



BANK OF ISRAEL
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Developing Data and Information on Israel's Credit Market

ABSTRACT

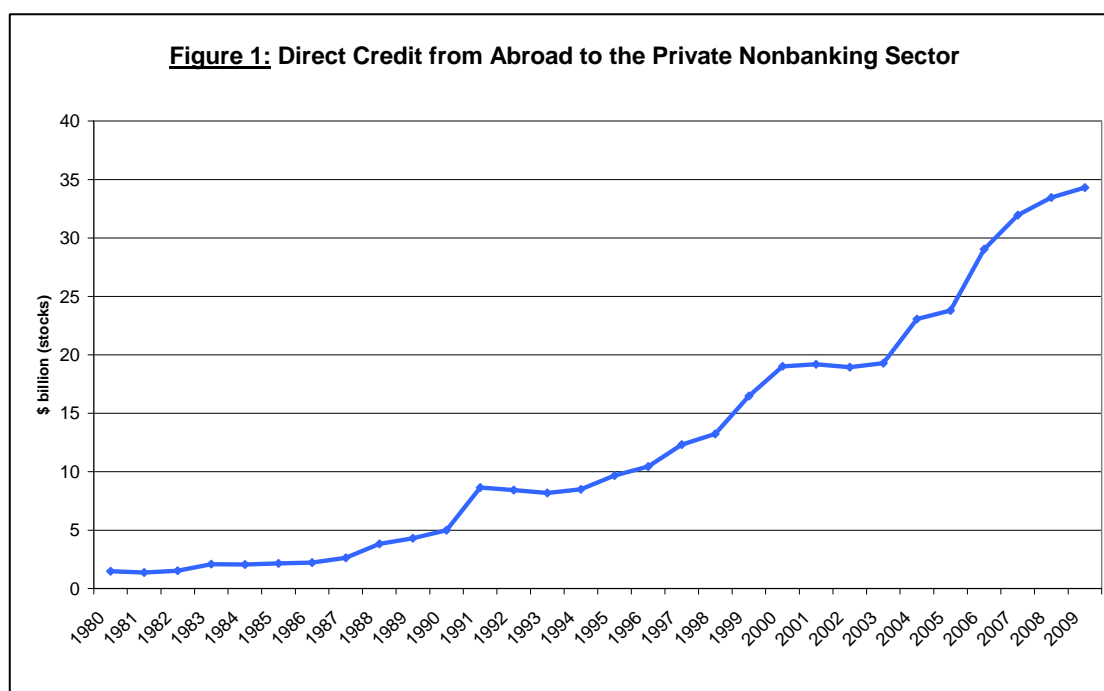
The recent global crisis had a severe impact on Israel's credit market, and in particular on the corporate bond market, which in effect dried up at the end of 2008. In the years **before the crisis**, the Bank of Israel developed databases and information on Israel's credit market alongside the development of the market itself—in the areas of bank credit, direct credit from abroad, corporate bonds, and credit risk in the economy as a whole. **During the crisis**, the Bank of Israel introduced various measures to improve the data and information on credit market. Among other things: (1) the frequency of banks' reports on new credit granted was increased; (2) methods of processing and presenting the data on the credit market was improved; (3) the Bank started monitoring the financial strength of large concerns; (4) the frequency of management reports was increased and the range of information presented in them was extended; and (5) the publication frequency of data and information on credit was increased. **Looking forward**, the Bank intends to continue improving the data and information on credit, with the emphasis on extending the coverage of reports on credit to additional financial institutions, enhancing the data on the inter-industry distribution of credit, and broadening the information published.

This description of the development of data and information on credit underlines the importance of ongoing adjustment of the data and information systems alongside changes in economic activity, and the importance of flexibility in processing the data in line with changes in information needs in normal time, and even more so in times of crisis.

