

## Measuring direct investment as a part of the International Investment Position

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### **Abstract**

The purpose of direct investment is for foreign individuals or companies to purchase ownership of domestic companies. An analysis of direct investment shows the strength of the domestic economy and how open and attractive it is to foreign investors. The Information and Statistics Department at the Bank of Israel manages a database on the economy's activity vis-à-vis abroad, and calculates the aggregates of nonresidents' investments in Israel and Israelis' investments abroad for the purpose of compiling Israel's International Investment Position (IIP). These data are used in economic analyses of Israel's financial activity vis-à-vis abroad and in compiling Israel's balance of payments.

This paper focuses on measuring direct investment as a part of the Israel's overall IIP. In it, we present the dimensions, main terms and definitions of Israel's IIP; we outline the method of calculating direct investment in and from the Israeli economy; and we demonstrate the possible uses of the data on direct investment.

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## 1. Background and Objectives

Globalization has, to a large extent, removed restrictions on capital movements between economies, and diverted most economic activity to multinational corporations. These processes have contributed greatly to the expansion of global investment volumes, the main aim of which is the purchase of domestic companies by foreign individuals or companies. Nonresidents' investments in domestic companies, and domestic residents' investments in foreign companies, totaling 10 percent or more of the target company's capital, are referred to as "foreign direct investments" (FDI – hereinafter "direct investments"; a detailed definition is provided below).

There are a number of characteristics unique to direct investments. They involve very large amounts, take place through long-term processes, assist in the development of the domestic economies and companies, and provide exposure to capital, new technologies, and knowledge. The investors hold the companies for a long time, and do not tend to be influenced by short-term volatility in the stock markets, interest rate gaps, or changes in the exchange rate. Direct investors affect the decision-making and financial policy formulation of the companies in which they invest.

An analysis of the trends in direct investment may help economic policy makers in the country, by enabling them to measure the strength of the economy and the extent of its openness and attractiveness to foreign investors. A strong economy with strong fundamental data attracts foreign investors, thereby increasing its sources of financing. The economy's strength also makes it possible to expand its long-term investment channel in illiquid foreign assets. An analysis of direct investments by industry and by sector indicates the attractive industries in the economy, while an analysis of the geographic distribution of direct investments makes it possible to identify the economies and companies with which the economy has financial connections.

Data on the flow of direct investments, together with data on the flow of financial and other investments, are defined as capital movements to and from the economy, and are part of the economy's balance of payments<sup>1</sup> and of its national accounts. Data on capital movements, together with data on capital balances and other changes in balances, constitute the economy's International Investment Position (IIP). The IIP is compiled by the Bank of Israel's Information and Statistics Department on a quarterly basis according to international standards formulated by the International Monetary Fund (the BPM5 rules, which are subject to the National Accounts Calculation and Distribution Rules (SNA)). The figures are published<sup>2</sup> and sent to the Central Bureau of Statistics for use in compiling the balance of payments.

The second chapter of this work presents the main measures, terms and definitions in the IIP, which include direct investments. The third chapter outlines the method of calculating direct investments in the economy and from it. The fourth chapter demonstrates the possible uses of direct investment data, including international comparison of Israel's direct investments.

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<sup>1</sup> For more information on the balance of payments and its components (in Hebrew), see:  
[http://www.cbs.gov.il/reader/?MIval=cw\\_usr\\_view\\_SHTML&ID=344](http://www.cbs.gov.il/reader/?MIval=cw_usr_view_SHTML&ID=344)

<sup>2</sup> For more information on the International Investment Position, see:  
<http://www.boi.org.il/en/DataAndStatistics/Pages/MainPage.aspx?Level=2&Sid=27&SubjectType=2>

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## 2. Israel's International Investment Position

### 2.1 Measures

Israel's International Investment Position (hereinafter "IIP") provides a comprehensive description of all financial activity between the Israeli economy and abroad, combining three main measures:

#### 1. The economy's assets and liabilities

Investments by Israelis in foreign assets are presented alongside the economy's assets ("outgoing investments"), and nonresidents' investments in Israeli assets are presented alongside the economy's liabilities ("incoming investments").

