NBP Narodowy Bank Polski

Foreign direct investment in Poland and Polish direct investment abroad in 2016

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Department of Statistics

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Introduction

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The annual report on foreign direct investment in Poland and Polish direct investment abroad was prepared based on reporting data collected by NBP for the purpose of analysis of multifaceted foreign economic relations of Poland, including, in particular, for the purpose of the balance of payments and international investment position. In the report, data available as at 30 August 2017 were used.

Foreign direct investment represents a significant part of cross-border capital flows and constitutes an important part of the financial account in the country's balance of payments. At the same time, it is an important element of the globalisation process of the world economy.

The report provides information on direct investment in various dimensions in response to the high interest in direct investment issues. The statistical data contained herein are presented according to the applicable international standard. In accordance with this standard, a basic criterion used for classification of direct investment is the location of its control centre in the country or abroad. As a consequence, from the perspective of the economy in question direct investment is divided into investment controlled by non-residents and investment controlled by residents. Thus, we refer to foreign direct investment in Poland and Polish direct investment abroad. This method of presentation of data on direct investment differs from that adopted in the balance of payments and international investment position where direct investment is presented with a breakdown into assets and liabilities.

The data on direct investment was purged of transactions, positions and income of special purpose entities registered in Poland. Despite their formal compliance with the current definition of direct investment, the operations carried out in connection with them do not correspond to the traditional understanding of such investment. The data presentation method adopted in the report is compliant with the recommendations of institutions dealing with the collection and analysis of data on direct investment at an international level.

Certain information in the report is presented according to more detailed breakdowns, going beyond the standard scope of data.

Explanations about the method applied for the presentation of direct investment data are included in the Methodological note, constituting an integral part of the report. The terms used in the report are explained in the Glossary of terms forming a part of the Methodological note.

Summary

Summary

In 2016, net inflow of foreign direct investment to Poland amounted to PLN 54.9 billion. It was only PLN 2.6 billion lower than in the record year of 2015 and PLN 9.9 billion higher than a year earlier. The significant inflow of capital in recent years resulted mainly from the high earnings gained by direct investment entities and reinvestment of such earnings.

In 2016, Polish direct investors performed transactions with a record value of PLN 31.8 billion, PLN 13.0 billion, i.e. 69%, more than in the previous year. However, transactions connected with the reorganisation of investment funds represented almost half of this amount, resulting in the decrease in portfolio investment and a corresponding growth in direct investment.

At the same time, a 2% decline in direct investment was recorded globally, although its level still remained high.

Foreign direct investment in Poland

In 2016, net inflow of direct investment to Poland amounted to PLN 54.9 billion. Once again, reinvestment of earnings in the amount of PLN 34.2 billion was the predominant item. Inflow of capital in the form of equity amounted to PLN 8.4 billion, while net capital inflows in the form of debt instruments amounted to PLN 12.3 billion.

As a result of the growth in inflow of direct investment to new European Union (EU) member states,[1] with the simultaneous decline in the inflow of direct investment to Poland, the share of Poland in the inflow of direct investment to those countries decreased from 52% in 2015 to 17% in 2016.

In the geographical structure of direct investment inflow in 2016, reinvested earnings which originated from countries of the biggest direct investors prevailed: the Netherlands (PLN 20.2 billion – total inflow), Germany (PLN 13.7 billion) and Luxembourg (PLN 8.7 billion). On the other hand, unit transactions turned out significant, which were reflected in an increased inflow of direct investment from the Netherlands and their outflow to Ireland (PLN -2.3 billion) and Italy (PLN -1.7 billion).

In 2016, foreign direct investment was mainly targeted at manufacturing entities (PLN 15.9 billion) as well as management consultancy activities (PLN 10.4 billion). In the case of entities involved in electricity generation and supply, outflow of capital was recorded, associated with losses incurred by those entities (negative reinvestment of earnings) as well as repayment of debt towards direct investors (PLN -1.9 billion in total).

[1] In this report, new EU member states include countries of Central and Eastern Europe, i.e. Bulgaria, Croatia, Lithuania, Latvia, Poland, the Czech Republic, Romania, Slovakia, Slovenia and Hungary. Due to the publication dates of annual data on direct investment compliant with the directional principle, data on inflows of net direct investment were used for estimation of the inflow of direct investment to new EU countries, i.e. liabilities of direct investment less the assets. Data collected for the needs of the balance of payments were used for calculations.

A closer analysis of the structure of direct investment inflows to Poland over the recent years indicates a certain change of investment areas and forms. In the area of services, the share of investment in the form of equity has increased to the detriment of other forms of investment. In manufacturing, reinvestment of earnings is the prevailing form of investment, after the inflow of capital in the form of equity in the previous years. At the same time, outflows of capital in the form of equity have been observed.

In 2016, direct investment inflows to Poland once again recorded a negative balance of mergers and acquisitions. This was related to the trend of repurchasing of domestic industrial undertakings from foreign investors by Polish capital. It affected the decline in the value of total foreign direct investment in Poland. The share of mergers and acquisitions in the direct investment inflow remained insignificant.

At the end of 2016 Poland's inward direct investment positions amounted to PLN 778.6 billion. Over 7-per cent growth in the inward direct investment positions was recorded, mainly as a result of an increase in the value of investment in equity. The geographical structure of liabilities was almost the same as a year ago. The highest liabilities were recorded towards investors from the Netherlands (PLN 149.9 billion), Germany (PLN 129.4 billion), Luxembourg (PLN 103.7 billion) and France (PLN 78.7 billion). Taking into account the country of the seat of the ultimate controlling parent in the enterprise group, it turns out that the biggest direct investor in Poland was Germany (PLN 151.0 billion), France (PLN 80.5 billion) and the United States (PLN 79.0 billion) were next.

Taking into consideration the country of the ultimate controlling parent's seat allows to show the role of Polish direct investors in inward direct investment in Poland. At the end of 2016, inward direct investment in Poland controlled by Polish entities amounted to PLN 34.9 billion, which constituted 4.5% of liabilities. The scale of this phenomenon, defined as round-tripping, was similar to that observed in France (4.4%), higher than in the United States (2.5%), but much lower than in Italy (10.5%) or in Germany (7.9%).

No significant changes occurred in the structure of inward direct investment positions according to industry. The highest amounts of liabilities were attributed to manufacturing (PLN 245.4 billion), financial and insurance activities (PLN 147.9 billion), wholesale and retail trade, including repair of vehicles (PLN 114.2 billion), professional, scientific and technical activities (PLN 64.2 billion) and real estate activities (PLN 64.2 billion).

In 2016, similar to previous years, the highest liabilities due to inward direct investment were recorded in the Mazowieckie Voivodeship (PLN 422.7 billion). Other voivodeships with a significant level of investors' involvement include Śląskie Voivodeship (PLN 82.6 billion), Wielkopolskie Voivodeship (PLN 69.9 billion), Dolnośląskie Voivodeship (PLN 44.0 billion), Małopolskie Voivodeship (PLN 35.8 billion) and Pomorskie Voivodeship (PLN 26.3 billion). However, the above data should be interpreted with considerable caution. Liabilities due to inward direct investment show the place of investment registration, whereas the real place of incurring capital expenditure is often different than the registered office of the entity that a given direct investment is related to.

In 2016, investors' income due to direct investment in Poland reached a record value of PLN 79.0 billion. It consisted of dividends in the amount of almost PLN 36.1 billion, reinvested earnings at a level of PLN 34.2 billion and interest income with the value of PLN 8.7 billion. The highest

income was recorded by direct investors from the Netherlands (PLN 18.4 billion), Germany (PLN 15.3 billion) and Luxembourg (PLN 11.2 billion). This income reached the highest values in the following sections: manufacturing (PLN 30.5 billion), wholesale, retail trade and repair of vehicles (PLN 12.1 billion) as well as financial and insurance activities (PLN 10.0 billion). It should be emphasised that in 2016, earnings of all companies operating in Poland increased, including those gained by companies with a share of foreign direct investors.

Polish direct investment abroad

In 2016, Polish direct investors invested PLN 31.8 billion abroad. Equity investment amounted to PLN 22.7 billion, reinvestment of earnings reached PLN 1.9 billion and investment in debt instruments amounted to PLN 7.3 billion.

In 2016, organisational changes in investment funds had a major impact on the value of Polish direct investment abroad. They were related to changes in taxation of closed-end investment funds introduced in November 2016. It made those funds resign from portfolio investment abroad and invest in the same entities, but through domestic companies created by themselves. Such investment was classified as direct investment. For the above reasons, in 2016 growth in transactions due to Polish outward direct investment of PLN 15.3 billion was recorded, at the expense of portfolio investment.

The biggest outward direct investment transactions by Polish residents occurred in Luxembourg (PLN 19.1 billion) and in Sweden (PLN 3.9 billion). Investment in Luxembourg was mainly related to the reorganisation of investment funds and in Sweden, with the repayment of liabilities towards direct investment entities.

In 2016, Polish outward direct investment was mainly targeted at direct investment entities dealing with professional, scientific and technical activities (PLN 9.4 billion) and entities dealing with information and communication (PLN 6.8 billion). The first group of investment was mainly related to the reorganisation of investment funds, whereas the second group was associated with the aforementioned repayment of debt.

While interpreting the data on Polish direct investment abroad, it should be kept in mind that they present countries and types of activity of entities to which residents' funds flow directly. It means that if they use, for example, holding companies in Luxembourg, the real target investment will not be visible in the data, only the investment in the industry associated with the financial activity in Luxembourg. This has a substantial impact on the geographical and economic activity breakdowns of Polish direct investment abroad.

At the end of 2016, Polish outward direct investment positions reached a record value of PLN 122.4 billion. They consisted of receivables due to equity at a level of PLN 123.1 billion and negative receivables due to debt financial instruments at a level of PLN -0.7 billion. The negative position due to debt financial instruments resulted from the liabilities of Polish direct investors (PLN 46.1 billion), exceeding their receivables (PLN 45.4 billion) from foreign affiliates.

The highest amounts of receivables due to Polish outward direct investment at the end of 2016 were recorded towards entities from Luxembourg (PLN 44.2 billion), Cyprus (PLN 15.0

billion), Switzerland (PLN 9.1 billion) and the Czech Republic (PLN 8.5 billion). The first three of the aforementioned countries owed their position to deploying there special purpose vehicles used in investment structures. Negative amounts of receivables due to Polish outward direct investment occurring in the case of several countries resulted from the specific method of Polish companies' investing in those countries.[2] The highest negative value was recorded for receivables from Sweden (PLN -19.6 billion).

The highest amounts of receivables were attributed to financial and insurance activities (PLN 41.2 billion), professional, scientific and technical activities (PLN 21.9 billion), administrative and support service activities (PLN 17.1 billion) and to manufacturing (PLN 17.0 billion). The highest negative receivables were recorded in the case of production and distribution of electricity (PLN -5.5 billion). Special purpose vehicles used in outward investment are usually classified as financial activity, professional activity and administrative activities.

While analysing Polish direct outward investment, it should be taken into consideration that it was pursued by entities both under national control (residents) and under the control of non-residents. At the end of 2016, receivables of entities under national control amounted to PLN 72.2 billion, whereas receivables of those under the control of non-residents amounted to PLN 50.2 billion.

In 2016, private investment related to round-tripping, with the value of PLN 34.9 billion, had the highest share in Polish direct outward investment under the control of residents (in contrast to investment by entities with the State Treasury share).

Other private investment of this type amounted to PLN 20.5 billion, while investment of entities controlled by the State Treasury amounted to PLN 16.8 billion. Investment of domestic entities controlled by non-residents can be divided into investment related to capital in transit, pursued by entities running real activity (PLN 11.5 billion) and other direct investment of domestic entities controlled by non-residents (PLN 38.7 billion). It confirms the considerable difference between the traditional understanding of domestic outward investment and its presentation in accordance with international standards.

In 2016, Polish direct investors' income due to outward direct investment reached the value of PLN 4.9 billion. Declared dividends amounted to PLN 2.6 billion, reinvested earnings PLN 1.9 billion and interest income PLN 0.4 billion.

The highest income was gained on investment in Lithuania (PLN 1.1 billion) and in Luxembourg (PLN 0.9 billion). The highest negative balance of income (losses) was recorded in the case of United Kingdom (PLN -0.7 billion) and Sweden (PLN -0.5 billion). In the United Kingdom it was the result of losses of direct investment entities established in this country. In Sweden, negative income resulted from high interest payments in favour of direct investment entities.

In 2016, the income of Polish investors originated mainly from investment in foreign direct investment entities associated with manufacturing (PLN 2.4 billion) and wholesale and retail trade including repair of vehicles (PLN 0.6 billion).

[2] In many cases Polish companies have liabilities towards their affiliates established abroad. Those liabilities exceed the amount of capital invested in those entities and arise from the acquisition of capital through those companies from the issue of bonds on the European market for the needs of the parent companies.

Foreign direct investment in Poland and innovation in the Polish economy

Direct investment in innovative industries is perceived as a driving force of economies due to its potential contribution to economic development. In recent years, the role of direct investment in industries classified as innovative has been growing. The growth of transactions in this area is mainly related to higher than average profitability of enterprises and the resulting increased possibility of reinvestment of earnings. To a lesser extent, these investments result in the establishment of new companies.

Chapter 1

Foreign direct investment in Poland

Foreign direct investment in Poland

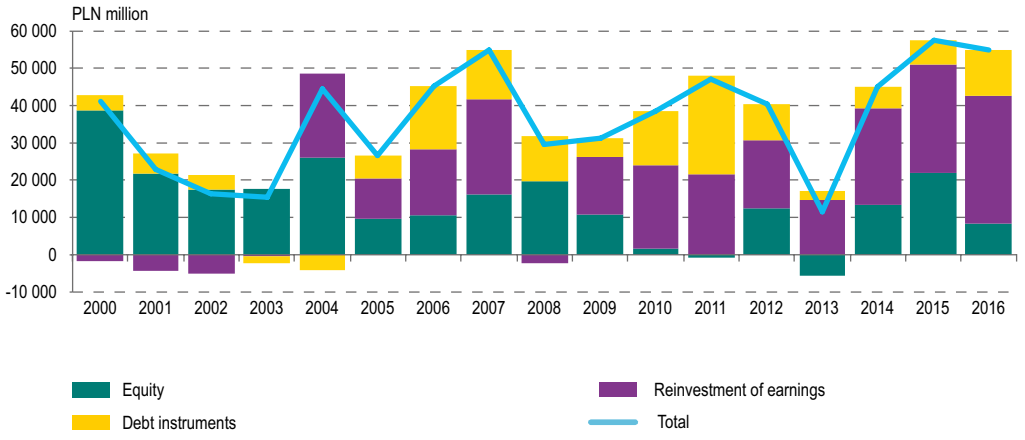
The inflow of inward direct investment is one of the most important sources of foreign capital in the Polish economy. In its traditional form, direct investment also translates into investment and consumer demand. They also contribute to the growth of employment and the introduction of new technologies. Inward direct investment gives domestic companies the opportunity to enter the global economy owing to cooperation within the global value chains (GVC).

In accordance with the international standards, direct investment also comprises inter--affiliate flows intended only for short-term financial optimisation of enterprise groups. Thus, this report covers both investments affecting the economy and those without any impact thereon and serving only for optimisation of capital flows through created special purpose vehicles. Excluding special purpose vehicles participating in transactions and established in Poland allows one to only partial ignore phenomena having little to do with traditionally perceived direct investment.

1.1 Foreign direct investment transactions to Poland

In 2016, inward direct investment transactions to Poland amounted to PLN 54.9 billion and were PLN 2.6 billion lower, i.e. 4.6%, than in 2015 (PLN 57.6 billion). The value of those transactions consisted of a positive balance of inflow of equity capital amounting to PLN 8.4 billion, reinvestment of earnings amounting to PLN 34.2 billion and a balance of transactions in debt instruments equal to PLN 12.3 billion.

Figure 1 Inward direct investment transactions to Poland in 2000–2016



The level and structure of inward direct investment transactions in Poland in 2016 were affected mainly by internal conditions associated with the growth in income of direct investment entities. Changes in taxation of closed-end investment funds also had a significant impact. As a result of these changes, one transaction was recorded which increased capital inflow in the form of equity instruments. Other single transactions did not significantly affect the balance of inward direct investment transactions; however, their impact on presented data in geographical and economic activity breakdowns is visible.

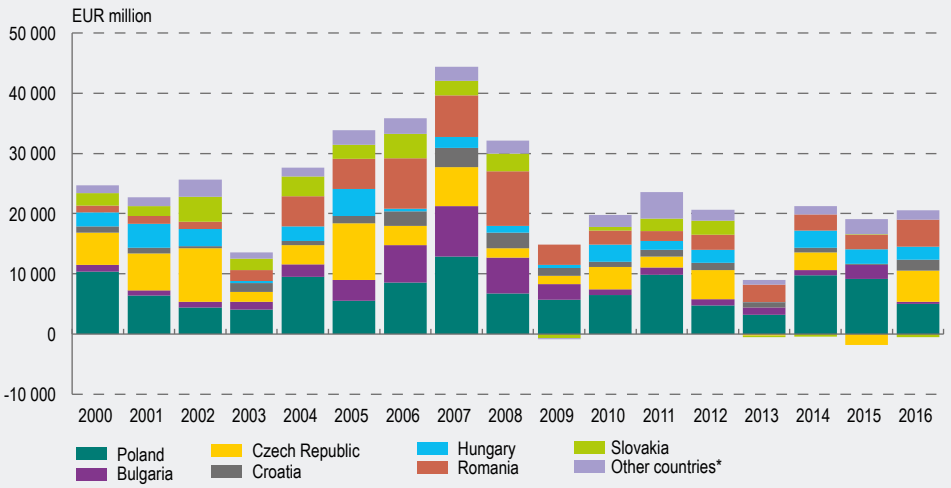
A slight decline in the inflow of direct investment to Poland in 2016 is in line with the tendency observed in this period in other developed European economies.

Poland is still perceived as an attractive location of direct investment. This is confirmed by a relatively high and stable inflow of foreign direct investors' funds over recent years, mainly in the form of reinvestment of earnings.