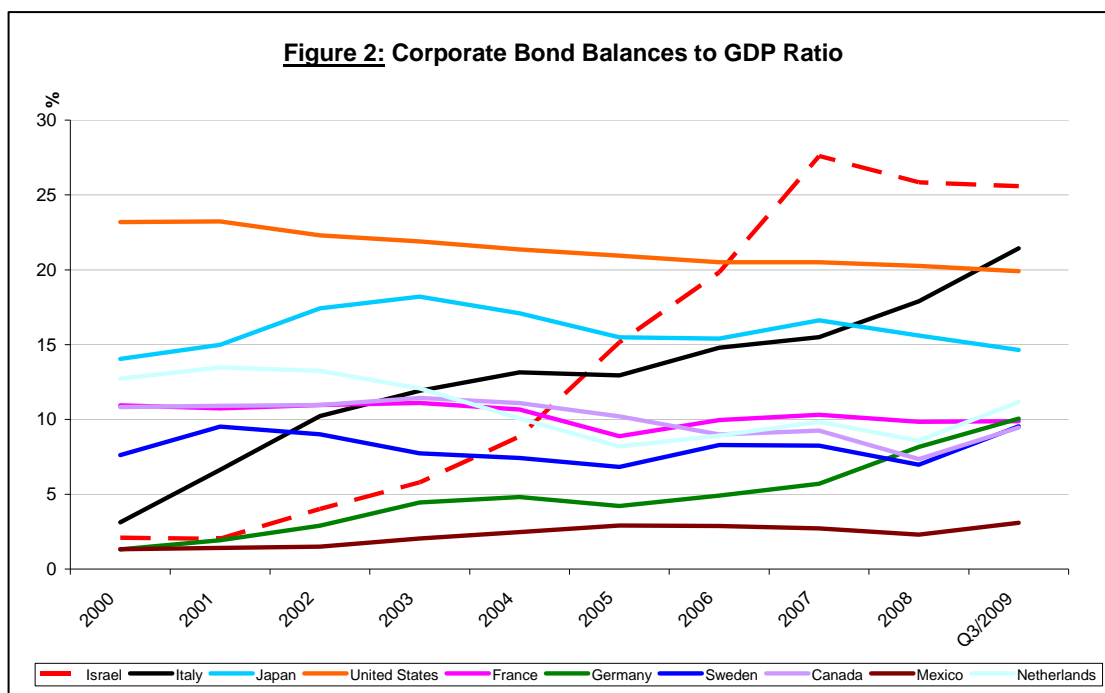
1. The development of data and information on credit prior to the crisis

In Israel, as in many other countries, the banking system was traditionally the dominant lender in the credit market, which was subject to many restrictions due to the size and involvement of the government in the economy as a whole, and in the credit market in particular. Hence, the basic information on the market was derived from the banks' reports to the Bank of Israel. These covered mainly outstanding bank credit, with a breakdown by industry and by large borrowers. The data and information systems on the credit market developed alongside with the developments in the market itself. **Four main processes** can be traced in the development of the market, the data and the information in the last three decades.

1. As a result of the reduction of government involvement and the removal of restrictions on banks' activities, the **bank credit market** became more sophisticated. At the same time, the coverage of banks' reports was widened to include details on credit, such as data on the flows of credit granted during the month or the quarter, and the interest the banks received on them. These reports helped the Banking Supervision Department in the Bank of Israel to monitor credit risks, and also helped in the calculation of the money and credit aggregates for monetary policy purposes.
2. In the next stage, following the foreign currency liberalization in the 1990s, **direct credit from abroad** increased (Figure 1). This led to the establishment of a broad infrastructure of reports, data and processing relating to foreign currency activity and to activity vis-à-vis nonresidents. This included data on the amounts and interest rates on borrowings by the government and Israeli companies from financial entities and other lenders abroad. The infrastructure was used mainly to monitor and analyze the foreign currency market and capital flows.



3. A nonbank credit market, and in particular **a corporate bonds market**, started to develop about ten years ago, as a result of reforms in the nonbank financial system, changes in tax regulations, and reduction of Government deficit and public debt. This market developed rapidly (Figure 2), and at the same time new data was collated on bond issues and balances, and on prices and yields in the secondary market. These data enabled the monitoring of the development of the market.



