possibility of conflict between Israel and the Palestinians. India has come to accept its downgraded ties with Tehran. However, the Israel-

Hamas war has already mounted a challenge to India's West Asia policy and [effectively shelved](#) the IMEC project (one leg of which was to pass through Israel or the West Bank).

If real-life outcomes begin to resemble Scenarios I or III discussed above, India will have to recalibrate its approach to the region so as not to alienate its key Arab partners. The result may be a return to the more transactional and equidistant foreign policy India pursued in the 1990s and 2000s. Such a policy is likely to reduce Indian influence in West Asia and close potential opportunities for technological and economic cooperation.

A secondary risk from the Israel-Gaza war is the signal it could send to terrorist organisations. Hamas' coordinated mass-casualty attack on October 7, 2023 could be interpreted as a major success by some, since it has drawn Israel into a bloody war, reminded the world of the plight of the Palestinian people, and increased criticism of Israeli actions.

Looking Ahead

India has little control over the trajectory of the Israel-Hamas war and its outcomes; it can only focus on managing the risks. Since wars are inherently dynamic and unpredictable, India will need to dedicate resources to track the progress of the Israel-Hamas conflict, identify potential risks, and develop or fine-tune contingency plans, all in real-time. This is an effort that will require cross-domain expertise and must involve diplomats, administrators, military representatives and intelligence officers. Any such undertaking is best organised under the auspices of the National Security Council (NSC).