Box 1 Inflows of foreign direct investment to Poland as compared to selected new EU member states

In order to compare capital inflows to Poland within direct investment to inflows of such capital to new European Union member states,[1] a category of net capital inflows due to direct investment was used, i.e. inward direct investment transactions of a given country less its outward direct investment transactions. Using the data presented in

Figure B1 Net direct investment in new EU member states in 2000–2016



* Estonia, Lithuania, Latvia, Slovenia.
Source: Eurostat.

[1] New European Union member states are those which acceded in 2004 and later. They include Cyprus, the Czech Republic, Estonia, Lithuania, Latvia, Malta, Poland, Slovakia, Slovenia, Hungary, Bulgaria, Romania, and Croatia. Cyprus and Malta were omitted in the analysis as special purpose vehicles are often established there, which disrupts the overall view of investment.

the balance of payments, net capital inflows due to direct investment can also be calculated as direct investment liabilities less direct investment assets.

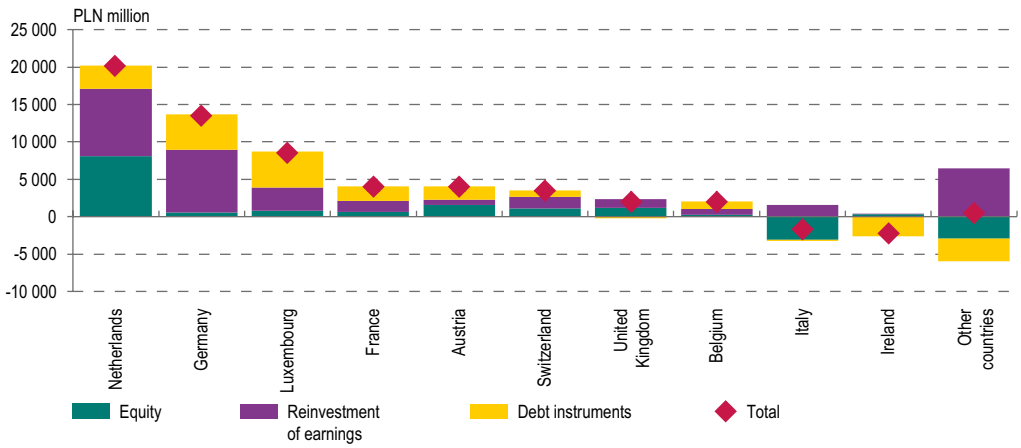
In 2016, the net capital inflows due to direct investment to new EU member states (excluding Malta and Cyprus) amounted to EUR 20.0 billion, i.e. PLN 87.3 billion.[2] In 2016 Poland's share in these net capital inflows decreased to 16.8%; in 2015 it reached 51.6%, and in 2014 – 30.1%. This decline resulted from an increase in net capital inflows due to direct investment to other countries (mainly to the Czech Republic and to Hungary) and a decline in the value of direct investment in Poland in net terms, mainly due to a high increase in assets arising from the reorganisation of investment funds.

It is worth emphasising that inflows of direct investment in Poland were positive in all the analysed periods, whereas in the Czech Republic, Estonia and Slovakia they showed a higher volatility, and in the years of global economic turbulences they even assumed negative values. In 2015, outflows of capital were recorded in the Czech Republic due to the fact that Czech outward direct investment was higher than inward direct investment in this country.

[2] For the conversion, the average annual PLN/EUR exchange rate of 4.3625 was applied.

In 2016, the highest inward direct investment transactions to Poland were recorded from the Netherlands (PLN 20.2 billion) and Germany (PLN 13.7 billion). Like in the previous years, this involved mainly investment in the form of reinvestment of earnings. Inflows from these two countries accounted for almost 62% of direct investment inflows to Poland in 2016. In addition, important direct foreign investors in Poland included Luxembourg (PLN 8.7 billion), France (PLN 4.1 billion), Austria (PLN 4.0 billion), Switzerland (PLN 3.5 billion) and the United Kingdom (PLN 2.1 billion).

Figure 2 Inward direct investment transactions to Poland in 2016, geographical breakdown



Compared to 2015, inflows of direct investment from the Netherlands increased (by 53%) and inflows of direct investment from the United Kingdom decreased (by 80%).

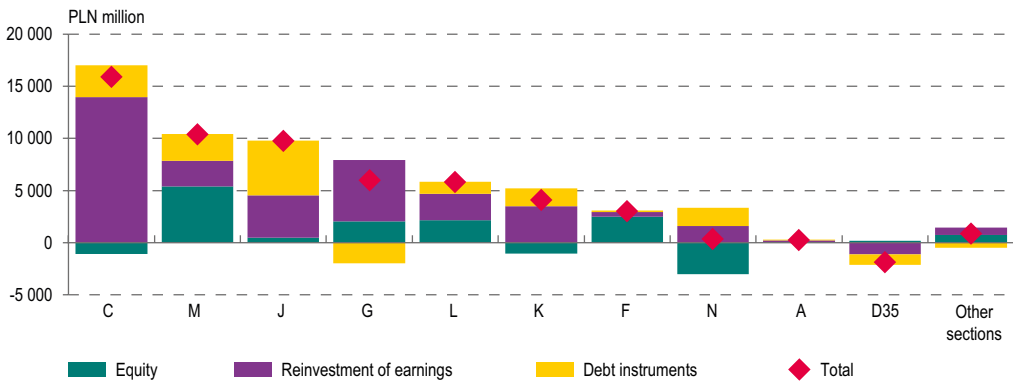
Only in the case of the Netherlands was a significant investment in the form of equity recorded. It amounted to PLN 8.1 billion and accounted for 40% of the balance of inflows of funds from the Netherlands to Poland in 2016. This was the consequence of re-organising the links in several enterprise groups with the participation of Polish entities.

In the case of two countries, a significant negative balance of direct investment inflows to Poland was noted (disinvestment): Ireland (PLN -2.3 billion) and Italy (PLN -1.7 billion). Withdrawal of Irish capital concerned debt instruments and was associated with the repayment of liabilities of direct investment entities in favour of direct investors from Ireland. In the case of Italy, it was the effect of a single transaction.

In 2016, a significant area of direct investment in Poland was the services sector in the broad sense.[3] Inflow of direct investment to this sector amounted to PLN 36.9 billion. Direct investment in the following sections played an important role in this case: professional, scientific and technical activities (PLN 10.4 billion, Section M), information and communication (PLN 9.8 billion, Section J), wholesale and retail trade, including the repair of motor vehicles and motorcycles (PLN 6.0 billion, Section G), real estate activities (PLN 5.8 billion, Section L), financial and insurance activities (PLN 4.2 billion, Section K). It should be added that Section M represents companies fulfilling the management and coordinating function with respect to other entities in the enterprise group.

In 2016, the inflow of inward direct investment to the manufacturing section (Section C) amounted to PLN 15.9 billion. The highest inflow of funds within this section was recorded for the following divisions: manufacture of motor vehicles, trailers and semi-trailers and manufacture of other transport equipment (PLN 5.6 billion), manufacture of machines and

Figure 3 Inward direct investment transactions to Poland in 2016 broken down by economic activity



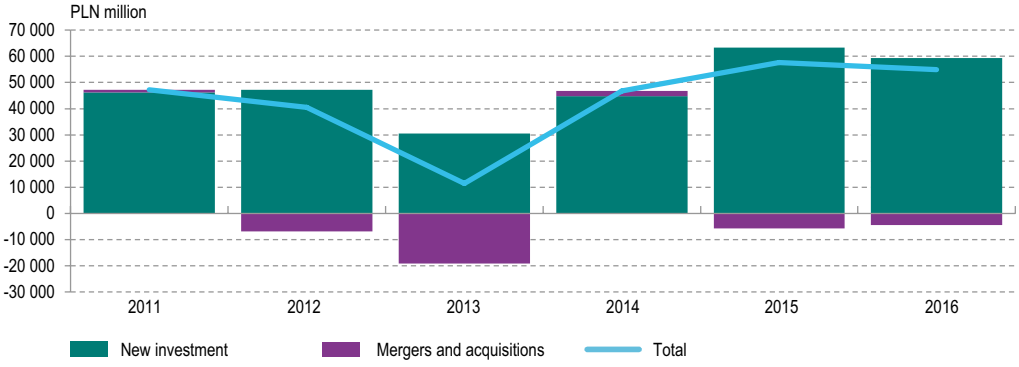
A – Agriculture, forestry and fishing; C – Manufacturing; D35 – Electricity, gas, steam and air conditioning supply; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities.

[3] In this case, the aggregate comprising sections from G to U is referred to as the services sector. The section, on the other hand, is a part of a hierarchically streamlined collection of economic activity performed by economic operators. In the report we use the Polish Classification of Activity (PKD) of 2007, i.e. PKD 2007.

metal products, excluding electrical equipment (PLN 4.6 billion), and manufacture of food products, beverages and tobacco products (PLN 4.2 billion). It is worth paying attention to the high share of reinvestment of earnings in manufacturing (PLN 14.0 billion), with simultaneous net outflows of equity (PLN -1.1 billion) from this industry, mainly as a result of resale of equities by non-residents to Polish investors. On the other hand, in the wholesale and retail trade, including the repair of motor vehicles and motorcycles (Section G), outflows of funds due to debt instruments were noticeable (PLN -2.0 billion), resulting from the positive balance of loans granted to entities from the group and from the repayment of debt towards those entities.

In 2016, the inflows of new[4] inward direct investment to Poland amounted to PLN 59.3 billion and was PLN 4.0 billion lower than in 2015 (PLN 63.3 billion). At the same time, in 2016 negative values of cross-border mergers and acquisitions were recorded once again. This was the result of transactions where foreign direct investors resold their shares to domestic investors. The value of those transactions amounted to PLN -4.4 billion in 2016 against PLN -5.7 billion in 2015. In recent years, mergers and acquisitions decreased the value of net direct investment inflows; however, their share in the turnover was relatively low compared to other developed economies.

Figure 4 Foreign direct investment transactions to Poland, with an indication of mergers and acquisitions in 2011–2016



The value of direct investment was also affected by mutual unsettled receivables and liabilities of enterprise groups stemming from trade loans. In 2016, the difference between the balance of transactions due to trade credit received from foreign direct investors by Polish direct investment entities (PLN 2.7 billion) and the balance of transactions due to trade loans granted to foreign direct investors by those entities (PLN 2.9 billion) was negative and amounted to PLN -0.2 billion. This amount reduced the value of net inflows of direct investment to Poland.

[4] In methodological terms, greenfield investment is not well defined and, accordingly, the precise determination of its value is difficult. A certain approximation of its value is obtained from "new" investments calculated as the total direct investment less the balance of mergers and acquisitions.

1.2 Foreign direct investment positions in Poland

At the end of 2016, Poland's inward direct investment positions amounted to PLN 778.6 billion and were PLN 53.1 billion higher, i.e. 7.3%, than at the end of 2015. This difference resulted from the increase in liabilities due to equities as well as liabilities due to debt instruments. At the end of the period under discussion, the value of the first type of liabilities amounted to PLN 580.1 billion (an increase of PLN 36.8 billion, i.e. 6.8%). In turn, liabilities due to debt instruments reached PLN 198.5 billion and, compared to the previous year, they increased by PLN 16.3 billion, i.e. 8.9%.

Figure 5 Foreign direct investment positions in Poland at the end of years 2000–2016

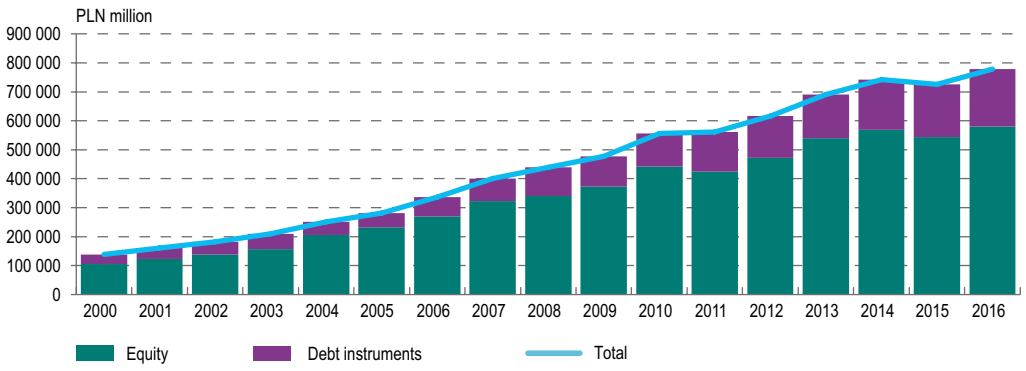
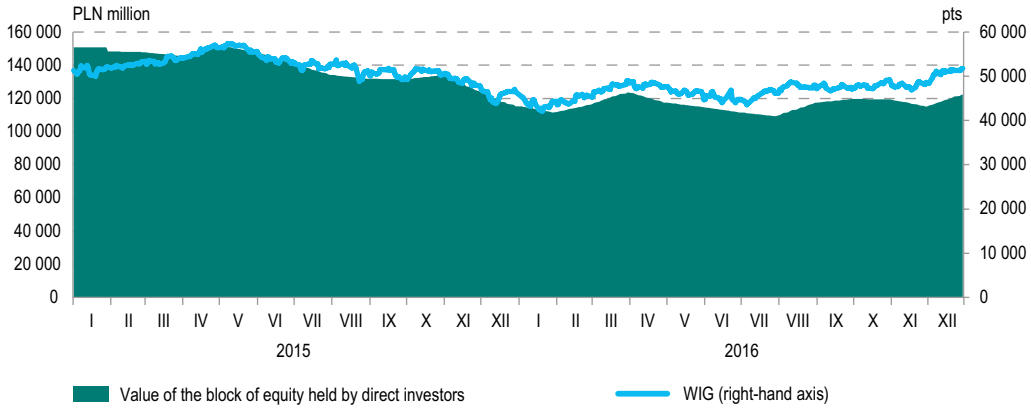


Figure 6 The value of the block of shares held by direct investors against the WIG index in 2015–2016



The growth in the value of liabilities due to inward direct investment in Poland in the form of equities referred mainly to direct investment entities which are not listed on the stock exchange. Prices of shares of companies listed on the regulated market of the Warsaw Stock Exchange and in the alternative trading system – NewConnect – remained almost at the same level. The value of the block of shares held by direct investors decreased, mainly as a result of several major transactions of share sales by foreign investors.

Since 2000, the structure of Poland's liabilities due to inward direct investment has been dominated by liabilities of Polish direct investment entities due to equity. Their share in individual years ranged from 74% to 83% of the value of inward direct investment in Poland; in 2016, similar to the previous year, it amounted to 74.5%.

Taking into consideration the fact that international organisations publish data both in EUR and in USD, the changes of position expressed in those currencies are also worth noticing. In 2016, Poland's liabilities due to inward direct investment expressed in PLN and in EUR increased, whereas those presented in USD decreased. This is a result of a more than two-fold higher depreciation of the zloty against the US dollar than in relation to the euro.

Figure 7 Foreign direct investment position in Poland in 2000–2016 expressed in various currencies

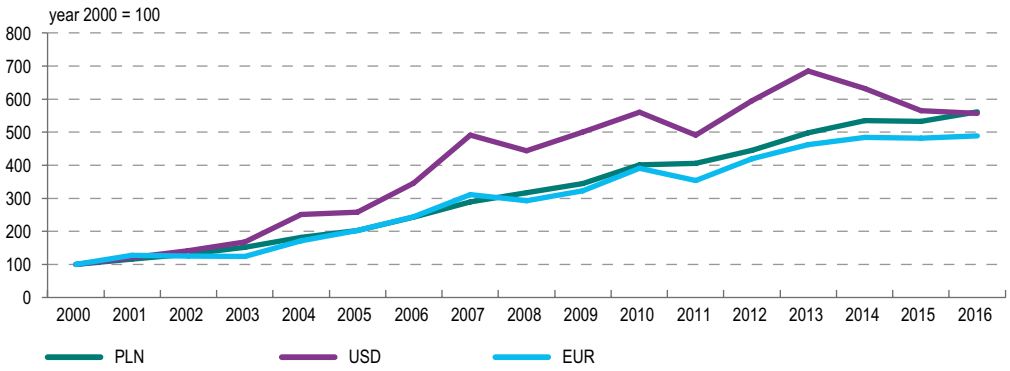
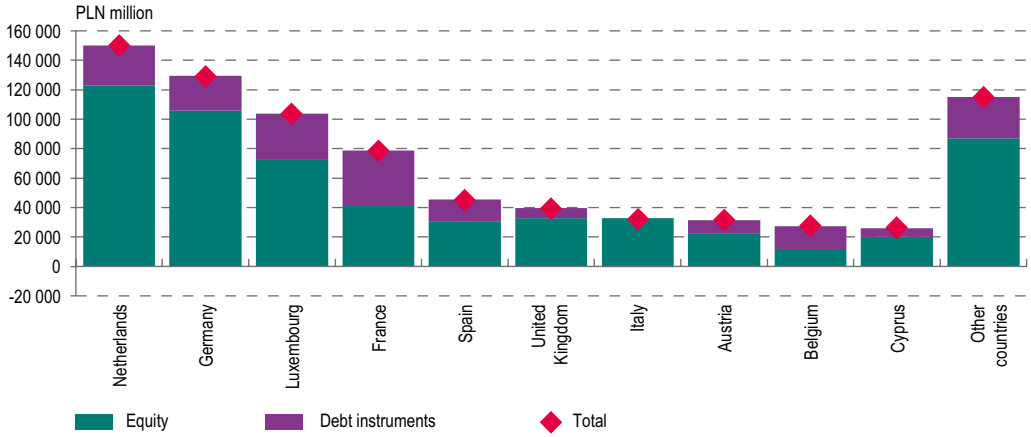


Figure 8 Foreign direct investment position in Poland at the end of 2016 broken down by country of immediate investor



In 2016, like a year ago, liabilities to direct investors from OECD countries (95.7%) prevailed in the geographical structure of liabilities due to inward direct investment in Poland. On the other hand, liabilities in relation to non-residents coming from 28 countries of the European Union represented 92.2% of the total amount of liabilities. This indicates a relatively high concentration of those liabilities in European countries.