#### 2. Investment channels

The economy's assets and liabilities are grouped into three main channels by the characteristic of the investment: direct investments, investments in tradable securities ("financial investments") and other investments. The secondary sorting of these investment channels is by type of financial instrument—shares, bonds, loans, deposits, and so forth.

#### 3. Balances, transactions and other changes

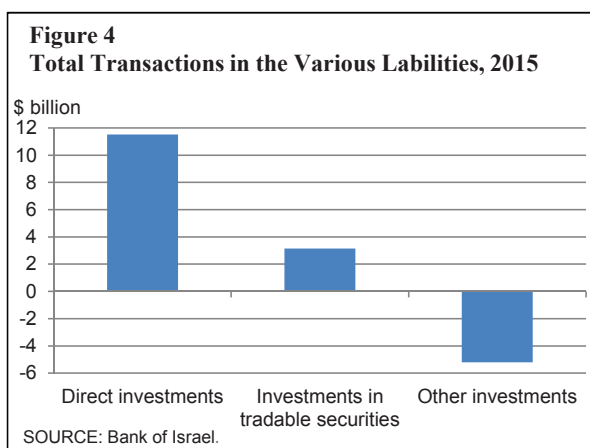
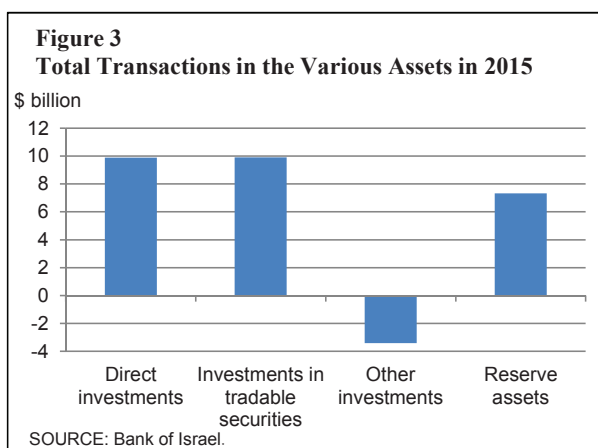
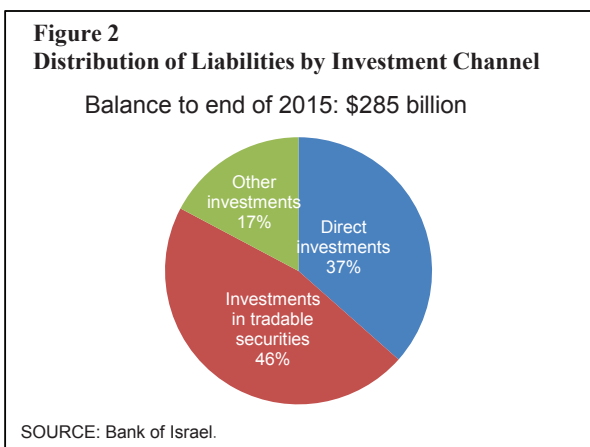
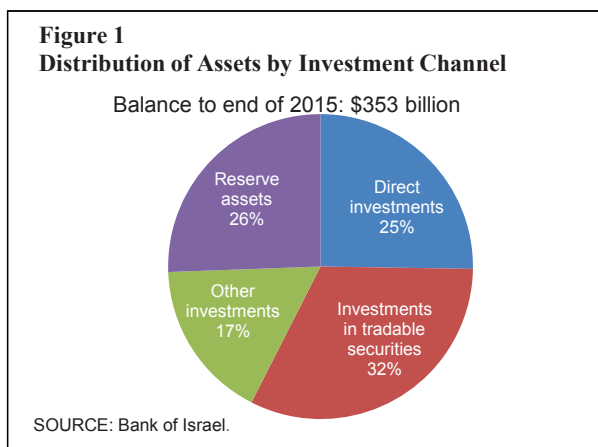
For a given period, the IIP details transactions in Israel's financial assets and liabilities vis-à-vis abroad, the balances at the beginning and end of the period, and the other differences between balances, that are not explained by transactions. These figures are presented in the IIP in a consistent and closed manner, such that the difference between the balance at the end of the period and the balance at its beginning is exactly equal to the amount of transactions and other changes, in the following schematic structure:



