SECTION FOUR: CONCLUSION AND RECOMMENDATIONS FOR ISRAEL

This memorandum has presented the emerging world order, at the center of which is the global technological competition between the great powers, in the context of the retreat from globalization and a return to models based on self-reliance, alliances, and coalitions. The supply-chain crisis demonstrated to the world the risk of relying on factories in countries with which cooperation is strategically sensitive, given the potential for instability in relations. Most technologically advanced countries have internalized the depth of the geostrategic changes and in the past year have examined the implications, each country according to its size, strength, geographic location, economy, and unique characteristics.

The United States and the European Union have shaped a dual strategy of bringing the core technological production back from Asia and imposing supervision and monitoring regimes to prevent the leakage of Western technology. Smaller countries have begun characterizing their basic technological needs in a way that enables them to maintain computing and hardware infrastructure to support knowledge-intensive industries and their continuous functioning in regular times and in times of crisis.

Unlike most technologically advanced countries, the State of Israel has not yet held an orderly discussion to analyze the implications of the technological competition between the great powers and the retreat of globalization, and it has not yet formulated a strategy or national plan in response to the recent technological developments. Basic academic discussions as well as policyoriented research are meant to help policy-shapers and authorized bodies. We hope this memorandum will contribute to understanding the geostrategic reality and will present several initial recommendations to decision-makers.

Israel, like the United States and Europe, needs to examine its supply chains to ensure the regular supply of technology that is critical to its security needs

and to advance local production and partnerships with dependable allies. The rivalry between the United States and China has also highlighted the issue of the use of technology to violate human rights (espionage, for example), and this is a source of criticism, even if it only affects private companies in Israel. The global discourse on technology is conducted as a battle of values between clashing worldviews. The United States has indicated a clear policy line according to which the condition for partnership is based on interests as well as shared values (democracy first and foremost). This historic change requires Israel to create clarity with respect to its character and intentions. An ambiguous policy is interpreted as support for the wrong side of the global map and could jeopardize Israel's place in the global supply chain.

As part of the technological discussion announced in 2021 and officially launched in September 2022,⁹¹ the government should advance the issue of hardware and chips in particular. Meanwhile, in terms of the European Union, Israel should strive for collaboration initiatives under the Horizon plan that address hardware and chips. In this context, Israel needs to highlight its comparative advantage in research and development, especially in artificial intelligence fields, in which Israel has an ecosystem that combines industry, academia, and defense bodies. They drive the field forward through cooperation, knowledge, and human resources at levels higher than many other countries.

Furthermore, Israel needs to understand that the United States is willing to change the structure of global trade for the sake of protecting its national security and democratic values. The chip alliance seems to be the most ambitious global architecture to attempt to regiment access to technology sources and to harness them in favor of American geostrategic ambitions. The current administration is willing to target American companies, let alone foreign companies, which violate the requirements. The place of values in global trade is changing, as technology has become a tool in the struggle between democracies and other forms of government. We can learn from the case of the Israeli company NSO, which has been tied to the murder of exiled Saudi journalist Jamal Khashoggi. The case demonstrates the changing value system of technology, and other Israeli companies may be knowingly or innocently violating US demands. The government has a responsibility toward entrepreneurs and high-tech companies in maintaining a clear and transparent policy about the safe and legitimate spheres for economic cooperation with undemocratic countries. In the geostrategic environment of the rivalry between China and the United States, the latter is demanding transparency and clarity from its allies and advanced technology partners with respect to their conduct vis-à-vis autocracies, especially China. Israel must refrain from ambiguity when it comes to China and formulate a policy that includes restrictions on trade with China, as a trust-building measure vis-à-vis the United States and its partners in the "chip alliance."

In concluding this memorandum, we would like to reiterate that the State of Israel is in a state of displacement when it comes to planning its technology strategy, compared to other similar countries, and it needs to act quickly to narrow the gaps in addressing the emerging reality if it wants to maintain its leading position in the world. It is quite possible that the basic model of Israeli high-tech that was built on minimizing government intervention is already past its prime. In the face of the enormous investments abroad and the return to models of self-production, self-reliance, and technology coalitions, the Israeli strategy will reach its limit. We contend that just as the Israeli government decided to reshape the economy as part of the economic stabilization plan of 1985 and to align with the global trend, and despite having significant consequences for many sectors and imposing occupational change on masses of citizens and entire communities, Israel must now hold a similar discussion in the context of the tectonic change worldwide and the retreat from globalization to self-reliance and alliances.⁹²

Israel needs a policy that will maintain its standing as an innovative nation and a center for high-tech entrepreneurship. The international changes in technology indicate an accelerated pace of development that directly affects the balance of powers and leads every developed country to examine how it can maintain or improve its standing.