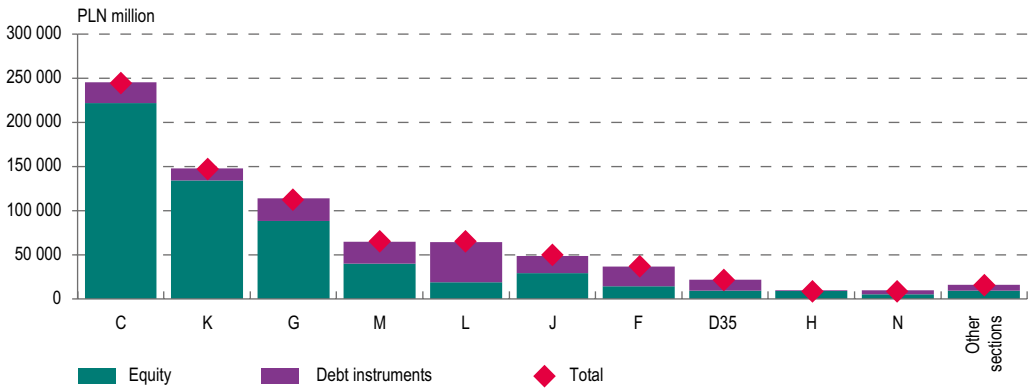
At the end of 2016, the highest liabilities due to inward direct investment in Poland were recorded towards investors from the Netherlands (PLN 149.9 billion, i.e. 19.3% of the total liabilities), Germany (PLN 129.4 billion, i.e. 16.6%), Luxembourg (PLN 103.7 billion, i.e. 13.3%), France (PLN 78.7 billion, i.e. 10.1%) and Spain (PLN 45.4 billion, i.e. 5.8%). They mainly comprised liabilities due to equity.

At the end of 2016, the value of liabilities due to inward direct investment in relation to countries bordering Poland amounted to PLN 133.7 billion and represented 17.2% of the total amount of those liabilities. Over recent years, their geographical structure has remained basically unchanged. The liabilities towards direct investors from Germany (PLN 129.4 billion, i.e. 96.8%), the Czech Republic (PLN 2.3 billion, i.e. 1.7%), the Russian Federation (PLN 1.2 billion, i.e. 0.9%), Lithuania (PLN 1.1 billion, i.e. 0.8%) and Slovakia (PLN 0.6 billion, i.e. 0.4%) still constituted the major part of liabilities. On the other hand, entities with direct investors from Ukraine (PLN -0.8 billion) and Belarus (PLN -0.1 billion) recorded receivables from those countries. Such a situation resulted mainly from cumulative losses of those entities.

The structure of liabilities due to inward direct investment in Poland according to industry has remained unchanged for many years.

At the end of 2016, like a year ago, the highest liabilities due to inward direct investment in Poland were recorded by entities related to manufacturing (Section C). They amounted to PLN 245.4 billion, constituting 31.5% of Poland's liabilities under this title. In this section, similar to the previous year, liabilities of undertakings dealing with the manufacture of motor vehicles, trailers and semi-trailers and the manufacture of other transport equipment (PLN 49.0 billion), the manufacture of food products and beverages, and tobacco products (PLN 48.4 billion), the manufacture of machines and metal products, excluding electrical equipment (PLN 44.3 billion) and the manufacture of refined petroleum products, chemicals and pharmaceuticals as well as rubber and plastic products (PLN 41.5 billion) dominated.

Figure 9 Structure of foreign direct investment position in selected industries at the end of 2016



C – Manufacturing; D35 – Electricity, gas, steam and air conditioning Supply; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; H – Transport and storage; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities.

In terms of the balance of liabilities, investment in the broadly defined service sector (PLN 467.6 billion, i.e. 60.0%; Sections G to U) occupied consecutive positions. In this group, the highest liabilities were recorded by entities carrying out financial and insurance activity (PLN 147.9 billion, i.e. 31.6%, Section K) as well as those dealing with wholesale and retail trade; repair of motor vehicles and motorcycles (PLN 114.2 billion, i.e. 24.4%, Section G). Other sections are also worth noticing: professional, scientific and technical activities (PLN 64.6 billion, i.e. 13.8%, Section M), real estate activities (PLN 64.2 billion, i.e. 13.7%, Section L) and information and communication (PLN 48.6 billion, i.e. 10.4%, Section J).

The analysis of inward direct investment in Poland according to the regions of their location is interesting; however, it requires particular caution. This is due to the distortion of results received as a consequence of allocating the investments to regions according to the place of establishment of the direct investment entity. The image of inward direct investment according to this arrangement is not fully compliant with its real distribution, i.e. according to the places where the funds of foreign direct investors have really been invested. The reason is that the available statistical data indicate the place where the investment is registered and not the place of incurring capital expenditure (these are often regions of the country other than where the reporting entity is established). This is clearly visible in the case of the Mazowieckie Voivodeship, where the highest number of entities with liabilities due to inward direct investment is located (3,274 entities at the end of 2016). At the same time, it is known that investment projects registered in accounting systems of companies which have their seat in Warsaw are often deployed in various, often distant areas. Thus, the regional distribution of the inward direct investment position in Poland presented below should be interpreted carefully.

The analysis of the inward direct investment positions in Poland at the end of 2016 broken down into voivodeships indicates that the Mazowieckie Voivodeship showed the highest value of liabilities under this title, amounting to PLN 422.0 billion, i.e. 54.2% of the total inward direct investment position. It arises from the fact that – as mentioned before – this region clearly demonstrates the highest number of investments registered in the accounting systems. The level of liabilities was also relatively high in the Śląskie Voivodeship (PLN 82.6 billion). A significant level of investment of foreign direct investors was also recorded in the Wielkopolskie Voivodeship (PLN 69.9 billion), Dolnośląskie Voivodeship (PLN 44.0 billion), Małopolskie Voivodeship (PLN 35.8 billion) and Pomorskie Voivodeship (PLN 26.3 billion). In other voivodeships liabilities under this title did not exceed PLN 21 billion.

In the regional analysis of inward direct investment in Poland, substantial receivables (assets) from affiliated non-residents in the Małopolskie Voivodeship, Śląskie Voivodeship and Pomorskie Voivodeship are noticeable. This confirms the extensive relations of direct investment entities established in Poland with other entities in international enterprise groups.

The average value[5] of direct investment in individual voivodeships looks slightly different than in the case where their total amount is analysed. In these terms, the highest positions are occupied by Podkarpackie Voivodeship (PLN 161 million), Śląskie Voivodeship (PLN 138 million), Mazowieckie Voivodeship (PLN 129 million) and Wielkopolskie Voivodeship (PLN 100 million). The lowest average value of direct investment was recorded in Opolskie Voivodeship (PLN 44 million).

[5] The average value is understood here as the quotient of liabilities due to direct investment in a given voivodeship and the number of entities with a direct investor having their seat in such a voivodeship.

Figure 10 Foreign direct investment position in Poland at the end of 2016 broken down by voivodeships

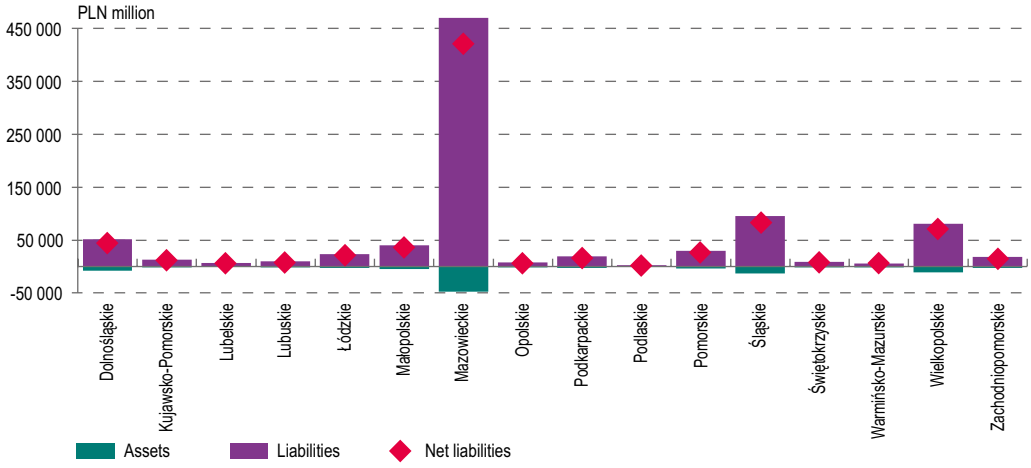
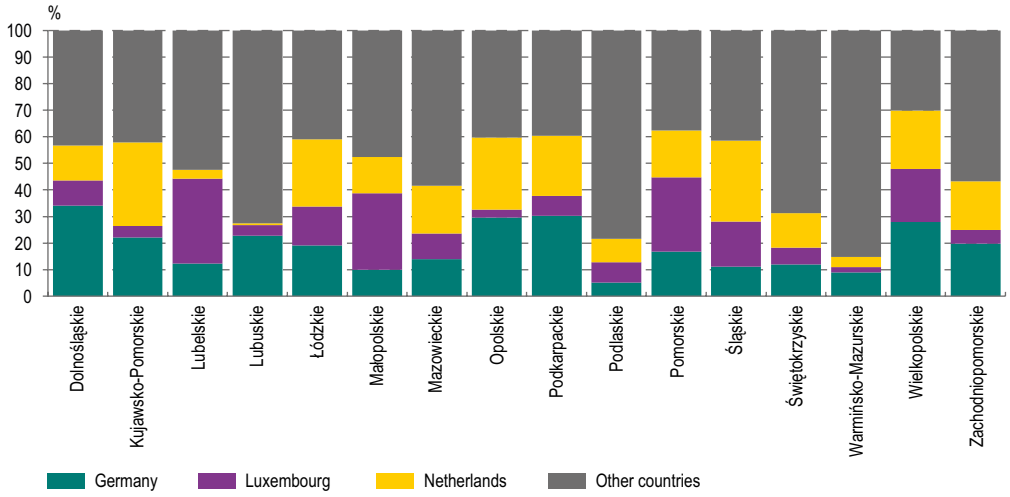


Figure 11 Foreign direct investment position in Poland at the end of 2016 broken down by voivodeships and main counterpart countries



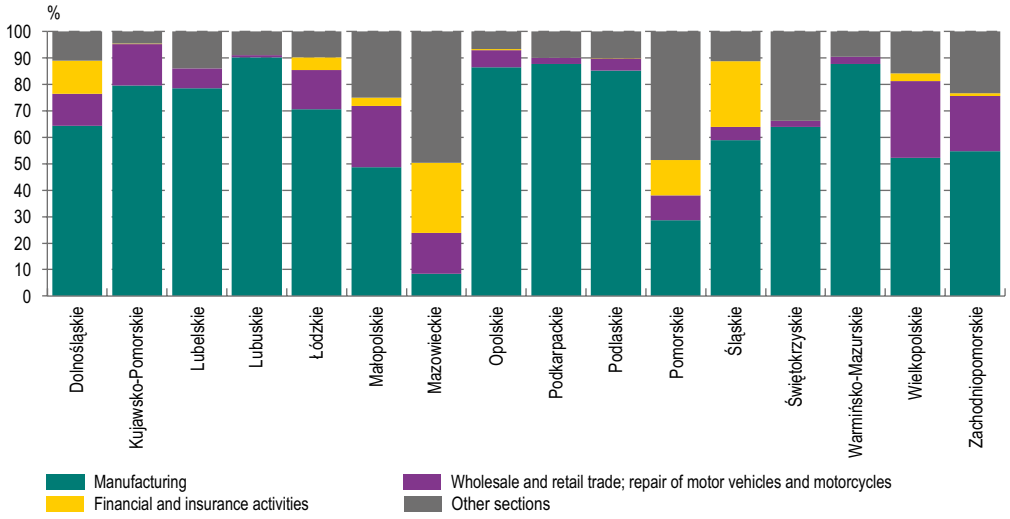
In 2016, similar to the previous years, the geographical allocation of liabilities due to inward direct investment in individual voivodeships was quite diversified.

In the Mazowieckie Voivodeship investment of entrepreneurs from the Netherlands (PLN 75.9 billion, i.e. 18.0%), Germany (PLN 59.1 billion, i.e. 14.0%) and Luxembourg (PLN 40.5 billion, i.e. 9.6%) jointly accounted for 41.6% of the liabilities in this voivodeship due to inward direct investment. In the majority of other voivodeships, direct investment also originated mainly from those three countries. In the Dolnośląskie Voivodeship, Lubuskie Voivodeship, Opolskie Voivodeship, Podkarpackie Voivodeship, Wielkopolskie Voivodeship and Zachodniopomorskie Voivodeship liabilities towards investors from Germany dominated, in the Kujawsko-Pomorskie Voivodeship, Łódzkie Voivodeship, Podlaskie Voivodeship, Śląskie

Voivodeship and Świętokrzyskie Voivodeship – liabilities towards the Netherlands, whereas in the Lubelskie Voivodeship, Małopolskie Voivodeship and Pomorskie Voivodeship – liabilities towards Luxembourg.

The structure of liabilities due to inward direct investment in individual voivodeships of Poland at the end of 2016 by industry was not strongly diversified. In almost all regions, investment related to the manufacturing section dominated (excluding the Mazowieckie Voivodeship, where financial and insurance activity prevailed). In the Lubuskie Voivodeship, Warmińsko-Mazurskie Voivodeship, Podkarpackie Voivodeship, Opolskie Voivodeship and Podlaskie Voivodeship, funds invested by foreign investors in entities from this section accounted for over 85% of the liabilities due to inward direct investment in those voivodeships.

Figure 12 Foreign direct investment position in individual voivodeships at the end of 2016 by industry (according to selected industries – NACE sections)



While considering the structure of liabilities due to inward direct investment by industry according to regional distribution, attention should be paid to the considerable share of entities associated with wholesale and retail trade, including the repair of vehicles and motorcycles (Section G). This tendency was particularly visible in Wielkopolskie Voivodeship (29.0%) and Małopolskie Voivodeship (23.1%). On the other hand, in Mazowieckie Voivodeship and Śląskie Voivodeship a major part of direct investment (respectively, 26.4%, i.e. PLN 111.6 billion, and 24.7%, i.e. PLN 20.4 billion) was invested in financial and insurance activity (Section K).

The regional analysis of inward direct investment indicates a substantial concentration of liabilities by industry and in geographical terms. At the end of 2016, similar to the previous year, the following voivodeships demonstrated a high industry concentration of direct investment: Lubuskie Voivodeship, Warmińsko-Mazurskie Voivodeship and Podkarpackie Voivodeship (mainly Manufacturing, Section C). On the other hand, substantial geographical concentration was observed in the following voivodeships: Dolnośląskie, Podkarpackie and Opolskie (most commonly, investors from Germany were present there). The strong concentration of liabilities due to inward direct investment (by industry or country) is not favourable for the economic

policy of the region). The risk of withdrawal of the biggest investor (e.g. from a specific industry or country) usually triggers threats and affects the economic condition of the given region.

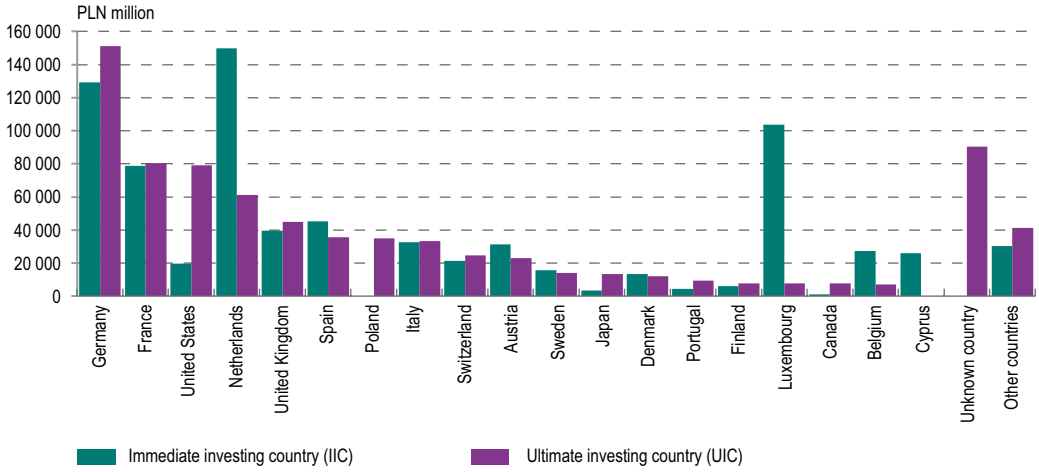
1.3 Foreign direct investment position in Poland according to the ultimate investing country

The statistics of foreign direct investment in Poland according to the country of the ultimate controlling parent's seat in the enterprise group to which the direct investor (ultimate investing country – UIC) belongs gives a slightly different view of the geographical allocation of liabilities due to inward direct investment in Poland. With this approach, the value of liabilities towards entities from such countries as Luxembourg and the Netherlands strongly decreases. If those countries are considered as the seat of the immediate direct investor, the foreign direct investment position will turn out much higher than in the case when they are treated as countries where the ultimate controlling parent in the enterprise group is established. This results from the fact that companies established in those countries are often used as an indirect link in the ownership chain within enterprise groups, with the purpose of more flexible disposal of the target investment and more favourable taxation of passive income. This is associated with the selection of the place where favourable conditions exist for the establishment and operating of economic entities, particularly in terms of tax solutions. The opposite situation exists in the case of the United States, the United Kingdom, Japan and Canada. If those countries are treated as places of establishment of ultimate controlling parents, liabilities due to direct investment in Poland will turn out higher than under the circumstances when they are considered as places of establishment of direct investors. This means that companies managed by ultimate controlling parents from those countries invested in Poland through entities based in other places, mainly in the Netherlands and Luxembourg.

As the aforementioned analysis shows, looking at direct investment from the perspective of the country of the ultimate controlling parent in the enterprise group whose member is the direct investor is useful for many reasons. First of all, it enables to determine the strength of real economic links among countries. Secondly, it helps to identify the political and legal environment which may determine such relations. For example, it enables to determine whether investment decisions result from agreements related to mutual investment, trade agreements or tax regulations. The application of such an approach allows the identification of real capital flow conditions under direct investment. It often turns out that the basis of many investment decisions are not the conditions (for a given investment) existing in the country of the direct investment entity, but those arising from the regulations applicable in the country of the ultimate controlling parent in the enterprise group. For those reasons, international organisations recommend additional analyses of liabilities due to inward direct investment according to the country in which the ultimate controlling parent in the enterprise group has its seat, also for the needs of own studies.