4. Against the background of Israel's advanced financial system and the increased activity in the financial markets, and in line with steps taken in other countries, a **Financial Stability Area** was established in the Bank of Israel in 2003. This function dealt with the analysis of the activity and risks in the financial system, and developed analytical frameworks to analyze and process the great amount of data already existing in the Bank. With regard to the credit market and credit risks, the Financial Stability Area developed methods for processing, presenting and analyzing (1) the distribution of total credit in the economy by borrowing and lending sectors and their changes over time (Table 1), (2) indices of financial strength of the borrowing sectors, i.e., the government, companies, and households, (3) national balance sheet data, and in particular the balance sheet of the financial sector and its various components (in cooperation with the Central Bureau of Statistics).

Table 1: Distribution of total outstanding debt in the economy by borrowing and lending sectors

(end of April 2010, NIS Billion*)

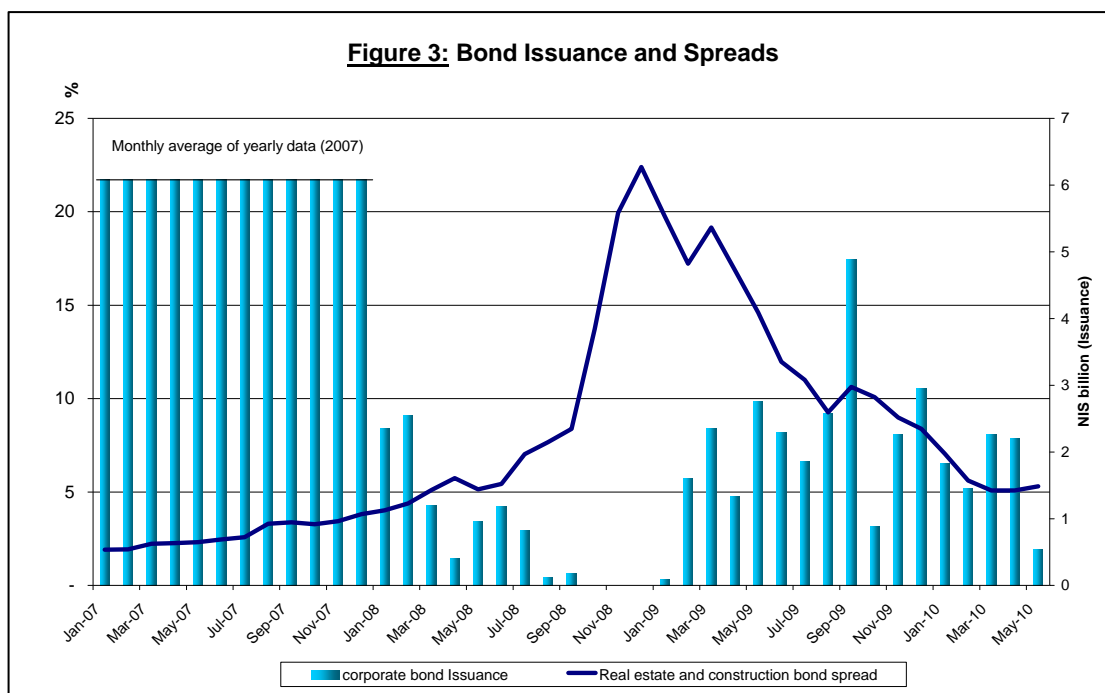
Lender Borrower	Banks	Institutional investors	Non residents	Households and others**	Total debt
Business sector	395	135	127	82	740
Loans	392	15	100	5	512
Tradable bonds	3	74	26	78	180
Nontradable bonds		47			47
Households	264	6	0	45	314
Loans	264	6		45	314
Government	63	291	114	148	616
Loans	15	6	12		32
Tradable bonds	48	143	71	148	410
Nontradable bonds		142	31		173
Total debt	722	432	240	275	1670

* Dollar rate April 2010: 1\$ =3.7 NIS

** Others includes: Credit cards companies, Government backed credit, business and financial corporations.

2. Adjustments to the data and information on credit during the crisis

During the global crisis, and especially from September 2008, the Bank of Israel took several steps to extend its data and information systems and to adjust them so that they could be used in decision-making during the crisis. The extension and adjustment of the data and information on the credit market was of great importance, as the global crisis had an immediate effect on that market, in particular on the corporate bond market: companies stopped issuing bonds, and bond prices in the secondary market slumped (Figure 3). The global crisis highlighted the need to identify in real time the damage to the credit market, to enable the Bank of Israel and the Ministry of Finance to make the appropriate decisions regarding the intervention required to minimize its implications on the real economy. More specifically, the need for data on the availability of credit to companies and its price and for data on companies' need for credit became more urgent.