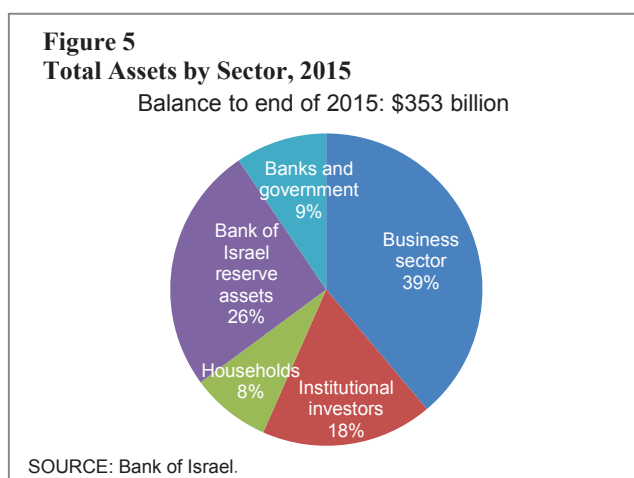
## MEASURING DIRECT INVESTMENT AS A PART OF THE INTERNATIONAL INVESTMENT POSITION

The table and explanatory notes below sample a combination of the three main measures in the data on assets and liabilities vis-à-vis abroad for 2015.

	Balance to end of 2014	Transactions	Price changes	Exchange rate differentials	Other adjustments	Balance to end of 2015
<b>A. Assets</b>						
<b>1 Total assets</b>	<b>335.3</b>	<b>23.5</b>	<b>-0.9</b>	<b>-4.9</b>	<b>0.4</b>	<b>353.4</b>
<i>of which: Debt instruments (2.3+3.2+4+5-4.5)</i>	<i>195.7</i>	<i>16.3</i>	<i>-0.3</i>	<i>-4.2</i>	<i>0.3</i>	<i>207.7</i>
<b>2 Direct investments</b>	<b>79.7</b>	<b>9.9</b>	<b>0.5</b>	<b>0</b>	<b>-0.7</b>	<b>89.4</b>
2.1 Share capital	71.0	5.1	0.5	0	-0.3	76.3
2.2 Land	..	0.4	0	0	-0.4	..
2.3 Ownership loans	8.7	4.3	0	0	0	13.1
<b>3 Investments in tradable securities</b>	<b>106.2</b>	<b>9.9</b>	<b>-1.7</b>	<b>-1.4</b>	<b>1.1</b>	<b>114.1</b>
3.1 Share capital	60.4	1.6	-1.5	-0.6	0.8	60.6
3.2 Bonds	45.8	8.3	-0.2	-0.7	0.3	53.5
<b>4 Other investments</b>	<b>63.7</b>	<b>-3.4</b>	<b>0.5</b>	<b>-0.9</b>	<b>0.1</b>	<b>59.9</b>
4.1 Deposits by Israelis	8.4	1.6	-0.1	-0.2	-0.1	9.5
4.2 Deposits in Israeli banks	14.8	-5.2	0	-0.2	0	9.4
4.3 Loans	11.1	-0.3	0.1	-0.1	-0.2	10.7
4.4 Customer credit	20.9	0.2	0	-0.4	0.2	21.0
4.5 Other assets	8.6	0.3	0.4	-0.1	0.1	9.4
<b>5 Reserve assets</b>	<b>86.1</b>	<b>7.3</b>	<b>-0.2</b>	<b>-2.6</b>	<b>0</b>	<b>90.6</b>
<b>6 Derivative instruments</b>	<b>-0.3</b>	<b>-0.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-0.6</b>
<b>B. Liabilities</b>						
<b>1 Total liabilities</b>	<b>270.6</b>	<b>9.4</b>	<b>8.5</b>	<b>-1.1</b>	<b>-2.6</b>	<b>284.9</b>
<i>of which: Debt instruments (2.3+3.2+4)</i>	<i>96.2</i>	<i>-5.5</i>	<i>0</i>	<i>-1.0</i>	<i>-0.2</i>	<i>89.4</i>
<b>2 Direct investments</b>	<b>93.3</b>	<b>11.5</b>	<b>1.2</b>	<b>0</b>	<b>-1.9</b>	<b>104.1</b>
2.1 Share capital	82.9	9.5	1.2	0	-1.0	92.6
2.2 Land	..	0.9	0	0	-0.9	..
2.3 Ownership loans	10.4	1.1	0	0	0	11.5
<b>3 Investments in tradable securities</b>	<b>122.1</b>	<b>3.1</b>	<b>7.3</b>	<b>-0.4</b>	<b>-0.6</b>	<b>131.6</b>
3.1 Share capital	91.6	4.5	7.3	-0.1	-0.5	102.8
3.2 Bonds	30.5	-1.4	0	-0.3	-0.1	28.8
<b>4 Other investments</b>	<b>55.2</b>	<b>-5.2</b>	<b>0</b>	<b>-0.7</b>	<b>-0.2</b>	<b>49.2</b>
4.1 Deposits by nonresidents	15.5	-2.7	0	-0.3	0	12.6
4.2 Deposits in banks abroad	4.4	-1.2	0	0	0	3.2
4.3 Loans	19.8	-1.3	0	-0.1	-0.3	18.1
4.4 Supplier's credit	15.5	-0.1	0	-0.3	0.1	15.2
<b>C. Net liabilities (B.1 - A.1)</b>	<b>-64.7</b>	<b>-14.0</b>	<b>9.4</b>	<b>3.9</b>	<b>-3.1</b>	<b>-68.5</b>
<i>of which: Net debt instruments</i>	<i>-99.5</i>	<i>-21.8</i>	<i>0.3</i>	<i>3.2</i>	<i>-0.5</i>	<i>-118.3</i>