This memorandum is a call for a discussion on Israel's "national technology strategy" that should be held as soon as possible. For the purpose of this discussion, preparatory work is required that would define the technological infrastructure as necessary for the existence and success of the Israeli high-tech industry, enabling it to continue to drive the country's economy, despite political, climate, or other crises such as the COVID-19 pandemic. Just as the state is committed to providing energy and food security, it must also define the meaning of basic technological security for the country. Most high-tech fields, such as cyber and artificial intelligence, are applications that depend on the existence of technological hardware infrastructure, including supplying or producing chips.

The world has experienced a revolution whose essence is the understanding among the technologically advanced countries-the United States, the European Union, Japan, and South Korea-that the key to economic success is a combination of R&D capabilities and production capabilities. These countries are now working to increase their independent production capabilities. Consequently, the State of Israel must strive to increase its production footprint and to examine how to adapt the structure of the economy to these changes, in part, by using new tools to incentivize multinational companies that are interested in expanding their technological manufacturing plants. Intel alone is not enough. In the chip industry there are other players, including production companies or companies in the technological supply chain of chip production, including chip assembly, packaging, and testing companies. By encouraging activity in Israel, it is possible to develop a technological ecosystem that is more suitable for the current reality. Aside from its contribution to the entire tech industry, this could provide a stable, long-term employment solution for diverse populations in Israel.

Given the international sensitivity and the potential upheaval, Israel must ensure that it maintains a comparative advantage in the technological production process as a "strategic card" for cooperation. Israel's strategic card today is its technological advantage in R&D, which has encouraged multinational companies to continue to invest in Israel. But many countries in Europe (the Netherlands, Germany, Ireland) are closing the gap with Israel by strengthening academia and encouraging investment in research, development, and production.

The more Israel has independent production capability inside its territory, the more it will be able to reexamine industrial policy and to characterize the areas in which it is preferable to maintain a certain level of self-reliance. This is of great value when it comes to Israel's defense development and production, especially in an era when the connection between technological assets and national security is increasing. In this context, the state will need to support industries that produce critical capabilities that are vital to its security and stability.

In our view, investment in technological production must be expressed as part of a comprehensive plan of investment in education at all levels, technological training, enrichment programs at a young age in the geographical and social periphery, as well as in academia and infrastructure. Only then will it be possible to ensure the participation of different segments of the population in the prosperous high-tech industry and to help narrow gaps between populations that have had low-level participation in Israel's economy.

Israel can offer the "chip alliance" a regional advantage and serve as a gateway to the Middle East. The Abraham Accords are an opportunity for Israel to encourage technological investment in its territory and to help the United States create a clear buffer vis-à-vis the competing interests of China and Russia, which are probing and aspiring to deepen their partnerships in the region. This channel connects Israel's need for large investments to support the model proposed in this memorandum with the Gulf countries that seek

cooperation and economic benefits from the enormous opportunities that Israel's high-tech provides.

In this context, it is recommended that the state establish a national policy and define clear criteria regarding the legitimate, responsible use of Israeli technology that is acceptable to Israel and its allies, as well as the uses and customers that are incompatible with democratic values. Thus far, the state has chosen to engage in defining military technology that requires special approvals for export or dual-use technology. In the current era, completely civilian technologies could fall into the hands of those whose values contradict those of the State of Israel and could make use of Israeli technology in a way that would damage Israel's standing and reputation.

While the key to the success of the technology economy in Israel was and still is the free market that gives entrepreneurs the freedom to fulfill their potential with as few barriers as possible, we believe that the lack of a government strategy and continued reliance on the investments and successes of the private sector could undermine Israel's national security. The level of government intervention in technology throughout the world has increased, particularly as it is understood that the risks have grown. Therefore, in light of the tremendous inputs of Western countries in advancing their technological strength vis-à-vis China, huge financial investments, as well as legal frameworks of export controls, trade alliances, and coalitions of countries that define the accepted values for the use of technology in a democratic country, it is recommended that Israel adopt an unequivocal strategic stance with respect to its position on these burning issues.