The **main steps taken** in the area of data and information on the credit market during the crisis are shown below:

1. The **frequency of banks' reports** to the Bank of Israel on the amount of new credit they had granted to the public and on interest rates was increased from once a month to once every two weeks.
2. A distinction was made between data on **credit** from the lenders' viewpoint and data on **debt** from the borrowers' viewpoint. In light of the significant effect of the fall in the market prices of bonds and the loan loss provisions on credit balances reported in the lenders' books (the institutional investors and the banks), it was important to distinguish between these balances and the value of borrower companies' debts in their books.
3. A method of calculating **quantitative changes** in outstanding debt was developed and applied. Following on from the above distinction between credit and debt, and in light of the growing importance of identifying the flow of new credit advanced to borrowers, a new method was used to deduct the effect of prices and indexation changes from the changes in outstanding debt.
4. The division between the different **borrowing sectors** in total outstanding credit was made sharper, i.e., between the non-financial business sector, the households, the government and the municipalities.
5. The **frequency of publication** of the data on outstanding credit and debt and on the corporate bond market was increased from quarterly to monthly.
6. The Bank started **monitoring large companies**. A special team gathered and analyzed data and information on concerns' financial strength, and focused on analyzing the debt of companies regarding which there was growing concern that would be unable to repay their debts.
7. New **management reports** were formulated. The new monthly report to the Governor and to the management of the Bank included credit market indicators, and data on quantitative changes (new credit) and prices (interest rates and margins) relating to credit and its components.

8. The new data were **published**. The Bank put on its website the new data that it had on distribution of total credit and debt by borrowing and lending sectors as soon as possible, together with detailed explanations (<http://boisite/deptdata/datastat/itrote.htm>).
9. The Bank started issuing a **press release** on credit. The monthly release focuses on business sector debt, and includes the most important data and a short analysis of their changes (<http://boisite/press/eng/100621/100621v.htm>).

3. Looking forward and conclusions

The Bank of Israel intends to continue improving the data and information on the credit market, mainly in the following areas:

1. **The coverage of reports** on credit: extending the reports on credit also to financial entities which grant credit and which do not currently report to the Bank of Israel, so that the Bank will obtain a fuller picture of credit in the economy. The new Bank of Israel Law authorizes the Bank to obtain the information it needs from all financial entities.
2. Data on the **inter-industry distribution** of credit: dividing nonbank credit by principal industry similar to that of bank credit, so that a by-industry distribution of total debt and credit can be presented.
3. **Publication:** among other things, adding the data on quantitative changes in credit on the website and extending the press releases so that they also cover credit to households.

The recent global crisis and the description above underline several aspects of the management of data and information on the credit market, and in fact on total economic activity. Some insights follow.

1. The importance of holding **complete, detailed and coherent data** on the credit market, and in fact on the financial sector and the whole financial activity. The data must be on the micro and macro levels, so that the detailed data can be integrated to obtain financial aggregates at the level of the financial system and the economy as a whole, as well as the breakdown of the aggregates to the detailed data.
2. The importance of real time **ongoing adjustment** of the data systems to the developments in economic and financial activity. Moreover, it is important to anticipate **future needs** for data and information, for example those deriving from market reforms, from new analytical approaches and from crisis and policy responses scenarios.
3. The special importance of **flexibility** in processing the data in line with changes in information needs in normal time, and even more so in times of crisis. This flexibility requires the development of tools that provide flexibility in investigating the data and of analytical frameworks relevant to various needs.
4. The importance of **making data and information available** to decision makers, to economists who monitor and analyze the economy—both in public offices (the central bank, the Ministry of Finance, the supervisory authorities, etc.) and in domestic and foreign economic entities, and to the public. Making data and information available must continue during a crisis—and in certain areas should even be boosted.