Ministry of Economy and Industry
Strategy and Policy Planning Department

The Digital Divide of the Israeli Business Sector:

Results of the First ICT Survey by the Israeli Central Bureau of Statistics from an International Comparative Perspective

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Executive Summary

- This document constitutes the first snapshot of its kind regarding the state of technology adoption in the Israeli business sector, alongside an international comparison. This analysis is possible thanks to the data of the "ICT Survey" ran for the first time by Israeli Central Bureau of Statistics, (while being run in the European Union since the beginning of the 2000s. The survey's purpose is to investigate the degree of adoption of various technologies in the business sector.
- The uniqueness of this survey is twofold: First, the survey enables the examination of business digitization technologies in high resolution - starting with basic technologies such as a website and ending with advanced technologies such as artificial intelligence (AI). Second, this survey enables analysis based on business characteristics that often shape government policy towards the business sector, such as industry, the size of the business, their degree of internationalization (foreign ownership, exports) and their geographic location (periphery vs. center).
- The Ministry of Economy and Industry, as part of a broad effort to increase productivity in the economy, has taken several actions in recent years to assimilate technologies, with the understanding that their adoption has an impact on labor productivity, wages and living standards. Accordingly, this survey is a unique tool for planning a data-based holistic policy on the one hand, and subject to its continuity, for measuring the effectiveness of the actions taken on the other.
- Among the main findings:
    - In general, there is a significant "digital gap" in technology adoption in Israel compared to comparable developed countries - the percentage of businesses in Israel that possess high technological intensity is 3 times smaller than this percentage in the average of the benchmark countries. This gap is not due to a single industry or a small set of technologies but encompasses a variety of technologies and industries.
    - It is not just an "excessive weakness" of the long tail of weak businesses - we found that the gaps in the international comparison

exist at both ends of the index: a very low proportion of businesses that possess the highest digital strength, as well as a very high proportion of businesses that possess the lowest digital strength.

- It is not only a weakness of small businesses - as in the world, larger businesses tend to adopt technologies at higher rates. However, in Israel the "economies of scale" are realized at a lower level, a phenomenon that is particularly noticeable in the category of medium-sized businesses.
- Israel is significantly behind in advanced manufacturing technologies - in examining the adoption status of advanced manufacturing technologies, which are at the center of the policy of the Ministry of Economy and Industry, we found that the Israeli industrial sector is significantly behind: the adoption rates of advanced manufacturing technologies in Israel are lower than these rates in the benchmark countries on average by at least 50% (in some technologies the gap is even larger).
- There is a correlation between integration in the global value chain and technology adoption - it was found that the proportion of locally owned businesses with high digitization is significantly smaller than this proportion in the category of foreign-owned businesses, even when controlling for size and industry characteristics. Similarly, there is a correlation between the degree of digital intensity of the companies and their being export intensive.
- There is also a correlation between technology adoption and geographic peripherality - in the relationship between the adoption of technologies and the geographic dispersion of businesses, we found that businesses in the center of the country tend to incorporate technologies at higher rates than businesses in the geographic periphery. Specifically, the proportion of businesses in the central districts that have high digitization is 2 times greater than this proportion in the other districts.