The ranking of the biggest direct investors investing their funds in Poland according to ultimate investing country, is slightly different from the ranking according to immediate investing country. In the case of the first criterion, Germany remains the biggest direct investor in Poland (PLN 151.0 billion). It is followed by France (PLN 80.5 billion) and the United States (PLN 79.0 billion). The United Kingdom (PLN 44.9 billion) occupies fourth place. It is characteristic that in 2016 Poland was seventh among the biggest direct investors in Poland.

Figure 13 Foreign direct investment in Poland according to the immediate investing country (IIC) and the ultimate investing country (UIC) at the end of 2016



Such a phenomenon, defined as round-tripping, should be included in the interpretation of statistical data on direct investment in geographical breakdown (see: Box 2).

The Netherlands, considered as a country where the immediate direct investor has its seat, occupied the first place in 2016, with direct investment in the amount of PLN 149.9 billion. As a seat of the ultimate controlling parent, it only occupied fourth place, with investment at the level of PLN 61.6 billion. Luxembourg, in standard terms, occupied third place, whereas in the case of presentation of direct investment according to the seat of the ultimate controlling parent in the enterprise group it was only seventeenth. This confirms the opinion that this country is still willingly used as an intermediary link of direct investment within enterprise groups.

Identification of the country of the seat of the ultimate controlling parent in the enterprise group to which the direct investor belongs, is sometimes quite difficult. The difficulties mainly refer to private equity funds and natural persons. In the case of natural persons operating as direct investors, establishing their residence is frequently impossible. The trace usually breaks off in countries defined as tax havens, where banks and financial intermediaries guard the identity of their clients. This mainly results from the legal regulations binding in those countries. The effect of these problems is still a relatively high share of direct investors for which the country of the seat of the ultimate controlling parent in the enterprise group remains unclassified. International standards are not very precise on this issue and work on an agreement on recommendations in this area is still in progress. The share of unclassified countries in liabilities due to inward direct investment in Poland at the end of 2016 was similar to the previous year and amounted to 11.6%.

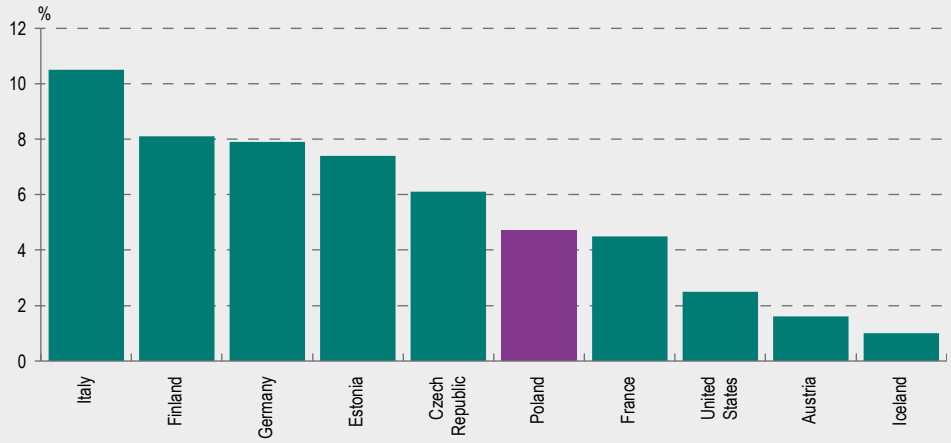
Box 2 Round-tripping in Poland and in other countries

In 2016, Poland's direct investment liabilities towards foreign entities belonging to enterprise groups in which the ultimate controlling parent is a Polish resident amounted to PLN 34.9 billion. In direct investment such phenomenon is defined as round-tripping. The aim of using such a settlement scheme is to optimise investment costs. It is based on the fact that the direct investor sends abroad its funds, which then return to the country in the form of foreign direct investment. In this way, investors exploit the diversification of legal and economic conditions for doing business in different countries. In addition, they take advantage of investment incentives for non-residents as well as the protection under Bilateral Investment Treaties (BITs), agreements on mutual support and investment protection.

The phenomenon of round-tripping is observed in all countries presenting statistics according to the seat of the ultimate controlling parent. Due to the delay in the publication of such data, the latest statistics comprise the end of 2015. The data published indicate that the level of round-tripping in individual countries practically does not change year by year.

The value of liabilities due to direct investment in Poland performed by Polish investors through foreign affiliates accounted for 4.7% of the direct investment positions in Poland. Lower levels were recorded in Iceland (1.0%) and in Austria (1.6%). In France, this share (4.5%) was similar to that in Poland. Higher shares at the end of 2015 were recorded by Italy (10.5%), Finland (8.1%) and Germany (7.9%).

Figure B2 Round-tripping in selected countries in 2016



Round-tripping occurs when investors from a given country decide for the abovementioned reasons to invest in this country through foreign entities. It is also used when international enterprises established abroad, where direct investors are residents of a given country, invest in a given country. However, these two differently motivated types of investment cannot be separated in this presentation.

1.4 Income on foreign direct investment in Poland

In 2016, income on foreign direct investment in Poland amounted to PLN 79.0 billion and was PLN 11.5 billion, i.e. almost 17%, higher than in 2015.[6] Compared to the previous years, income of direct investors in 2016 reached a record high.

Dividends amounting to PLN 36.1 billion constituted the largest part of the income. Reinvested earnings amounting to PLN 34.2 billion remained at a relatively high level. Traditionally, interest constituted the smallest part of income, amounting to PLN 8.7 billion. Contrary to 2015, growth in the aforementioned types of income was relatively even; however, income on reinvested earnings grew at a slightly slower pace.

Figure 14 Income on foreign direct investment in Poland in 2000–2016

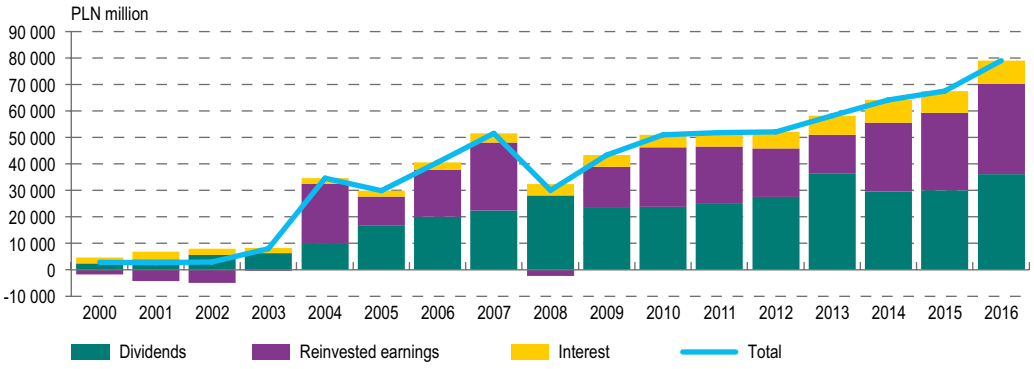
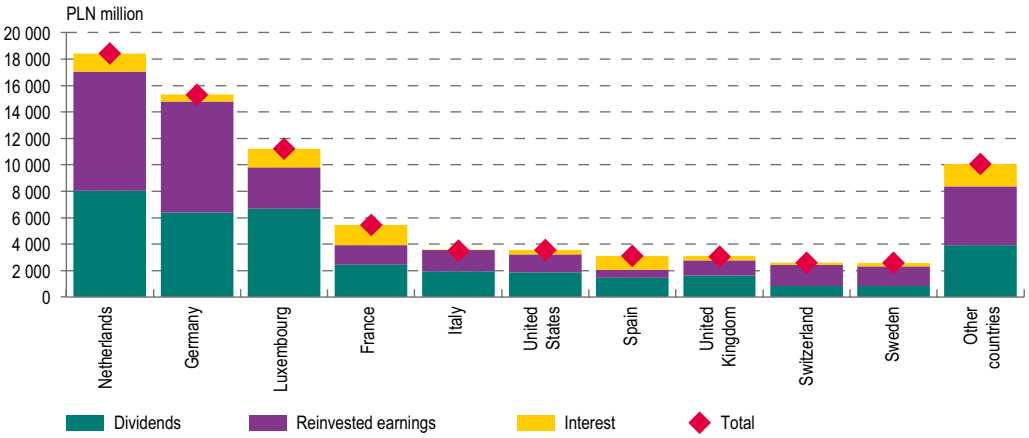


Figure 15 Income on foreign direct investment in Poland in 2016 according to the country of the immediate direct investor

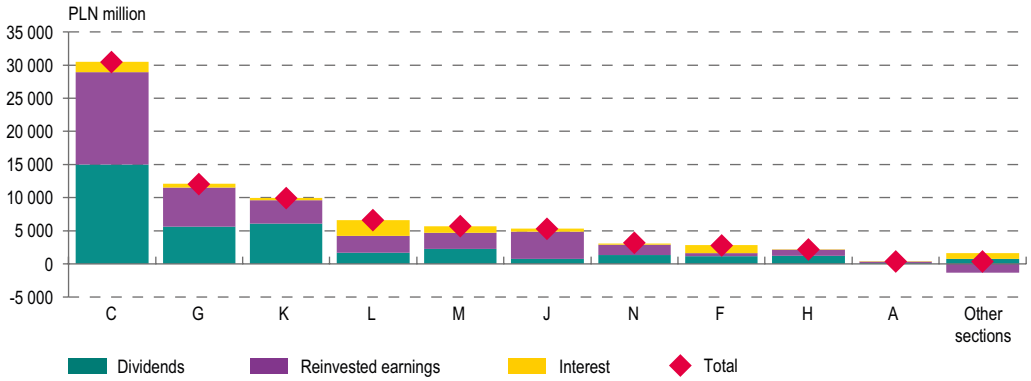


[6] Since 2010 income on equity has been calculated in accordance with the current operating performance concept (COPC), which excludes changes in valuation of financial instruments and extraordinary events from the income generated by companies, thus stabilising the income presented by economic entities. More information about the method of income calculation is presented in the Methodological note.

The geographical breakdown of income reflected the geographical breakdown position so far. In 2016, the highest income on direct investment in Poland was generated by direct investors from the Netherlands. Income on such investment amounted to PLN 18.4 billion. High income was also generated by investment from Germany (PLN 15.3 billion) and Luxembourg (PLN 11.2 billion). The aggregate income of investors from the Netherlands, Germany and Luxembourg accounted for 57% of the total amount of income gained from direct investment in Poland in 2016. Similar to previous years, it comprised mainly income on equity held by non-residents.

Investment from France (PLN 5.4 billion) and Italy (PLN 3.6 billion) generated a slightly lower income. Income of almost all direct investors mentioned above (besides France) increased in relation to 2015: in the case of the Netherlands by PLN 3.2 billion (21.3%), for Germany by PLN 1.6 billion (11.8%), and for Luxembourg by PLN 3.8 billion (by 51.8%). Income of investors from Italy increased by PLN 0.2 billion and was 7.3% higher than in 2015. On the other hand, in the case of France, an almost 17-per cent decline in income on direct investment in Poland was recorded compared to the previous year.

Figure 16 Income on foreign direct investment in Poland in 2016 broken down by economic activity

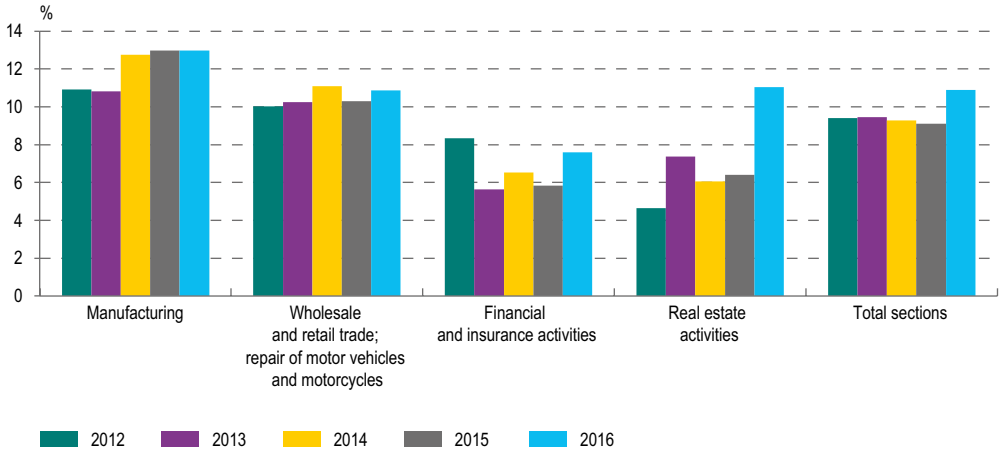


A – Agriculture, forestry and fishing; C – Manufacturing; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; H – Transport and storage; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities.

Similar to 2015, approximately 38.6% of income on foreign direct investment in Poland was generated by investment in the manufacturing section (section C). It amounted to PLN 30.5 billion. The highest income in this section fell to manufacture of machines and metal products, excluding electrical equipment (PLN 6.8 billion), manufacture of motor vehicles, trailers and semi-trailers and manufacture of other transport equipment (PLN 6.1 billion) and manufacture of food products and beverages, and tobacco products (PLN 4.9 billion).

Income from the wholesale and retail trade, repair of motor vehicles and motorcycles (Section G) constituted a significant part of income on direct investment in Poland. It amounted to PLN 12.1 billion. Income in sections: financial and insurance activities (Section K) – PLN 10 billion, real estate activities (Section L) – PLN 6.6 billion, and professional, scientific and technical activities (Section M) – PLN 5.7 billion, also deserves attention.

Figure 17 Profitability ratio broken down by economic activity of direct investment enterprises in Poland in 2012–2016



In the analysis of income on foreign direct investment in Poland, attention should also be paid to the profitability ratios[7] of individual industries.

In 2016, the profitability ratio of foreign direct investment in Poland in all sections totalled 10.9%. In the recent years, manufacturing (Section C) has shown the highest values of this indicator. In 2016, profitability in this section amounted to 13.0%. Lower values of the profitability ratio (below the average for all sections in aggregate) were recorded, among others, in the case of financial and insurance activity (7.6%; Section K).

The growth in the profitability ratio in the financial and insurance activity section can be surprising considering the tax on certain financial institutions introduced in February 2016 (the so-called bank tax). In fact, in the case of the banking sector itself the profitability dropped slightly, whereas an increase in profitability in this section occurred thanks to other entities, mainly holding companies.

In 2016, the profitability ratio increased in almost all sections. In relation to the previous year, the highest growth was recorded in real estate activities (Section L), whereas in manufacturing (Section C) this ratio remained unchanged. In the case of the first section, a growth of 72.2% resulted mainly from gaining income twice as high as in the previous year by direct investment enterprises, as a result of the completion of single large development projects related to commercial real estate. The change in the case of manufacturing was minimal and this section continues to demonstrate the highest profitability.

[7] In the report, the method of calculating the profitability ratio as a simple rate of return on investment in the specific year was adopted (the quotient of income of the current year and the foreign direct investment position of the previous year).

Chapter 2

Polish direct investment abroad

Polish foreign direct investment abroad

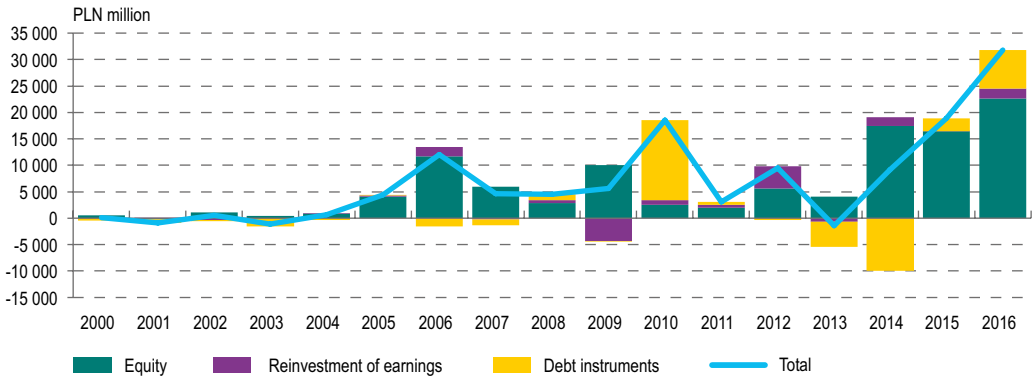
The value of outward direct investment transactions of Polish investors has been showing a clear upward trend since 2013. Despite the modest values of those transactions, in successive years Poland has remained the biggest foreign investor in Central and Eastern Europe. While the growth in the value of Polish outward direct investment could indicate the shifting of the Polish economy to the next development phases,[8] their structure raises certain doubts (see Box 3).

2.1 Polish direct investment transactions abroad

In 2016, the value of Polish outward direct investment transactions amounted to PLN 31.8 billion and compared to the previous year it increased by PLN 13.0 billion, i.e. by 69.0%. This growth was determined by the following:

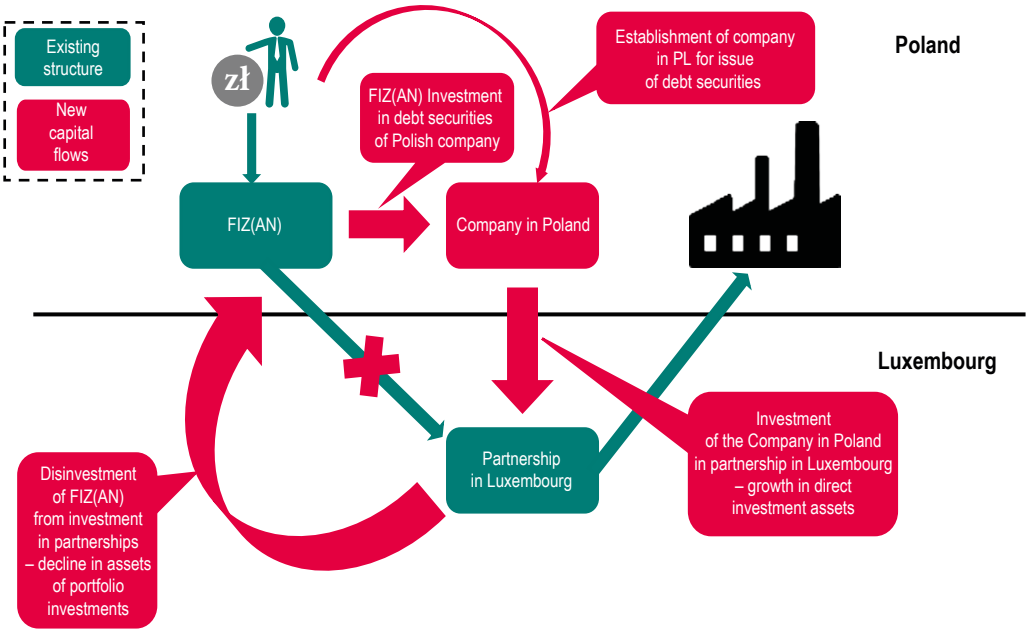
- an increase in the value of equity transactions by 37.6%, from PLN 16.5 billion to PLN 22.7 billion,
- over three-fold growth in transactions due to debt instruments, from PLN 2.3 billion in 2015 to PLN 7.3 billion in 2016,
- growth in the amount of reinvestment of earnings from PLN 0.02 billion in 2015 to PLN 1.9 billion in 2016.