The assets side in the IIP presents all sectors of the Israeli economy: business, banking, institutional investors, government, Bank of Israel, and households. For illustrative purposes, the economy's total assets for 2015, distributed by the various sectors is shown (Figure 5).



## 2.2 Definitions

### 2.2.1 Residency

- **An Israeli resident** (different from the international definitions)<sup>3</sup>:
  - An Israeli citizen, new immigrant, or holder of landed immigrant status who, in the 12 months preceding the transaction, lived in Israel, consecutively or alternately, for a period exceeding 180 days.
  - A corporation registered with the Registrar of Companies in Israel, or with the main part of its activities in Israel.
- **A nonresident** is defined as someone who is not an Israeli resident.

### 2.2.2 Assets

- **An Israeli asset** is defined as a financial asset issued by an Israeli resident and held or traded in Israel and/or abroad.
- **A foreign asset** is defined as a financial asset issued by a nonresident and held or traded in Israel and/or abroad.

### 2.2.3 Investment channels

- **Direct investment** (Foreign direct investment: FDI): Investments in share capital where the investor holds 10 percent or more of the share capital of the company plus the direct investor's profits from the investments that were not distributed as dividends (surplus). Direct investments also include investments in land and owners' loans.
- **Investments in tradable securities** (portfolio investments): Investments in share capital where the investor holds less than 10 percent of the share capital of the company, and investments in bonds.
- **Other investments**: Investments in financial assets that are not securities: deposits, commercial credit, loans and other financial assets.
- **Reserve assets**: The central banks foreign exchange reserves, the state's gold reserves, reserves with international organizations such as the International Monetary Fund, and SDR (Special Drawing Rights)—rights to withdraw from the account, allocated by the IMF in international currency, calculated by the average of the currencies of IMF member countries, for the purpose of meeting liabilities and covering balance of payment deficits.

### 2.2.4 Balances, transactions and other changes

**Transactions in the IIP**: Net flows (investments minus realizations) in financial assets and liabilities. These are calculated as the sum of new investments in the various channels, minus the realization of investments in those channels.

**Balances in the IIP**: The stock of foreign financial assets held by the economy's residents (including reserve assets), and the stock of financial liabilities of the economy's residents toward nonresidents. The difference between total assets and total liabilities at any point in time represents the total net assets of the economy.

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<sup>3</sup> The definition of residency according to the International Monetary Fund:

Domestic resident:

1. An individual, whose center of economic activity is in the country, and who has lived there for more than one year.
  2. A corporation, whose center of economic activity is in the country, and which has existed in it for more than one year.
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**Other differentials in the IIP:** price changes, which represent the total effect of changes in the price of tradable securities over the period; exchange rate differentials, which represent the total effect of changes in the exchange rate over the period; other adjustments, which represent other changes in the balances, such as revaluations, changes in residency and changes in tradability.

