



BANK OF ISRAEL

November 2018

Report of the team to examine the issue of Central Bank Digital Currencies*¹

Executive Summary

At the end of November 2017, the Governor of the Bank of Israel appointed a team to examine the issue of central bank digital currencies (CBDC).² The team was very glad for the opportunity to deal with the issue that has been the focus of much interest both among central banks and among the business sector and technology companies around the world. This document summarizes the team's work. The publication of this document is intended to bring the work done at the Bank of Israel to the public's attention and to allow for public discussion of its contents.

The team's work raised a number of main conclusions and findings:

- Many central banks are examining the possibility of issuing digital currency and/or using distributed ledger technology in payment systems.
- No central bank in any advanced economy has thus far issued digital currency for broad use. There are a few banks, primarily the central bank of Sweden, that are examining the issue. In contrast, there are others, such as the central banks of Denmark and Australia, that have declared that they are not planning to issue digital currency in the near future, because the payment systems in their countries are efficient and provide good alternatives.
- There is currently no uniform specification for a CBDC. The specification can be made in terms of its accessibility—to all or only to financial institutions; how it is issued—balance

* The original document was written in Hebrew. A full translation will be made available shortly.

¹ The team consisted of Barak Ettinger (Market Operations Department), David Bavli (Banking Supervision Department), Elitzur Weiser (Legal Division), Shiry Hadash (Currency Department), Daniel Hahiashvili (Governor's Office / Banking Supervision Department), Nir Levy (Accounting, Payment and Settlement Systems Department), Tomer Mizrahi (Information Technology Department), Michal Sinai Livyatan (Legal Division), Raz Navon (Research Department, Team Coordinator), Ronit Chitayate (Accounting, Payment and Settlement Systems Department), and Sigal Ribon (Research Department, Head of the Team).

² In this document, the term "digital currency" applies to currency issued by the central bank, unless otherwise noted. The digital currency may be encrypted (such as Bitcoin) or based on another technology.

based or token based; the extent of anonymity in its use; and whether it will bear interest. This document presents the advantages, disadvantages, and risks inherent in various specifications.

- CBDC is similar to immediate payment systems. Both means are convenient and accessible, and both settle immediately. But CBDC differs from immediate payment systems in three aspects: (a) it is an asset that constitutes a central bank liability, similar to cash; (b) it is possible to enable offline transactions to be made through it; and (c) users of the currency can be granted elements of anonymity (even if it is limited, for instance, to transactions that total up to a certain ceiling).
- The main purpose of issuing digital currency is to maintain the public's access to a central bank's liability, but that issue is not currently relevant to the Israeli economy, since there is no significant reduction in the use of cash. Making payments more efficient and supporting the payment system (including improved redundancy) are also worthy purposes for the issuance of digital currency. Under certain specifications, digital currency can serve as an additional monetary tool, but that is not a main purpose in issuing it.
- The issuance of digital currency can generate other benefits, including assistance with combating the unreported economy, adaptation with the advanced technological environment, and advancing the fintech sector in Israel. Another important consideration is coordination with possible advances in this field made by other countries.
- There are expected to be quite a few material and technological difficulties and risks in the issuance of CBDC that are mainly derived from the possible effect on the financial system. In addition, such issuance is expected to have an effect on the central bank as the issuer of cash, on its management of monetary policy, and on the payment system.

The team does not recommend that the Bank of Israel issue digital currency in the near future. We must continue to examine and monitor this field before we can form the proper foundation for a decision on whether to recommend digital currency. Accordingly, the following recommendations have been formulated:

- The team established by the Bank of Israel will continue its activity to study and monitor the issue, in coordination with departments at the Bank dealing with interfacing topics, including the payment system, distributed ledger technologies, and cryptocurrencies. The

team will report to the Bank's management semi-annually regarding its activity and significant global developments in the field.

- In order to make decisions regarding digital currency, the team will examine the following issues on an ongoing basis:
 - ✓ Developments abroad, mainly at other central banks. Attention will be paid to situations in which advanced economies issue digital currency, and to the ramifications on the foreign exchange market in Israel.
 - ✓ Scenarios that concern the effect of digital currency on various areas, in accordance with the extent to which it becomes an alternative to cash and to other means of payment in Israel and abroad.
 - ✓ The public's positions regarding digital currency (which can be learned about, for instance, by integrating the issue in surveys of the use of cash).
 - ✓ Technological developments connected with digital currency. The team will pay particular attention to relevant initiatives by domestic companies, and will strive to create a dialogue with them with the aim of learning about developments in the field.
- Further to the publication of this report, the team intends to hold meetings with relevant parties in the private and public sectors, in order to discuss and follow the issues arising from the report.
- The Bank of Israel is examining and encouraging the establishment of an infrastructure for immediate payments. It is important to examine the extent to which digital currency will complement or replace the system, and whether the decisions made regarding it must already take into account considerations regarding digital currency. Within this, attention must also be paid to how immediate digital payments will affect demand for cash and the Bank of Israel's service targets in the area of cash.
- We recommend considering the possibility of holding an international workshop in the future, with the participation of parties dealing with the issue in the major central banks, in order to create a forum for learning and information sharing. In particular, it is worth examining cooperation with the relevant international bodies, including the BIS, the OECD, and the IMF, since they have also begun working on the issue.