Figure 18 Polish direct investment transactions abroad in 2000–2016



[8] The development phases of the economy in the context of direct investment were shown by the American scientist of Japanese origin, T. Ozawa, and developed by the British scholar, J.H. Dunning. They describe the shifting of the economy from development based on exploitation of natural resources of a given country, through development thanks to the inflow of investment from abroad, to development driven by investment in innovation, to the prosperity phase. In the consecutive phases, the role of outward investment increases. More in: J.H. Dunning, "Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Development Approach", Weltwirschaftliches Archiv, vol. 119, 1981.

Diagram 1 Diagram of capital flows associated with the change in the structure of investment fund assets



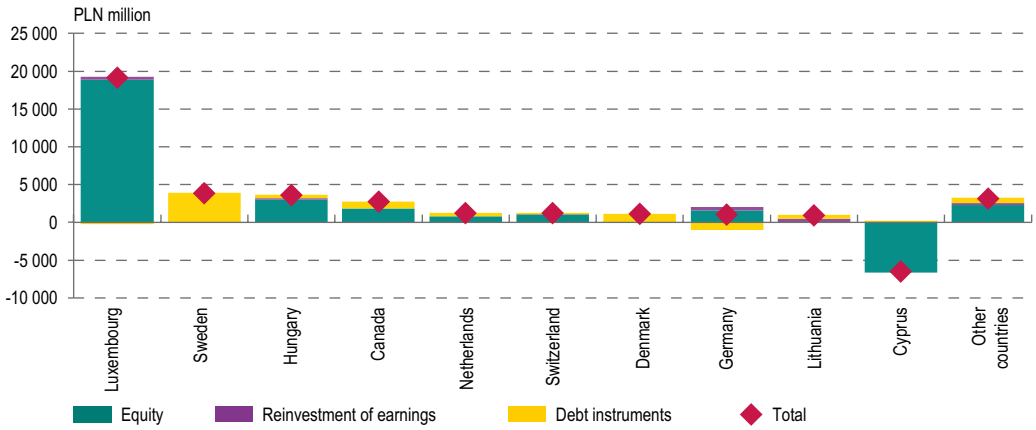
Similar to the previous years, the varying value of transactions due to Polish outward direct investment was determined by single transactions of significant value. In 2016, the value of outward direct investment was most strongly affected by the reorganisation of investment funds related to the November changes in taxation of closed-end investment funds.

Due to the legal changes related to closed-end investment funds, instead of investing abroad (which was earlier recognised as portfolio investment), those funds invested in the same entities through domestic companies (such investment is recognised as direct investment). This resulted in a PLN 15.3 billion growth of transactions due to Polish outward direct investment. Above, a diagram of such a reorganisation is presented.

In 2016, the highest level of transactions due to Polish outward direct investment was recorded in Luxembourg (PLN 19.0 billion). However, it mainly comprised investment related to reorganisation of investment funds. Investment in Sweden amounted to PLN 3.9 billion and included mainly repayment of liabilities of direct investors established in Poland towards direct investment entities. In the case of both Luxemburg and Sweden, in 2015 disinvestment was recorded (withdrawal of investment by Polish direct investors). Such a high volatility of both the value and the flow of investment in those and other countries was mostly associated with single transactions.

In 2016, a relatively high value of transactions due to Polish outward direct investment was recorded in Hungary (PLN 3.7 billion) and in Canada (PLN 2.8 billion). Disinvestment occurred in the case of Cyprus (PLN -6.4 billion), United Kingdom (PLN -0.9 billion) and Norway (PLN -0.5 billion).

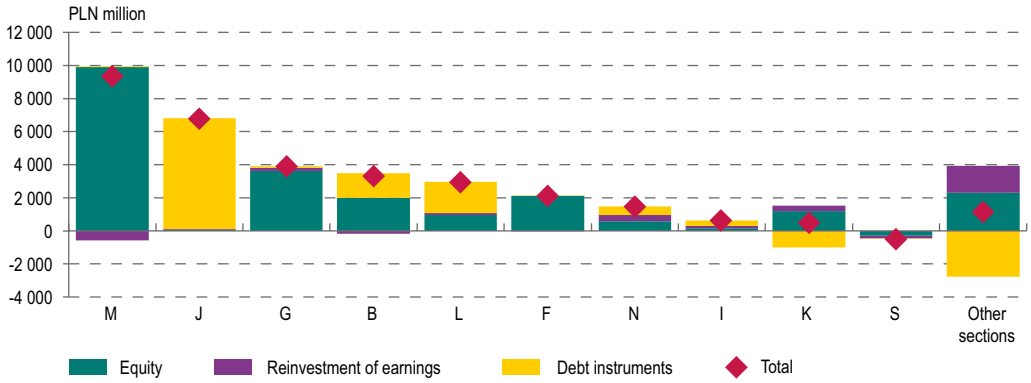
Figure 19 Polish direct investment transactions abroad broken down by country in 2016



The breakdown of transactions due to Polish outward direct investment according to industry was subject to quite significant changes. However, this was not the result of new developments but the effect of single transactions of a significant value performed by Polish investors. Due to the relatively low total value of Polish outward direct investment transactions, such significant transactions resulted in a change of investment directions.

In 2016, investment of the highest value was mainly targeted at entities dealing with professional, scientific and technical activities (PLN 9.4 billion, Section M) and, as a result of repayment of debt instruments – at entities associated with information and communication (PLN 6.8 billion, Section J). Once again, an outflow of capital to entities related to mining and quarrying was recorded (PLN 3.3 billion, Section B).

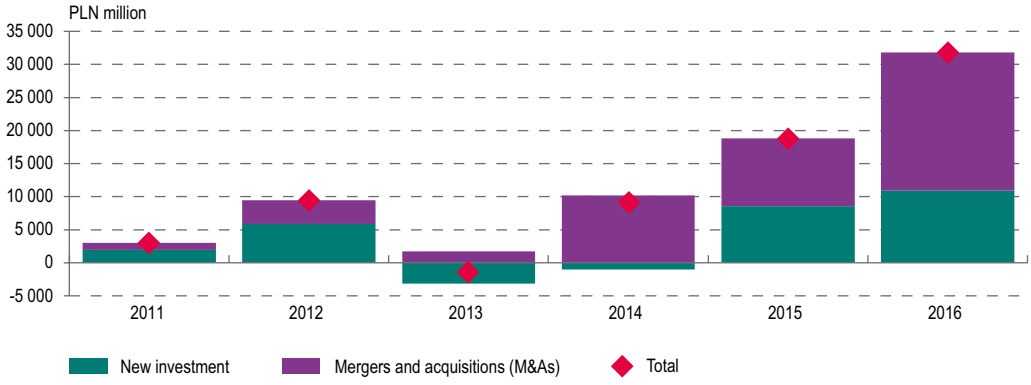
Figure 20 Polish direct investment transactions abroad broken down by economic activity (NACE sections) in 2016



B – Mining and quarrying; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; I – Accommodation and food service activities; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities; S – Other service activities.

Mergers and acquisitions, which reached a record value of PLN 20.9 billion in 2016, had a significant impact on Polish outward direct investment transactions. However, this record should be associated with the aforementioned reorganisation of investment funds: the value of transactions under this title amounted to PLN 15.3 billion. So-called new investment[9] constituted the remaining part of Polish outward direct investment. In these terms, 2016 was also a record year. The value of these transactions amounted to PLN 10.9 billion against PLN 8.6 billion in the previous year.

Figure 21 Polish direct investment transactions abroad distinguishing mergers and acquisitions (M&As) and new investments in 2011–2016



In 2016, the value of trade credits and advances under Polish outward direct investment amounted to PLN 1.1 billion and represented a positive component of Polish outward direct investment in the form of debt instruments. The highest outflows of trade trade credits and advances were recorded in the case of Lithuania and the Czech Republic.

2.2 Polish direct investment positions abroad

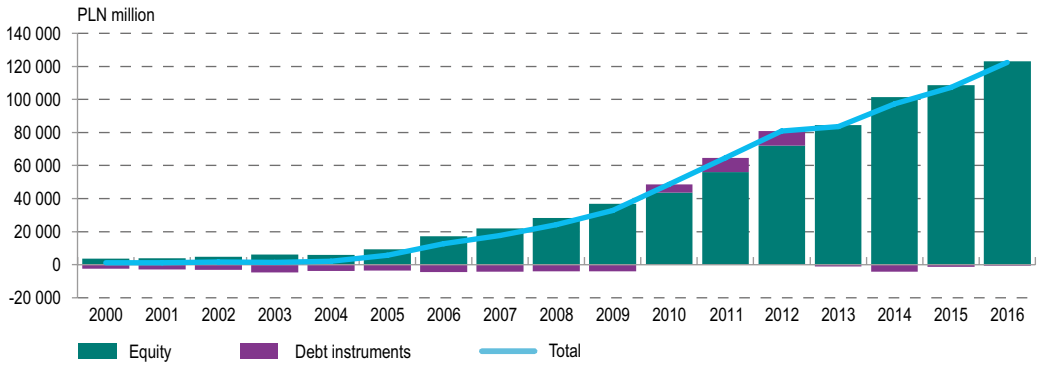
At the end of 2016, Polish outward direct investment positions amounted to PLN 122.4 billion and were PLN 15.1 billion, i.e. 14.1% higher than in 2015. This growth resulted mainly from transactions associated with changes in the structure of enterprise groups and from exchange rate changes.

The main component of the Polish direct investment position abroad in 2016 was the equity position. It amounted to PLN 123.1 billion, which means it increased by PLN 14.5 billion, i.e. by 13.3% as compared to 2015. The negative debt position in the amount of PLN -0.7 billion reduced the value of the Polish outward direct investment position at the end of 2016. In the previous year, the debt position amounted to PLN -1.4 billion.

The growth in the Polish outward direct investment position in 2016 was strongly affected by changes in taxation of closed-end investment funds and transactions related to the reorganisation of investment structures using those funds, as described above.

[9] New investment is defined as Polish direct investment abroad minus the value of mergers and acquisitions.

Figure 22 Polish direct investment position abroad in 2000–2016



In 2016, the geographical allocation of Polish outward direct investment positions did not change significantly. At the end of the year 2016, the countries with the highest Polish direct investment position were Luxembourg (PLN 44.2 billion, i.e. 36.1% of the total position) and Cyprus (PLN 15.0 billion, i.e. 12.2%). The next places were occupied by Switzerland (PLN 9.1 billion, i.e. 7.4%), the Czech Republic (PLN 8.5 billion, i.e. 6.9%) and the Netherlands (PLN 8.1 billion, i.e. 6.7%). In 2015, the order of these countries was a bit different. The highest positions were allocated to direct investment entities established in Cyprus (PLN 36.0 billion, i.e. 33.5%), in Luxembourg (PLN 26.6 billion, i.e. 24.8%), the Netherlands (8.9 billion, i.e. 8.3%), Switzerland (PLN 7.5 billion, i.e. 7.0%) and in the Czech Republic (PLN 7.1 billion, i.e. 6.6%). However, it should be emphasised that Luxembourg, Cyprus and Switzerland owe their high position on the list of countries where Polish direct investment was made to the location of special purpose vehicles used for optimisation of investment structures in those countries.

In 2016, similar to previous years, the country with the highest negative value of Polish outward direct investment position was Sweden (PLN -19.6 billion). This is quite a typical situation for direct investment entities registered in this country. Usually they are affiliates of

Figure 23 Polish direct investment position abroad broken down by countries in 2016

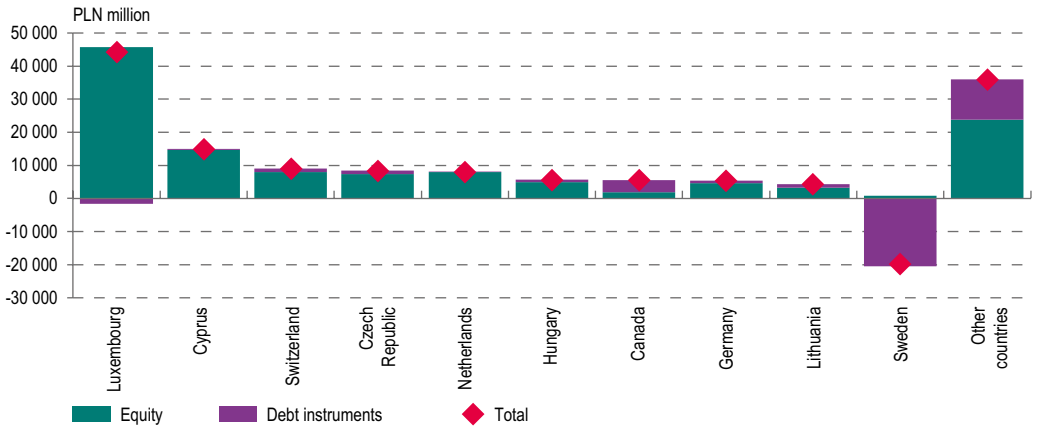


Figure 24 Polish direct investment abroad in 2016 by industry

B – Mining and quarrying; C – Manufacturing; D35 – Electricity, gas, steam and air conditioning supply; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; H – Transportation and storage; K – Financial and insurance activities, L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities.

entities registered in Poland through which Polish direct investors gained access to the capital, e.g. by means of the issue of bonds in the European market.

Similar to previous years, direct investors' claims on foreign entities representing broadly understood service activities (sections G to U) prevailed in the Polish outward direct investment position by industry. At the end of 2016, they amounted to PLN 98.5 billion, i.e. 80.5% of the Polish outward direct investment position. In this group, claims on entities dealing with financial and insurance activity (Section K) constituted 41.8% (PLN 41.2 billion), claims on entities representing the section of professional, scientific and technical activities (Section M) constituted 22.2% (PLN 21.9 billion), and claims on entities representing the section of administrative and support service activities (Section N) – 17.3% (PLN 17.1 billion). Foreign direct investment entities associated with manufacturing (PLN 17.0 billion, i.e. 13.9%; Section C) were the next source of claims of Polish direct investors. In 2016, contrary to the previous year, the highest negative value of claims were recorded on entities dealing with electricity, gas, steam and air conditioning supply (PLN -5.5 billion; Section D35) and information and communication (PLN -0.2 billion; Section J). For comparison, at the end of 2015 these amounts reached PLN -5.8 billion and PLN -7.5 billion, respectively. In the presentation by economic activity (as in the earlier classification by countries), the role of special purpose vehicles is clearly distinguished, classified in the following sections: financial activities (Section K), professional, scientific and technical activities (Section M) and administrative and support service activities (Section N).

Box 3 Who controls Polish direct investment positions abroad?

At the end of 2016, Polish outward direct investment positions reached a record value of PLN 122.4 billion. At least for this reason, it is worth analysing who really controls them. A closer analysis of data concerning Polish outward direct investment positions indicates that domestic entities controlled assets in the amount of PLN 72.2 billion, while non-residents controlled the remaining assets with the value of PLN 50.2 billion. For both residents and non-residents, a more in-depth analysis can be performed. In 2016, outward direct investment positions controlled by capital held by private investors, related to round-tripping of funds, had the highest share in residents' outward direct investment positions. They amounted to PLN 34.9 billion, whereas the remaining private outward direct investment positions reached the level of PLN 20.5 billion. In this period, the value of outward direct investment positions of entities controlled by the State Treasury reached the value of PLN 16.8 billion. A more detailed analysis of Polish outward direct investment positions controlled by non-residents allows to distinguish outward direct investment positions associated with the capital in transit performed by operational direct investment entities (PLN 11.5 billion) and remaining outward direct investment positions of non-residents, amounting to PLN 38.7 billion.

The above data illustrate the assignment of individual investment undertakings to the ownership structures of entities pursuing them and to the investment methods. Entities under state control were distinguished based on the analysis of the portfolio of equity owned by the State Treasury in listed companies and based on the list of entities supervised by the former Ministry of Treasury. The classification into entities controlled by residents – private investors and controlled by non-residents – was carried out according to the seat of the ultimate controlling parent. The values of round-tripping described in the previous box were presented separately. It was assumed that they corresponded to the value of inward direct investment in Poland, which demonstrate the opposite direction of flow of funds transferred abroad under round-tripping. This means that it is the upper limit of estimates and that the values of private residents' investment may be underestimated. Moreover, from the outward direct investment positions controlled by non-residents, the approximate value of capital in transit was separated, flowing through operational entities and, contrary to special purpose entities, not recognised in the direct investment statistics.