## 3. Method of calculation of direct investment figures

### 3.1. Sources of data

Most of the data on direct investments in Israel—incoming and outgoing—come from direct reports<sup>4</sup> from companies and individuals to the Bank of Israel pursuant to the Bank of Israel Order. (See: Information regarding developments in the foreign currency market in Israel, 5770–2010.) The companies that are required to report are any Israeli company with a balance of \$20 million or more in direct investments in foreign companies, and any Israeli company where foreign direct investors hold direct investments of \$40 million or more in them. In addition, individuals who own financial assets abroad valued at \$20 million or more must also report. Additional data used in measuring direct investments are obtained from reports by the Israel Securities Authority, the Ministry of Finance, and the domestic banks on nonresidents' transactions in shekels and of Israelis' transactions in foreign exchange.

### 3.2. Main calculations

#### 3.2.1 Incoming direct investments

The Table below summarizes the main calculations made by the Bank of Israel's Information and Statistics Department regarding incoming direct investment data.

The vast majority of the data on direct investment in the Israeli economy is calculated as the sum of data from the direct reports of Israeli companies and individuals obtained by the Information and Statistics Department (presented in the Table as "total"). All of the calculations presented in the Table are based on assumptions at the time of the given calculation, and therefore generate only estimated figures. There is no extrapolation based on the partial data, so where the estimates are derived from only partial figures, they are underestimates. For instance: The estimate of net transactions based on reports by the domestic banks includes only transactions that passed through domestic banks, and does not include transactions that passed through banks abroad or noncash transactions, and is therefore an underestimate.

Incoming direct investments are, by their nature, investments in Israeli companies (other than land) by nonresidents. Therefore, the calculations in the Table focus on the companies in which investments were made.

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<sup>4</sup> For more information regarding the forms for reporting to the Bank of Israel (in Hebrew): <http://www.boi.org.il/he/DataAndStatistics/Pages/ReportingForms.aspx>

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**Table 2**  
**Calculation of data on incoming direct investment**

Type of instrument	Type of company invested in		Source of data	Balance	Net transaction	Price change	Exchange rate differential	Other adjustments
Share capital	Tradable companies	Companies traded in Tel Aviv	Israel Securities Authority data	Quantity of shares held by direct investors, multiplied by the share price at the end of the period	Change in quantity held by direct investors, multiplied by the average share price for the period	Average quantity of shares held by direct investors during the period, multiplied by the change in the dollar prices of the share for that period, minus exchange rate differentials	Change in the dollar balance, minus change in the shekel balance, translated into dollars at the average exchange rate for the period	Remainder*
		Companies traded abroad	Companies' direct reports to the Bank of Israel			Change in the price of the share, multiplied by the geometric average of balances at the beginning and end of the period	Not relevant	Remainder*
	Nontradable companies	Companies that meet the threshold for direct reporting to the Bank of Israel	Companies' direct reports to the Bank of Israel	Total	Total	Not relevant	Total	Total
		Companies that do not meet the threshold for direct reporting to the Bank of Israel	Reports from the domestic banks	Total cumulative net transactions and other adjustments since 1996	Total	Not relevant	No data	Total
Land			Reports from the domestic banks	No data	Total	No data	No data	No data
Owners loans		Companies that meet the threshold for direct reporting to the Bank of Israel	Companies' direct reports to the Bank of Israel	Total	Total	Not relevant	Total	Total
		Companies that do not meet the threshold for direct reporting to the Bank of Israel	Reports from the domestic banks	Total cumulative net transactions and other adjustments since 1998	Total	Not relevant	No data	Total

\* Other adjustments are calculated as the remainder after subtracting transactions, exchange rate differentials, and price changes from the balance differentials.

### 3.2.2 Outgoing direct investments

Outgoing direct investments are, by their nature, investments in foreign companies (other than land) by Israelis, from various sectors. Therefore, the following description is according to the investing sector.