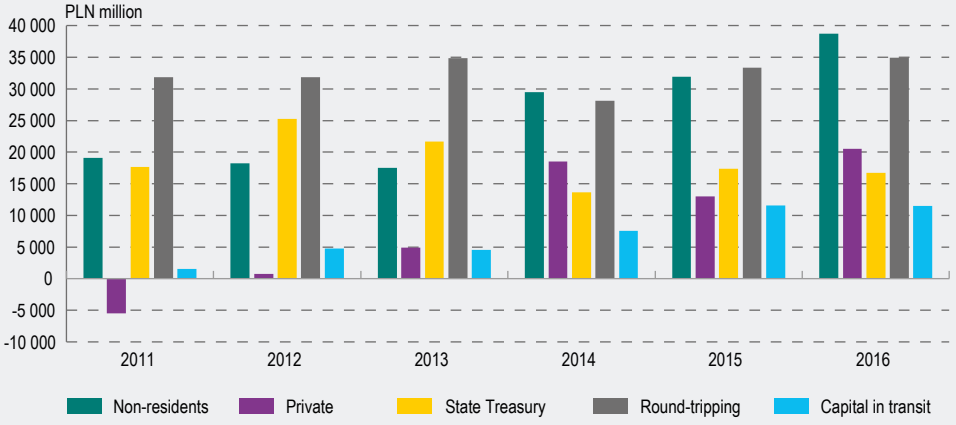
Outward direct investment transactions, intuitively understood as flows of capital abroad, in reality also includes incurring liabilities abroad, mainly by entities acquiring funding located there but also under regular trade. In Polish outward direct investment transactions the first category seems particularly significant.

Over recent years, the most significant outward direct investment was pursued by entities controlled by non-residents. The value of their outward direct investment positions between 2011 and 2016 increased from PLN 20 billion to PLN 39 billion, whereas the liabilities remained at a level of approximately PLN 20 billion.

In the case of entities controlled by the State Treasury, the value of outward direct investment positions in recent years remained at the level of almost PLN 20 billion.

However, it should be kept in mind that such control may arise not only from holding a simple majority of votes, but also from limitations regarding the voting rights of shareholders other than the state, imposed by the statutes (the so-called golden share). Growth in the value of Polish outward direct investment positions pursued by entities controlled by the State Treasury would be much higher if their debt towards their foreign subsidiaries through which they acquire funding in foreign markets did not increase. In 2011, this debt amounted to approximately PLN 2 billion, whereas in 2016 it exceeded PLN 18 billion.

Figure B3 Polish outward direct investment positions in 2016 broken down by ownership structure



The opposite approach to financing abroad can be observed in the case of private investors. Their liabilities towards foreign affiliated entities decreased from PLN 17 billion in 2011 to PLN 5 billion in 2016. This significantly contributed to the growth in outward direct investment positions, which amounted to PLN -6 billion in 2011, reaching over PLN 20 billion at the end of 2016.

The value of outward direct investment positions classified as round-tripping, although insignificant as compared to inward direct investment positions in Poland, represented a significant part of Polish outward direct investment. In 2011–2016, it remained at a level of approximately PLN 30 billion. In this investment, the role of capital transfer from abroad to Poland and from Poland abroad by operational entities (conducting actual manufacturing and service activities) is growing. Its value increased from PLN 1.5 billion in 2011 to PLN 11.5 billion at the end of 2016.

Outward direct investment is traditionally understood as investment of controlled entities from a given country in other entities abroad. In such terms, investment under the control of non-residents – the abovementioned capital in transit and round-tripping – should be deducted from values presented in compliance with the standard. After such adjustments, the value of outward direct investment positions of domestic entities amounts to only PLN 37.3 billion, i.e. 30.5% of the value presented as Polish outward

direct investment. The comparison of this amount with the value of liabilities due to inward direct investment positions shows that the scale of foreign expansion of Polish investors (both private and state-controlled) is still not very impressive. It should also be stressed that outward direct investment is pursued not only with the purpose of starting a business abroad, but also in order to acquire financing of activity in the country. The substantial, growing share of non-residents controlling Polish outward direct investment is also worth noticing. For them, Poland is the place of the establishment of entities founded for the purpose of controlling investment in other countries of the region. The location in Poland is also continuously used in global optimisation structures.

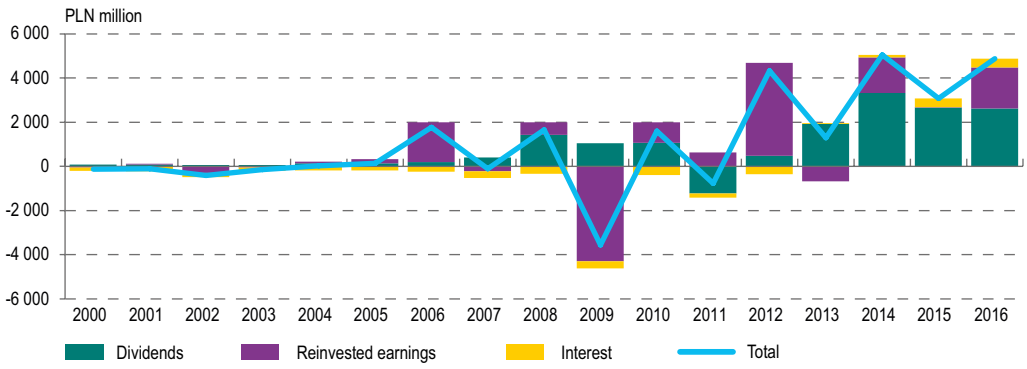
2.3 Income on Polish direct investment abroad

In 2016, the total income of residents on Polish outward direct investment amounted to PLN 4.9 billion. Compared to 2015, it was almost 60% higher (PLN 3.1 billion). This relatively high rise resulted from the growth of reinvested earnings from PLN 0.02 billion to PLN 1.9 billion. Dividends and interest on debt financial instruments remained at a level similar to 2015: PLN 2.6 billion and PLN 0.4 billion, respectively.

A significant reason for the increase in income on Polish outward direct investment was the improvement of profits gained by direct investment entities. At a level of dividends similar to the previous year, this resulted in growth of reinvested earnings. The positive net interest income indicates a surplus of interest received from direct investment entities over interest that had to be paid by Polish direct investors due to debt financial instruments.

An analysis of income on Polish direct investment abroad in recent years indicates the stabilisation of the level of income on dividends, with the growth of interest income. On the other hand, income on reinvested earnings shows a relatively high volatility. This volatility arises from the impact of results of individual entities on income on Polish outward direct investment.

Figure 25 Income on Polish direct investment abroad in 2000–2016



In 2016, the highest income was gained by foreign direct investment entities established in Lithuania (PLN 1.1 billion), Luxembourg (PLN 0.9 billion), Germany (PLN 0.8 billion), the Czech Republic (PLN 0.6 billion) and in Cyprus (PLN 0.5 billion). The highest negative net income was recorded by entities registered in the United Kingdom (PLN -0.7 billion) and Sweden (PLN -0.5 billion). The geographical structure of income on Polish outward direct investment was similar as in 2015.

In the breakdown by industry, income of entities dealing with manufacturing prevailed (PLN 2.4 billion, Section C). Much lower income was achieved by entities associated with trade (PLN 0.6 billion, Section G), financial intermediation (PLN 0.6 billion, Section K), administrative services (PLN 0.5 billion, Section N) as well as mining and quarrying (PLN 0.4 billion, Section B).

Figure 26 Income on Polish direct investment abroad in 2016 broken down by country

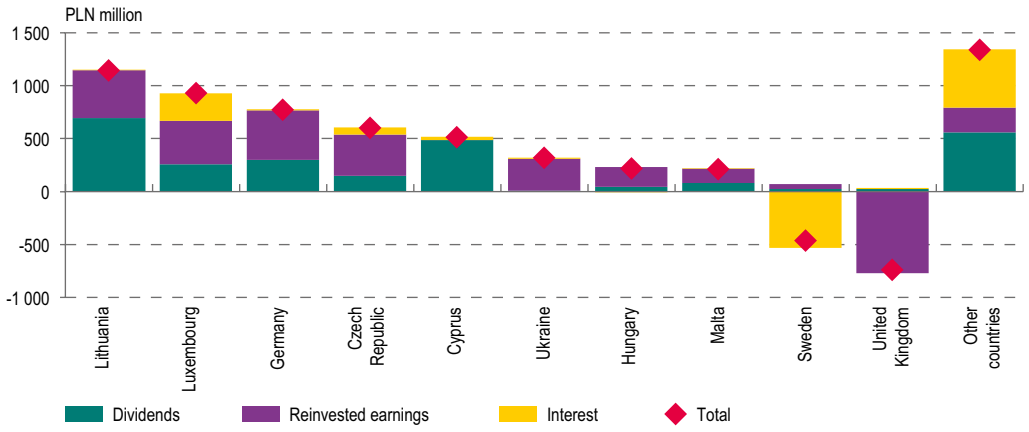
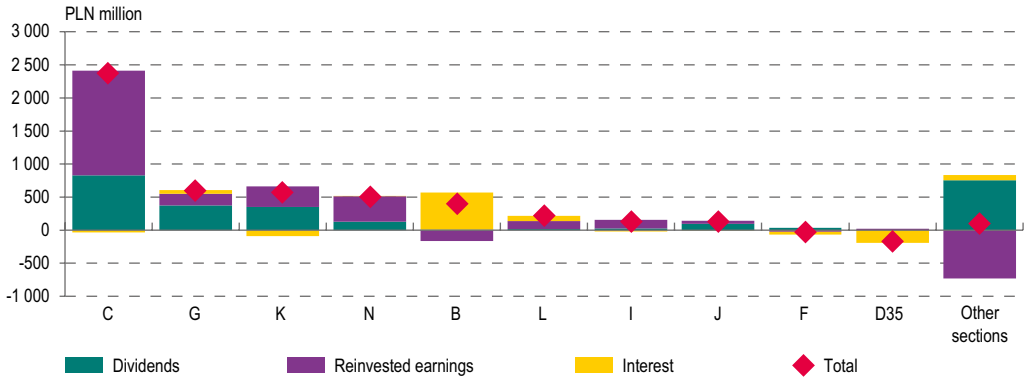


Figure 27 Income on Polish direct investment abroad in 2016 by industry



B – Mining and quarrying; C – Manufacturing; D35 – Electricity, gas, steam and air conditioning supply; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; I – Accommodation and food service activities; J – Information and communication; K – Financial and insurance activities, L – Real estate activities; N – Administrative and support service activities.

Chapter 3

Foreign direct investment in Poland and innovation in the Polish economy

Foreign direct investment in Poland and innovation in the Polish economy

This chapter presents an analysis of foreign direct investment in Poland in industries perceived as innovative. Identification of those industries was based on the approach presented by Narodowy Bank Polski in the report on the innovative potential of the economy.[10] According to this approach, industries with the highest expenditure on research and development are recognised as innovative. These data are made available by the Statistics Poland.[11]

The reasons underlying inward direct investment in a given country are various: a possibility to obtain access to new markets, an improvement of production effectiveness, a possibility to use the high qualifications of a host country's employees for the development of new technologies and creating new products. The last reason is usually associated with innovativeness and it is the most desirable among the reasons for implementing foreign investment projects.

Over recent years, the role of inward direct investment in industries perceived as innovative has been growing. The main reasons for this growth may be attributed to the higher profitability of investment in those industries and related possibilities of high reinvestment of earnings. Most commonly, this is not new, greenfield investment, but investment influencing the potential and development of existing companies.

Looking at the regional distribution of this type of investment in Poland, it can be stated that the highest amount of direct investment in innovative industries was recorded in Mazowieckie Voivodeship, Śląskie Voivodeship and Wielkopolskie Voivodeship. These voivodeships also occupy top positions in terms of the total value of inward direct investment. In terms of the relation of investment in innovative industries to investment in other industries, Świętokrzyskie Voivodeship and Wielkopolskie Voivodeship take the lead. On a national scale, a significant diversification of the level of investment in innovative industries occurs. Over recent years, the share of investment in these industries has increased significantly in certain voivodeships.

3.1 The concept of innovation and the mechanisms of the impact of direct investment on innovation

According to the OECD definition,[12] innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, as well as new workplace organisation or external relations.

[10] NBP report on "Potencjał innowacyjny gospodarki: uwarunkowania, determinanty, perspektywy" [Innovation potential of the economy: conditions, determinants, perspectives] of 2016.

[11] Statistics Poland "Działalność innowacyjna przedsiębiorstw w Polsce w 2015" [Innovation activity of enterprises in Poland in 2015], 2016.

[12] The recent version of the handbook devoted to the analysis of innovation is: OECD, "Frascati Manual 2015 Guidelines for Collecting and Reporting Data on Research and Experimental Development", 2015. The same definition is used in the aforementioned NBP report on "Potencjał innowacyjny gospodarki: uwarunkowania, determinanty, perspektywy" [Innovation potential of the economy: conditions, determinants, perspectives], 2016.

Inward direct investment is one of the methods for the transfer of knowledge, technology and creating innovation of business entities and, in certain cases, of overall economies. Entities implementing investment may transfer funds through various channels. Multinational enterprises usually do it through inter-company flows in enterprise groups, including within the global value chains, where both foreign and domestic entities participate.

The participation of companies in the global value chains is associated with the penetration of innovation (mainly process and product innovation) and affects the growth of work efficiency in the investing and host economy. Gaining experience through inward direct investment contributes to the growth of parent companies' efficiency in home countries. In the host country, the cooperation of local firms with foreign entities fosters the dissemination of innovation due to the need for technological adjustment to investors' requirements. In addition, the growth of competition related to the appearance of investors on the local markets forces an increase in efficiency by other companies.[13]

Besides cross-border flows within enterprise groups recognised in direct investment, we also face capital flows outside enterprise groups. They may be associated, for example, with franchising agreements, the sale of capital goods, the sale of licences, technical assistance or agreements concerning subcontracting.

Positive effects of innovation growth occur when companies from the host country participate in the stages of production financed by direct investors, particularly where high technology products are manufactured. Those effects are strengthened by positioning the local firms in the end part of the global value chain – closer to the final product.

The transfer of technology and innovation is more effective if multinational enterprises cooperate closely with local firms, supporting them technologically and organisationally. The sole purchase of goods and services from foreign suppliers, present at the initial stages of foreign investment, contributes to the growth in innovation to a much lesser extent.

The capacity of an economy to absorb innovation through inward direct investment is determined by the level of human and social capital as well as institutional conditions. In that case, investors' motivation is important, as well as the related market entry methods and selection of industries, depending on the level of technological advancement. Absorption of new solutions is also fostered by the professional and territorial mobility of employees and their education.

Studies related to the impact of inward direct investment on the productivity of domestic companies in Poland[14] show that the presence of foreign entities has a strong impact on the level of innovation of those companies. It depends on the relationships within the production chain and is particularly visible in industries of a high intensity of research and development.

[13] The positive impact of direct investment on innovation is presented, among others, by M. Kolasa in "How does FDI inflow affect productivity of domestic firms? The role of horizontal and vertical spillovers, absorptive capacity and competition", The Journal of International Trade & Economic Development, An International and Comparative Review, Vol. 18, 2008, and B. Javorcik in "Does FDI Bring Good Jobs to Host Countries?", World Bank Research Observer, 30, 2015.

[14] The impact of inward direct investment on the productivity of domestic companies was presented, among others, by M. Kolasa in the paper: "How does FDI inflow affect productivity of domestic firms?, op. cit.

Significant growth of investment processes (product and service-related) in the global economy in recent decades encouraged international organisations to undertake joint studies on the implementation methods and effectiveness of foreign direct investment. One of the initiatives was the preparation of the Trade in Value Added (TiVA) database by the OECD in cooperation with the WTO.[15] Within the analysis of global value chains, the OECD also included direct investment in the form of mergers and acquisitions related to projects oriented to research, development and innovation.[16]

Direct investment related to innovation is also the subject of interest of authorities and researchers in individual countries.

The analysis below is based on aggregate data related to direct investment. Necessary simplifications may sometimes hinder the interpretation of indicators; however, they allow the observation of overall tendencies related to direct investment in entities operating in industries defined as innovative.

3.2 Foreign direct investment in innovative industries

For the needs of this report, innovative industries[17] were identified based on criteria similar to those adopted in the aforementioned report of Narodowy Bank Polski concerning the innovative potential of the economy. In accordance with this definition, innovative industries are those reporting the highest research and development expenditure. The group of industries defined in this way[18] was extended by entities associated with trade in motor vehicles (division 45 of Section G) due to classifying some manufacturers of motor vehicles in this industry.

The types of economic activity listed in Table I are treated herein as a synonym of the term: innovative industries.

In 2016, the value of transactions due to inward direct investment in innovative industries in Poland amounted to PLN 24.4 billion against PLN 16.4 billion in 2015 and PLN 10.8 billion in 2011. In the entire period under analysis, inward direct investment transactions in innovative industries showed a positive value. On the other hand, in 2013 total disinvestment was recorded in other industries, which confirms relative "resistance" of innovative industries to changes in the business cycle. The ratio of the value of inward direct investment transactions in innovative industries to total inward direct investment transactions increased from the level of almost 22.9% in 2011 to 44.4% in 2016.

[15] This base was built based on harmonised input-output tables and bilateral data on the OECD trade; cf. WTO, "Trade in Value Added: Concepts, Methodologies and Challenges", 2012.

[16] OECD, "Where to locate innovative activities? Does co-location matter", Directorate for Science, Technology and Innovation Policy Note, December 2016.

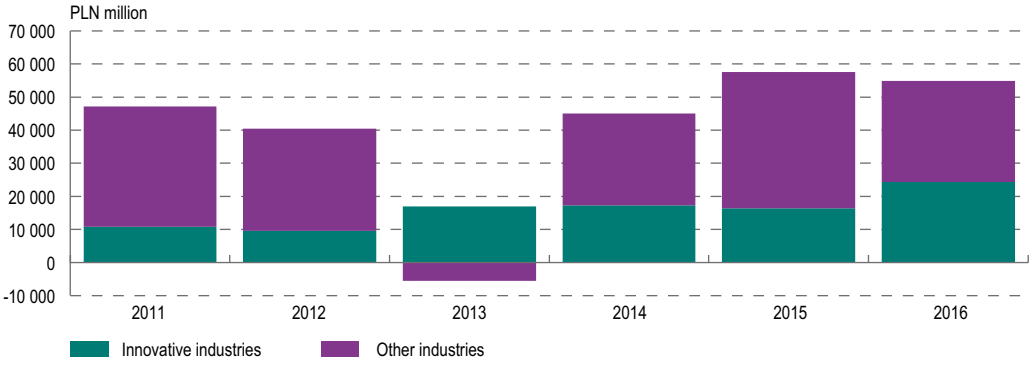
[17] Due to the structure of the data on direct investment, individual industries are classified as innovative or other, using the available codes applied in the standard of data exchange between international organisations. Those codes are linked with PKD 2007. For example, code C24_25 in PKD 2007 means divisions 24 and 25 of Section C.

[18] Statistics Poland "Działalność innowacyjna przedsiębiorstw w Polsce w 2015" ["Innovation activity of enterprises in Poland in 2015"], 2016.

Table I Innovative industries identified for the needs of analysis of direct investment in innovative industries in Poland in 2011–2016

DSD Code	Sections and division of PKD2007	Type of economic activity
C21	C.21	Production of pharmaceuticals
C24_25	C.24 C.25	Manufacture of fabricated metal products, except machinery and equipment
C26		Manufacture of computer, electronic and optical products
C28		Manufacture of machinery and equipment n.e.c.
C29		Production of vehicles, trailers and semi-trailers
C_OTH	C.15 C.23 C.27 C.31 C.32 C.33	Other manufacturing (aggregate)
G45	G.45	Wholesale and retail trade and repair of motor vehicles and motorcycles
G46	G.46	Wholesale trade, except of motor vehicles and motorcycles
J58_62_63	J.58 J.62 J.63	Other information and communication activities
J61	J.61	Telecommunications
M72	M.72	Research and development works

Figure 28 Inward direct investment transactions in innovative industries and other industries in Poland in 2011–2016



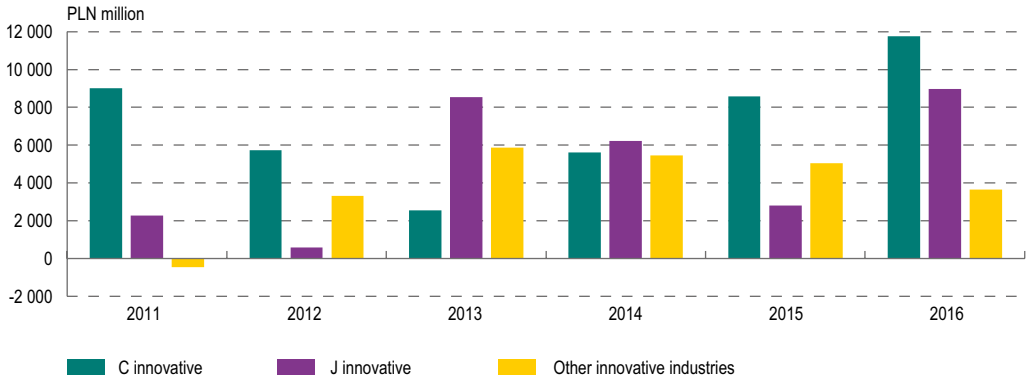
Special attention should be paid to reinvestment of earnings, which in innovative industries amounted to PLN 16.4 billion in 2016 and accounted for over half of the value of reinvestment of earnings in all industries.

While investing their funds in innovative industries, foreign investors selected various types of economic activity. In 2016, entities carrying out activity in the area of information and

communication attracted most interest (J58_62_63).[19] In earlier years, the majority of inward direct investment was targeted at entities dealing with the manufacture of motor vehicles, trailers and semi-trailers, excluding motorcycles (C29). The lowest value of investment in 2011–2016 was recorded in the case of activity related to research and development works (M72).

In 2011–2016, the inflows of inward direct investment to entities operating in the area of information and communication (J section), manufacture of motor vehicles, trailers and semi-trailers, excluding motorcycles (C29) and wholesale and retail trade, including repair of vehicles (G45), showed the strongest volatility. On the other hand, the inflows of investment to the manufacturing section (C21, C26, C28 divisions) and research and development works (M72) were more stable. It is worth emphasising that although 2013 resulted in the decline of total inward direct investment transactions (by almost PLN 29 billion, i.e. by 72% compared to 2012), in entities operating in innovative industries this investment stayed at a level of PLN 17.0 billion. In the same period, inward direct investment capital at a level of PLN 5.5 billion was withdrawn from other industries.

Figure 29 Inward direct investment transactions in innovative industries in Poland in 2011–2016



In C section, the following innovative industries were included: C21, C24_25, C26, C28, C29, C_OTH, in J innovative: J58_62_63 and J61, and other innovative industries included: G45, G46 and M72.

In 2016, inward direct investment positions in innovative industries reached PLN 235.5 billion and they were systematically growing (in 2011, PLN 172.6 billion). In 2016, the ratio of liabilities of innovative industries due to inward direct investment in Poland to total liabilities under this title amounted to 30.2% compared to 30.7% in 2011. Whereas in the period 2011–2016, growth of inward direct investment positions in innovative industries was recorded every year, in other branches, as in the case of transactions, various tendencies are observed. In particular, due to the decline in companies' valuation in other industries, the share of innovative industries in liabilities due to inward direct investment in Poland increased to 32.4%.

Among innovative industries analysed, the highest liabilities due to inward direct investment were recorded in the following sections: manufacturing, and trade and activity related to information and communication. At a lower level of aggregation, a relatively high share of

[19] This was affected by a single transaction of the acquisition of an entity operating in this industry by a foreign investor.

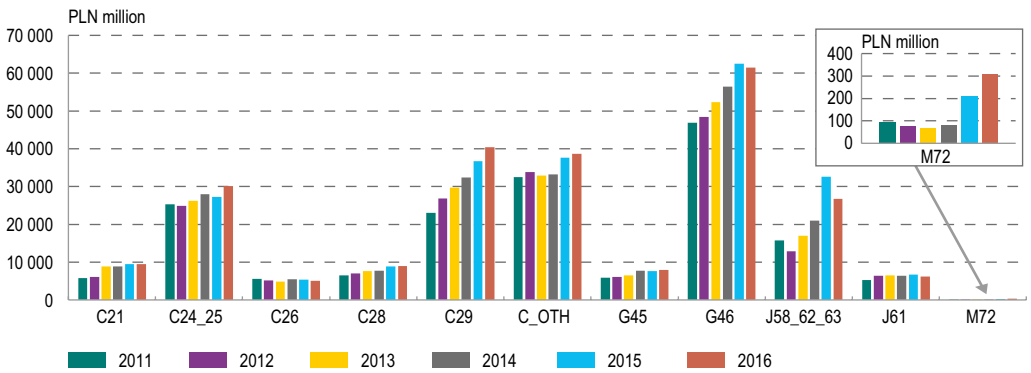
Figure 30 Inward direct investment positions in innovative industries and other industries in Poland in 2011–2016

liabilities in the case of wholesale trade, except for motor vehicles and motorcycles (G46), telecommunications (J61) and manufacturing of motor vehicles (C29) attracts attention. In those cases, the highest growth in liabilities due to inward direct investment was recorded in 2011–2016. Relatively high growth of liabilities under this title was also observed in the division of research and development activity, however, their value still remains marginal.

The equity position accounts for the major part of liabilities due to inward direct investment positions in industries perceived as innovative (similar to other industries). However, in innovative industries, its share in total liabilities is higher. The increased share of liabilities due to equity position in the total liabilities resulted mainly from the high level of reinvested earnings. The ratio of equity position to total inward direct investment positions in innovative industries was higher than in other industries throughout the period under analysis. The difference between these ratios for innovative industries and for other industries increased from 7.7% in 2011 to 12.4% in 2016.

The average income on inward direct investment in 2011–2016 amounted to PLN 62.8 billion. Its major part (PLN 36.8 billion) originated from other industries; however, the share of

Figure 31 Inward direct investment positions in innovative industries in Poland in 2011–2016



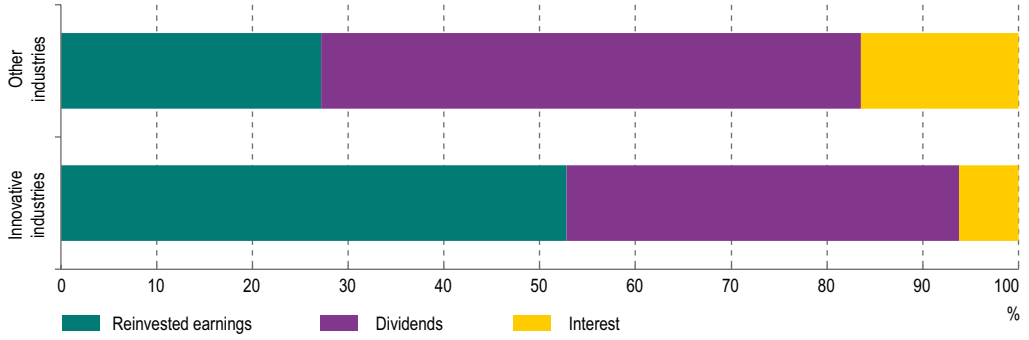
innovative industries in income was much higher than in inward direct investment positions. This indicates a higher profitability of inward direct investment in innovative industries as compared to other industries.

Among innovative industries, the highest income was gained from investment in wholesale trade (the average in 2011–2016 amounted to PLN 6.1 billion; G46), other manufacturing (PLN 4.7 billion; C_OTH) and manufacture of motor vehicles, trailers and semi-trailers excluding motorcycles (PLN 4.4 billion; C29). The lowest income was generated by investment in research and development works (PLN 0.2 billion; M72), wholesale and retail trade, including repair of vehicles (PLN 0.6 billion; G45) and manufacture of computer, electronic and optical products (PLN 0.6 billion; C26).

In 2011–2016, in the structure of income on inward direct investment, income from other industries (58.6%) prevailed over income from innovative industries (41.4%).

Figure 32 Income on inward direct investment in innovative industries and other industries in Poland in 2011–2016

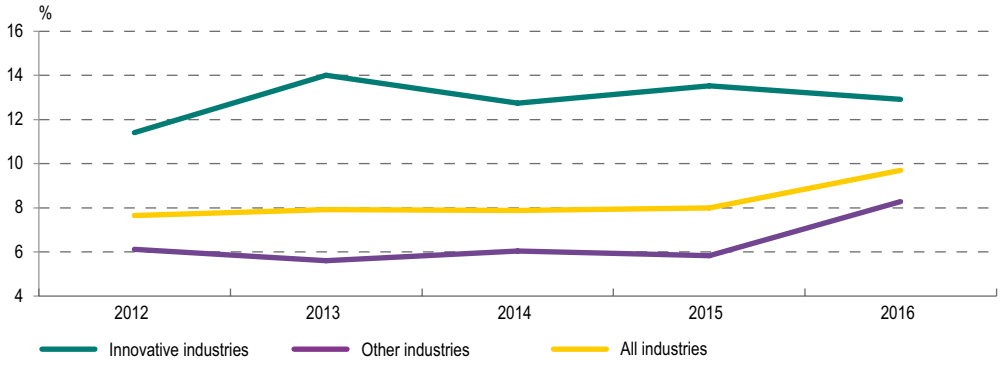
Figure 33 Income on inward direct investment in Poland broken down by innovative industries and other industries in 2011–2016



In 2011–2016, the structure of income on inward direct investment in innovative industries was different than in other industries. In the first group, the average share of reinvested earnings amounted to 52.8%, dividends – to 41.0%, and interest – to 6.2%. In the case of other industries, dividends accounted for 56.5% of income, reinvested earnings – for 27%, and interest for 16.5%. A significantly lower level of reinvested earnings compared to innovative industries is noticeable.

A significant feature distinguishing innovative industries compared to other industries is their profitability. The analysis of the profitability ratios in 2011–2016 shows that the profitability achieved by foreign investors (12.9% on average) of the whole capital invested in innovative industries was almost two-fold higher than in other industries (6.4% on average). It was certainly one of the reasons underlying the deployment of foreign investments precisely in those industries.

Figure 34 Profitability ratios of inward direct investment positions in Poland by industry in 2012–2016



The analysis of inward direct investment positions in Poland in innovative industries at a regional level brings interesting results. Its share in the total direct investment in individual voivodeships was diverse and was subject to certain changes in recent years.[20]

The highest share of inward direct investment position in innovative industries in the total inward direct investment position was observed in three voivodeships: Mazowieckie, Śląskie and Wielkopolskie. At the end of 2016, 37.0% of such investment was located in Mazowieckie Voivodeship, 18.1% in Śląskie Voivodeship, and 11.4% in Wielkopolskie Voivodeship. The highest growth in the share of the inward direct investment position in innovative industries in 2011–2016 was recorded in Mazowieckie Voivodeship, Wielkopolskie Voivodeship and Podkarpackie Voivodeship.

In voivodeships where the share of innovative industries' liabilities was the highest, investors did not concentrate on a single type of activity. In other voivodeships, inward direct investment was deployed in some activity types.

[20] This analysis refers to direct investment entities operating in selected innovative industries, in accordance with the criteria presented. With such more detailed breakdown, assignment of direct investment to individual voivodeships is more significant.

Figure 35 Inward direct investment positions in innovative industries in Poland broken down by voivodeships in 2016 (in %)

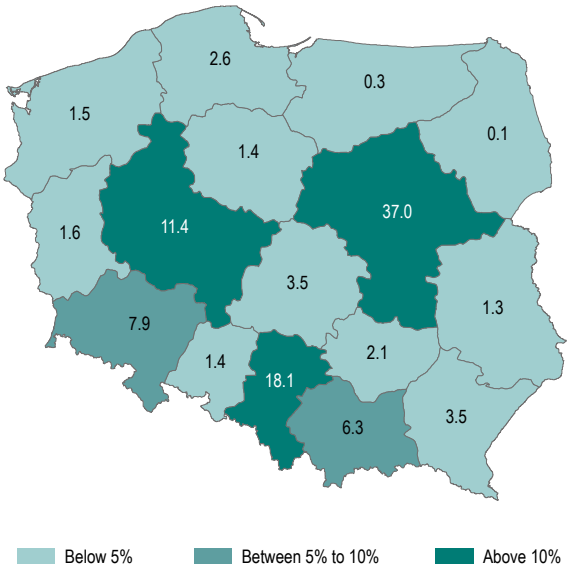
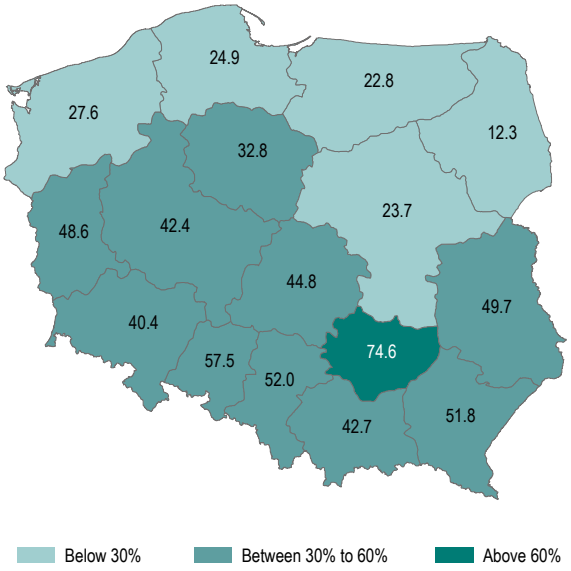


Figure 36 Shares of inward direct investment positions in innovative industries in the total inward direct investment position in individual voivodeships in 2016 (in %)



Note: the average share of inward direct investment position in innovative industries in the total inward direct investment positions in individual voivodeships in 2016 amounted to 40.5%.

The continuing concentration of direct investment in innovative industries in several voivodeships did not reflect the share and role of direct investment in innovative industries in liabilities under this title in individual voivodeships.

In 2016, the highest share of the inward direct investment position in innovative industries in the total inward direct investment position was recorded in Świętokrzyskie Voivodeship (74.6%) and in Opolskie Voivodeship (57.5%). The lowest share of this investment occurred in Podlaskie Voivodeship (12.3%).

In 2011–2016, the commitment in innovative industries clearly increased in the following voivodeships: Wielkopolskie (from 36.9% to 42.4%) and Kujawsko-Pomorskie (from 23.3% to 32.8%), whereas it decreased in the following voivodeships: Opolskie (from 62.6% to 57.5%), Śląskie (from 62.6% to 52.0%) and Zachodniopomorskie (from 28.9% to 27.6%). In 2011, the Warmińsko-Mazurskie Voivodeship had the lowest share of the inward direct investment position in innovative industries in total inward direct investment positions (10.1%), whereas in 2016 it reached 22.8%.

It should be emphasised that in Mazowieckie Voivodeship the share of inward direct investment position in innovative industries is the highest; however, its share is below the national average.

While analysing the share of individual innovative industries in total inward direct investment positions, it can be noted that foreign investors in some voivodeships continued to specialise in selected industries (however, the extent of commitment was changing). Only in a few voivodeships did they decide to enter new areas of activity. Examples of continuing concentration in selected industries include Śląskie Voivodeship, with the manufacture of fabricated metal products (C24_25), as well as Mazowieckie Voivodeship, with wholesale trade (G46).

Methodological note

Methodological note

Standard of direct investment statistics

The world standard of direct investment statistics is the document of the Organisation for Economic Cooperation and Development (OECD), *The Benchmark Definition of Foreign Direct Investment* (Benchmark Definition), developed for the first time in 1983. In 2008 its fourth, current issue was elaborated.[21] The current version of the standard of direct investment statistics is implemented by an increasing number of countries.

The *OECD Benchmark Definition of Foreign Investment 4th edition* is fully consistent with the concept and definitions of direct investment contained in the sixth issue of the International Monetary Fund standard, related to the balance of payments and the international investment position.[22] It is also compliant with the concept of the system of national accounts – SNA 2008 and its European counterpart – ESA 2010.[23]

Narodowy Bank Polski has published data on foreign direct investment since 1996, in accordance with international standards, implementing their subsequent versions.

The OECD publication concentrates on foreign direct investment. It defines the methods of presentation of receivables and liabilities as well as transactions related to such investment, including related income in the aggregate form and with a breakdown into partner countries and types of economic activity.

In addition, the latest issue of *Benchmark Definition* recommends new presentations of direct investment, among others the following:
- presentation in accordance with the revised directional principle (a new method of treating entities with the status of "fellow enterprises"),
- distinguishing direct investment according to the country of residence of the ultimate controlling parent,
- presentation with a breakdown into assets/liabilities.

Based on the presented standard, Narodowy Bank Polski publishes data in accordance with users' needs. It fulfils international obligations, submitting data on direct investment to international organisations, in accordance with the needs of those institutions.