- Direct investment abroad by the business sector is calculated as detailed in Table B2.
- Direct investment abroad by domestic banks is calculated as the total of their direct reports to the Banking Supervision Department at the Bank of Israel.
- Direct investment abroad by institutional investors is calculated as the total of their direct reports to the Ministry of Finance and the Bank of Israel.
- Direct investment abroad by households is calculated as detailed in Table B2, other than the calculation of investments in companies traded abroad, which is calculated similar to the calculation of investments in nontradable companies.

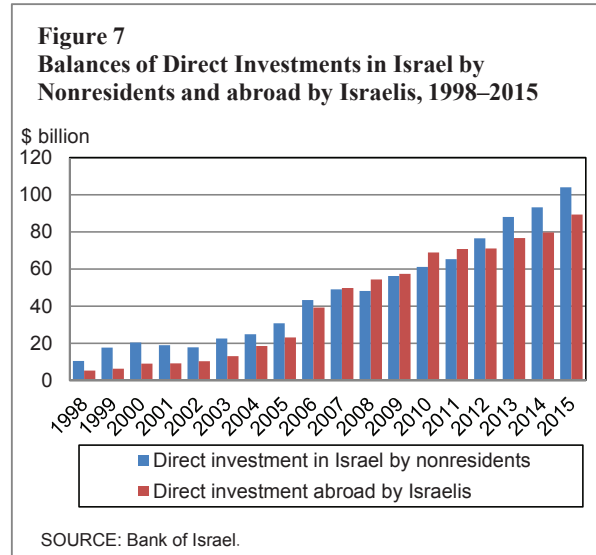
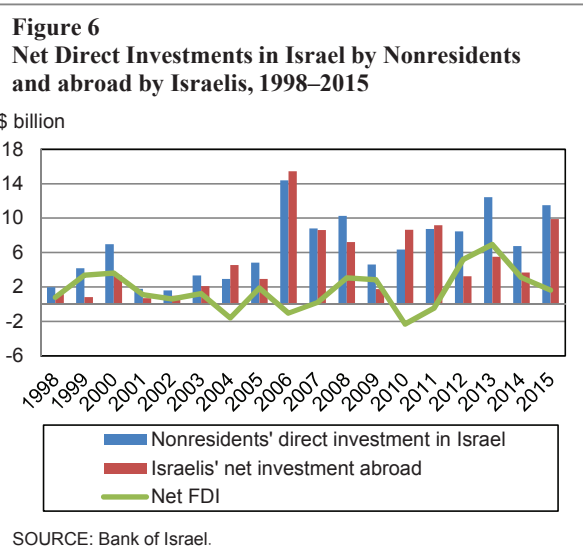


## 4. Demonstration of the use of direct investment data

This chapter demonstrates the potential uses of the direct investment data contained in the IIP. These uses are a tool in providing an economic analysis of capital movements to and from the economy.

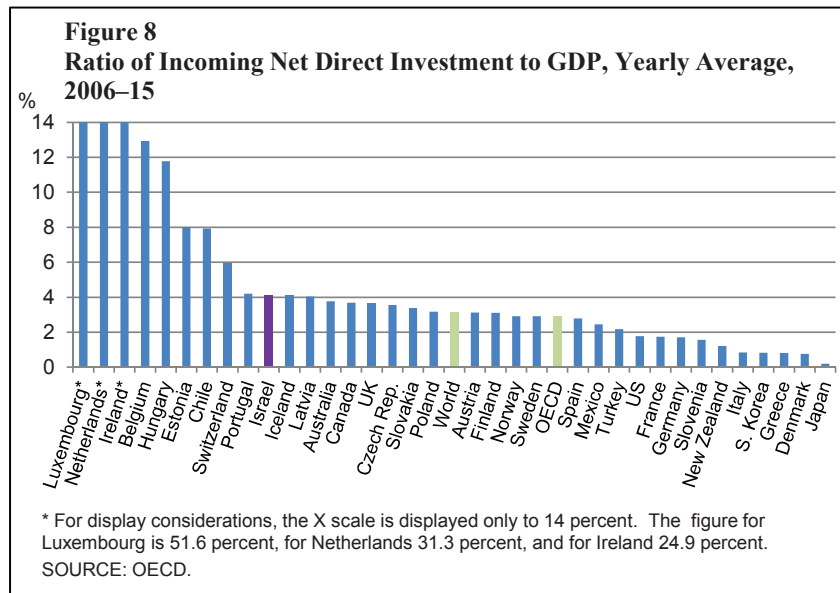
### 4.1 Analysis of direct investment balances and transactions

- Until 2005, the flows of gross direct investments to and from the economy were relatively low, averaging \$3.4 billion in incoming direct investments and \$2.1 billion in outgoing direct investments each year between 1998 and 2005. The flows of direct investment increased markedly in both directions beginning in 2006, reaching yearly averages of \$9.2 billion for incoming direct investment and \$7.3 billion for outgoing direct investment between 2006 and 2015. The flows of net direct investment were positive in most years, with large fluctuations in volume. 2006 was an exceptional year in terms of the volume of direct investment transactions, as a result of a significant investment by Berkshire Hathaway in the Israeli Iscar company. The global financial crisis that began in 2008 led to a temporary decline in investments in both directions during 2009, following which the flow of net investments into the economy expanded.
- Beginning in 2006, there has been a marked upward trend in the balance of incoming and outgoing direct investments, mainly as a result of increased flows of investment. With the increase in the balance of incoming direct investment, the proportion of all shares issued by the Israeli business sector that is held by nonresidents increased from 18 percent at the end of 2005 to 25 percent at the end of 2014. This increase was a result of the increase in the balance of incoming direct investment (by 202 percent from 2005 to 2014) beyond the increase in the total number of shares issued by the business sector (an increase of 80 percent from 2005 to 2014).

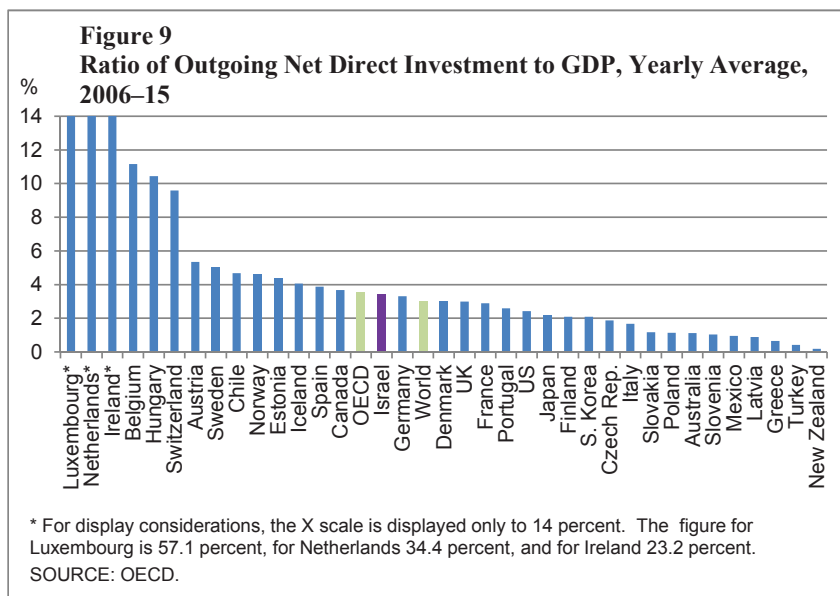


## 4.2 Comparing Israel and the other OECD countries in terms of the flow of direct investment

- Comparing the ratio between incoming direct investment to Israel and GDP to the same ratio in other OECD member countries shows that the Israeli economy is highly attractive and open to incoming direct investment. Incoming direct investment in Israel averaged 4.1 percent of GDP between 2006 and 2015, higher than the 3.1 percent global average and the 2.9 percent average in the OECD. This average ratio is also high when taking into account the fact that a few countries—such as Ireland, Luxembourg, Switzerland and the Netherlands—have averages that are significantly higher than in the rest of the countries, due to relatively lenient corporate tax policies.



- An international comparison of the ratio between outgoing direct investment from Israel and GDP to the same ratio in other OECD countries shows that Israeli companies are economically strong, which enables them to deploy their investments over wide geographic areas. Outgoing direct investment from Israel averaged 3.4 percent of GDP between 2006 and 2015, similar to the 3.5 percent average in OECD member countries, and higher than the 3 percent global average.

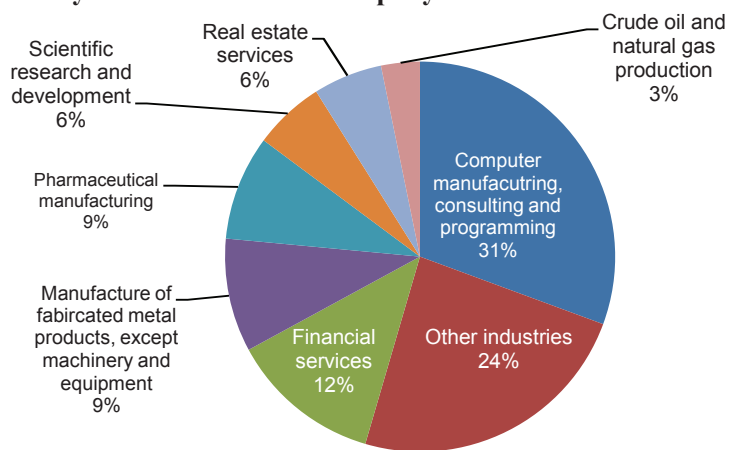


### 4.3 Industry<sup>5</sup> distribution of the balance of direct investment

- The industry distribution of the balance of outgoing direct investment at the end of 2014 was more concentrated than that of the balance of incoming direct investment.
- The balance of outgoing direct investment was concentrated in the pharmaceutical manufacturing industry (48 percent), and about 55 percent of direct investment in this industry was by just one Israeli company.
- The balance of incoming direct investment at the end of 2014 was concentrated in the computer manufacturing, consulting, and programming industry, and in the financial services industry (44 percent combined). Fifty percent of investments in the computer manufacturing, consulting and programming industry was concentrated in just five Israeli companies, and 65 percent of investments in the financial services industry was concentrated in just three Israeli companies.

<sup>5</sup> The analysis of the geographic distribution of incoming and outgoing direct investment is also provided by the Information and Statistics Department and sent to the Central Bureau of Statistics for publication and distribution to international organizations. In this work, we have chosen not to present this analysis, because the geographic distribution relates to the country from which or to which investments are made (immediate investing country), which is for the most part a transit country for the money, selected for taxation or other reasons, and not to the country of the final investor (ultimate investing country). To view the press release from the Central Bureau of Statistics regarding direct investments abroad by Israelis and in Israel by nonresidents by industry and by country for 2014: [http://www.cbs.gov.il/reader/newhodaot/hodaa\\_template.html?hodaa=201609104](http://www.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=201609104)

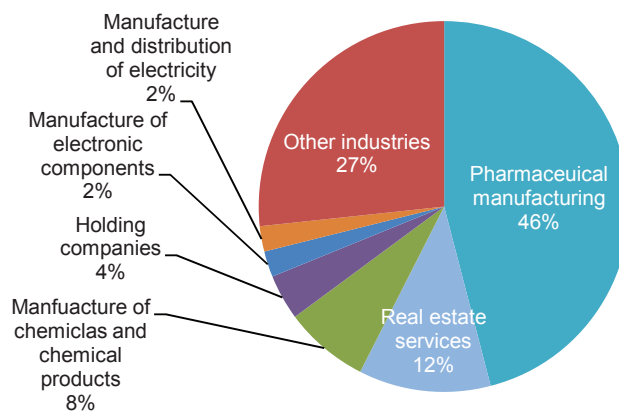
**Figure 10**  
**Distribution of Balance\* of Incoming Direct Investment by Industry of the Invested-In Company**



Balance to end of 2014: \$54 billion

SOURCE: Bank of Israel.

**Figure 11**  
**Distribution of Balance\* of Outgoing Direct Investment by Industry of the Invested-In Company**



Balance to end of 2014: \$67 billion

SOURCE: Bank of Israel.

\*The nonbank financial sector, companies that meet the benchmark for reporting to the Bank of Israel only, which comprise about 60 percent of the balance of direct investment in Israel by nonresidents and about 85 percent of the balance of direct investment abroad by Israelis.