The standard of direct investment statistics admits various methods of data collection and valuation of assets. Therefore, differences occur between the data as a result of applying diverse methods. Bearing this in mind, below we point out several key issues related to this problem. They result mainly from the additional detailed specification of certain principles at the European Union level.

[21] OECD, "OECD Benchmark Definition of Foreign Direct Investment – Fourth Edition", 2008.
[22] IMF, "Balance of Payments and International Investment Position Manual – 6th edition", 2007.
[23] European System of Accounts introduced under Regulation of the European Parliament and of the Council No. 549/2013.

The global standard of direct investment statistics recommends the method of measuring financial assets and liabilities based on their market value, at the same time allowing other measurement methods that are an approximation of the market value. In accordance with the principles adopted in the EU, Poland presents listed shares according to their market valuation, while other forms of equity are presented according to the value of equity per shareholder.

In compliance with the decision taken at the EU level, contrary to the generally applicable standard, assets and liabilities of investment funds are not recognised in direct investment, even if they exceed the threshold of 10% of votes.

In the relations between affiliated entities in Poland, no insurance technical reserves occur, therefore they are not presented in the Polish statistics of direct investment. At the same time, this issue is monitored and the data can be supplemented by this instrument if necessary.

Data sources of direct investment

Reports of reporting entities submitted to Narodowy Bank Polski represent the basic source of data on inward direct investment in Poland and Polish outward investment.

Such data are submitted to NBP for the purposes of the balance of payments balance and the international investment position by banks and by other residents.[24] Data are collected from residents whose total foreign assets and liabilities exceed PLN 7 million (natural persons) or PLN 10 million (residents other than investment firms). Investment firms (including banks) submit reports irrespective of the amount of foreign assets and liabilities held. The information provided refers to own transactions of individual entities. Only in the case of investment companies and banks maintaining securities accounts are aggregate data related to those institutions' clients also submitted.

Information is collected on a monthly, quarterly and annual basis.

The sources of data on direct investment based on securities include reports sent by Polish investors (related to assets) and issuers or financial intermediaries (related to liabilities). They contain data broken down into individual securities. Such data are collected using the "paper by paper" method.[25]

[24] The legal basis for the collection of data on direct investment in Poland consists of the following: Regulation of the Minister of Development and Finance of 9 August 2017 concerning the provision of data required for the preparation of the balance of payments and the international investment position to Narodowy Bank Polski (Journal of Laws of 18 August 2017, item 1548) and Resolution No. 78/2009 of the Management Board of Narodowy Bank Polski of 29 October 2009 concerning the procedure and detailed rules of submission of the data required for the preparation of the balance of payments and the international investment position by banks to Narodowy Bank Polski, as amended (Official Gazette of NBP of 19 November 2009, No. 18, item 20).

[25] The reporting entity provides the value of the transaction/position of receivables or liabilities and the identification number of each security, based on which other information is identified.

Data on foreign direct investment in companies holding dematerialised shares are collected at the level of individual series of shares (ISIN numbers[26]), based on available financial statements of issuers and monthly reports of custodian banks and brokerage houses.

Press information, financial statements of entities and direct contacts with entities provide an additional data source of the direct investment statistics. Information acquired in this way serves mainly the verification and updating of the register of reporting entities.

Method of compilation and presentation of data on inward direct investment

Data for statistics on inward direct investment statistics are submitted by reporting entities in electronic form through the reporting portal and are subsequently verified and processed by the dedicated internal electronic system of Narodowy Bank Polski.

In the process of verification and compilation of data on securities with the ISIN code, data contained in the CSDB database of the European Central Bank, information from the National Depository for Securities (KDPW) and information acquired from issuers themselves is additionally used.[27]

In this report, in accordance with the rules applicable in direct investment statistics, data are presented in compliance with the directional principle,[28] excluding domestic special purpose entities. For the purposes of the balance of payments and the international investment position, information on direct investment is presented according to the balance sheet principle (on an assets/liabilities basis) taking into account domestic special purpose entities. The result of this discrepancy in the presentation method is the lack of possibility of simple comparison of data on direct investment derived from those two sources.

In order to meet the expectations of data users, the statistical annex contains a comparison of the presentation according to the assets/liabilities principle and the presentation compliant with the directional principle for entities other than special purpose entities, i.e. for entities from the annual statistics of direct investment.

The foreign direct investment asset positions under the assets\liabilities principle are (generally) higher than the direct investment outward positions presented according to the directional principle. Likewise, the foreign direct investment liability positions under the assets/liabilities principle are (generally) higher than inward positions calculated according to the directional principle.

The difference between the two is equal to the sum of the assets of residents in non-residents when the residents are controlled or influenced by non-residents and of the liabilities of residents to non-residents when the residents are exerting control or influence on non-residents.

[26] The International Securities Identification Number is an international identification code assigned to securities issued in financial markets. It is an alphanumerical code consisting of 12 characters with a structure defined in accordance with the ISO 6166 standard.

[27] Central Securities Database – the database of securities issued within the European Union existing since 2010; see: https://www.ecb.europa.eu/pub/pdf/other/centralisedsecuritiesdatabase201002en.pdf.

[28] The presentation of data on direct investment in accordance with the directional principle, introduces the classification into outward direct investment and inward direct investment.

The net position (outward foreign direct investment less inward foreign direct investment and assets less liabilities) is the same in both presentations, i.e. the difference between foreign direct investment assets and foreign direct investment liabilities is equal to the difference between outward foreign direct investment and inward foreign direct investment.

Glossary

Control shall be understood as holding directly and/or indirectly more than 50% of voting power in the governing body of another entity.

Current operating performance (COPC) means that direct investment income on equity under COPC covers the sum of net operating surplus (NOS) plus net interest receivable plus dividend income receivable plus reinvested earnings receivable plus net current transfers receivable. It does not include any realised or unrealised holding gains or losses arising from valuation changes, exchange rate changes, write-offs, etc.

Debt instruments means all forms of investing other than the acquisition of shares or equities, or reinvestment of earnings associated with such shares or equities. Debt instruments include, among others, credits and loans, debt securities and other unsettled payments between entities in a direct investment relationship.

Direct investment entity means an entity in whose governing body a direct investor holds, directly or indirectly, alone or jointly with entities controlled by it, at least 10% of votes. An entity controlled by another direct investment entity is also a direct investment entity.

Direct investment flows mean financial flows between entities from the enterprise group in a given period.

Direct investment income is part of the return on the direct investment position; that is, the return on equity and debt investment. Direct investment income is calculated on an accrual basis, i.e. it is recorded as it accrues regardless of the payment term. However, as debt instruments involving financial intermediaries related through a foreign direct investment relationship are excluded from direct investment, so is the debt income between them.

Direct investment positions (stocks of investment) means the total stock of investment made abroad or received from abroad for a given reference date.

Direct investor means an entity which has acquired, either directly or indirectly, alone or jointly with entities controlled by it, at least 10% of voting power in the governing body of another entity.

Enterprise group means a group created by a parent company and entities where it acts as a direct investor. The entities are in a direct investment relationship. In the event that an entity holds votes in the governing body of another entity through the entity it controls, it is assumed that such an entity holds all the votes of the intermediary entity. The enterprise group may include both non-residents and residents. The enterprise group does not need to be equivalent to the enterprise group defined in the accounting standards.

Equity capital comprises all shares in subsidiaries and associates, other contributions of an equity nature and equity in branches.

Fellow enterprises are at least two entities belonging to the same enterprise group without either being a direct investor in the other but both being directly or indirectly influenced by the same enterprise "common parent". This common parent must be a direct investor in at least one of enterprises.

Influence is understood as holding directly and/or indirectly at least 10% of voting power in the governing body of another entity.

Inward direct investment is investment by a non-resident direct investor in a direct investment enterprise – resident. The direction of the influence by the direct investor is "inward" for the reporting economy.

Mergers and acquisitions means transactions as a result of which companies previously operating independently are merged and a new company is established, or shares of another company are acquired and control over it is held, with the simultaneous maintenance of organisational separation. In direct investment statistics, mergers and acquisitions are defined as transactions on existing shares (other than new issue shares) if, as a result of such transactions, the purchaser controls at least 10% of votes in the governing body of the other entity.

Outward direct investment is investment by a resident direct investor in a non-resident direct investment enterprise. The direction of the influence by the direct investor is "outward" for the reporting economy.

Reinvestment of earnings / reinvested earnings refer to earnings on equity accruing to direct investors less distributed earnings, proportionate to the percentage ownership of the equity owned by the direct investor(s). Reinvested earnings are included in direct investment income because the earnings of direct investment enterprises are deemed to be the income of the direct investor (proportionate to the direct investor's holding of equity in the direct investment enterprise), whether they are reinvested in the enterprise or remitted to the direct investor. A negative amount of reinvested earnings means that direct investment entities recorded losses in a given period or that the amount of dividends declared exceeded the earnings.

Special purpose entities – SPEs in the statistics associated with the balance of payments and the international investment position, mean entities created in order to carry out financial activity in favour of other enterprises of the enterprise group. Very often they neither employ any personnel nor carry out operating activities on the territory of the country they are present in. Most commonly they deal with holding activity and raising capital on behalf of and for other entities from the enterprise group. In the case of the former function, a special purpose entity is the owner of other entities in the enterprise group and transactions with its participation are mainly related to shares in subsidiaries. The latter of the aforementioned functions is associated with the raising capital from the issuance of securities, borrowing and the raising capital from other sources, and the transfer of funds raised in such a manner to other companies of the enterprise group. The components of the balance sheet of such entities are comprised almost exclusively of foreign assets and liabilities.

Super dividends / liquidating dividends mean dividends arising as a result of re-distribution of profit from previous years. They are usually higher than dividends paid regularly. In accordance with the current standards, they are classified as withdrawals of equity, rather than income.

Transactions of special purpose entities mean the phenomenon where in a given reporting period an inflow of foreign funds is recorded, increasing the capital of special purpose entities – residents; subsequently, such funds are transferred by such entities to foreign branches or subsidiaries abroad. The occurrence of transactions of special purpose entities results in recording symmetrical entries, both in inward direct investment in the country and in outward direct investment. Inflow of capital due to transactions of special purpose entities does not have a significant impact on domestic production and employment.

Ultimate controlling parent (UCP) is a direct investor at the top of the control chain. It is the ultimate source of control of the stocks of inward foreign direct investments (FDI) for a reporting economy. The UCP ultimately owns and controls, and therefore derives the benefits from owning and controlling the direct investment enterprise.

Statistical annex

Statistical annex

This annex presents selected data from the tables related to direct investment. Detailed tables (also in EUR and USD) are available on the NBP website.

Inward direct investment in Poland:

http://nbp.pl/home.aspx?f=/publikacje/zib/zib.html

Polish outward direct investment:

http://nbp.pl/home.aspx?f=/publikacje/pib/pib.html

Table 1 Inward direct investment transactions to Poland in 2000–2016 (in PLN million)

Year	Equity	Reinvestment of earnings	Debt instruments	Total
2000	38,771.0	-1,739.0	4,018.0	41,050.0
2001	21,672.0	-4,259.0	5,427.9	22,840.9
2002	17,432.0	-4,991.0	4,002.0	16,443.0
2003	17,733.0	-328.0	-1,917.5	15,487.5
2004	25,978.5	22,620.0	-4,193.9	44,404.7
2005	9,569.8	10,937.0	6,034.6	26,541.3
2006	10,558.1	17,646.0	17,032.2	45,236.3
2007	16,154.1	25,610.0	13,141.5	54,905.7
2008	19,796.9	-2,301.0	12,096.9	29,592.8
2009	10,692.3	15,497.0	5,134.8	31,324.1
2010	1,612.8	22,448.0	14,523.8	38,584.6
2011	-804.9	21,572.0	26,416.7	47,183.8
2012	12,447.0	18,254.1	9,756.6	40,457.7
2013	-5,674.7	14,732.2	2,401.2	11,458.7
2014	13,297.0	25,939.5	5,774.8	45,011.3
2015	21,879.0	29,145.1	6,539.4	57,563.4
2016	8,427.3	34,224.0	12,263.2	54,914.4

Table 2 Inward direct investment positions in Poland at the end of the year in 2000–2016 (in PLN million)

Year	Equity	Debt instruments	Total
2000	105,043.0	33,657.6	138,700.6
2001	123,619.0	37,405.6	161,024.6
2002	138,155.0	43,402.6	181,557.6
2003	156,789.0	53,106.4	209,895.4
2004	206,089.5	45,409.4	251,499.0
2005	232,454.3	49,144.2	281,598.5
2006	269,723.2	67,288.9	337,012.1
2007	323,225.0	77,016.1	400,241.1
2008	340,238.2	99,344.2	439,582.4
2009	373,166.4	103,971.0	477,137.5
2010	441,739.2	114,332.4	556,071.7
2011	424,678.7	137,225.3	561,904.0
2012	472,597.9	144,077.8	616,675.7
2013	540,261.4	149,989.1	690,250.5
2014	569,116.5	172,600.0	741,716.5
2015	543,296.5	182,255.0	725,551.5
2016	580,101.0	198,545.1	778,646.1

Table 3 Income on inward direct investment in Poland in 2000–2016 (in PLN million)

Year	Dividends	Reinvested earnings	Interest	Total
2000	2,447.0	-1,738.0	2,128.1	2,837.1
2001	4,003.0	-4,258.0	2,906.7	2,651.7
2002	5,571.0	-4,992.0	2,364.8	2,943.8
2003	6,309.0	-328.0	1,953.3	7,934.3
2004	9,837.0	22,619.0	2,140.5	34,596.5
2005	16,790.0	10,937.0	2,107.3	29,834.3
2006	20,078.0	17,645.0	2,772.5	40,495.5
2007	22,432.0	25,609.0	3,481.3	51,522.3
2008	28,095.0	-2,302.0	4,267.2	30,060.2
2009	23,356.0	15,499.0	4,425.2	43,280.2
2010	23,829.0	22,448.0	4,687.8	50,964.8
2011	24,945.0	21,572.0	5,256.2	51,773.2
2012	27,518.2	18,254.1	6,258.3	52,030.6
2013	36,267.7	14,732.2	7,234.8	58,234.7
2014	29,592.4	25,939.5	8,595.7	64,127.6
2015	30,091.6	29,145.1	8,270.1	67,506.9
2016	36,079.2	34,224.0	8,670.4	78,973.6

Table 4 Inward direct investment transactions to Poland in 2016, geographical breakdown (in PLN million)

DSD code	Description	Equity	Reinvestment of earnings	Debt instruments	Total
W0	All countries	8,427.3	34,224.0	12,263.2	54,914.4
	including				
NL	Netherlands	8,088.7	9,005.5	3,095.4	20,189.6
DE	Germany	576.7	8,395.0	4,739.8	13,711.5
LU	Luxembourg	767.8	3,150.5	4,783.0	8,701.3
FR	France	627.2	1,459.8	1,982.9	4,069.9
AT	Austria	1,566.0	675.6	1,788.3	4,029.9
CH	Switzerland	1,074.0	1,606.1	859.2	3,539.3
GB	United Kingdom	1,190.8	1,121.2	-219.8	2,092.1
BE	Belgium	224.1	782.8	1,003.2	2,010.1
NO	Norway	983.8	-66.7	-93.7	823.4
JP	Japan	274.5	-4.2	101.1	371.3
CY	Cyprus	-412.9	717.5	42.2	346.8
CA	Canada	-63.8	43.1	-134.3	-155.0
SK	Slovakia	-79.8	87.4	-169.6	-162.0
MX	Mexico	0.0	0.0	-163.7	-163.7
FI	Finland	141.8	176.5	-486.2	-167.8
HK	Hong Kong	-2.7	23.1	-272.5	-252.1
These	Saudi Arabia	0.0	-0.6	-266.6	-267.2
DK	Denmark	-610.6	557.6	-260.4	-313.4
HU	Hungary	122.5	14.2	-503.1	-366.3
ES	Spain	-400.2	609.7	-956.9	-747.3
IT	Italy	-3,111.6	1,590.5	-128.4	-1,649.5
IE	Ireland	334.3	9.9	-2,603.1	-2,258.9
	including economic areas:				
B5	European Union (28 countries)	9,052.3	30,943.9	10,444.8	50,441.0
I8	Euro area (19 countries)	8,155.8	27,345.5	13,114.3	48,615.7
R2	European Free Trade Association (EFTA)	2,096.4	1,553.7	801.5	4,451.6
P0	Organisation for Economic Co-operation and Development (OECD)	8,917.9	33,178.0	12,406.0	54,501.9
R3	North American Free Trade Agreement (NAFTA)	-3,257.8	1,391.0	1,673.9	-192.8
R14	CIS	-28.7	-34.5	143.8	80.7
R4	ASEAN	7.2	65.7	-110.4	-37.5
R5	OPEC	-2.0	40.4	-295.9	-257.5
A8	Latin America	4.4	-0.4	-139.9	-135.9
R6	African, Caribbean and Pacific States (ACP)	1.9	-6.6	43.0	38.2
9A	International organisations, excluding the European Union institutions	0.0	0.0	0.0	0.0

Table 5 Inward direct investment transactions to Poland in 2016 broken down by economic activity (in PLN million)

DSD code	Description	Equity	Reinvestment of earnings	Debt instruments	Total
FDI_T	Total	8,427.3	34,224.0	12,263.2	54,914.4
	including:				
A	Agriculture, forestry and fishing	21.9	207.4	69.4	298.7
B	Mining and quarrying	452.2	-396.3	104.0	159.9
C	Industrial processing	-1,095.4	13,949.0	3,064.5	15,918.1
D35	Electricity, gas, steam and air conditioning supply	192.1	-1,127.3	-988.3	-1,923.4
E	Water supply; sewerage, waste management and remediation activities	46.9	86.3	-106.9	26.3
F	Construction	2,481.5	448.2	162.4	3,092.1
GTU	Total services	6,328.0	21,056.7	9,478.5	36,863.2
	including:				
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	2,061.9	5,874.9	-1,958.7	5,978.0
H	Transportation and storage	-107.5	925.8	-864.1	-45.8
I	Accommodation and food service activities	365.5	57.2	-406.8	15.9
J	Information and communication	493.4	4,061.0	5,242.9	9,797.3
K	Financial and insurance activities	-1,030.6	3,515.7	1,686.0	4,171.1
L	Real estate activities	2,150.2	2,539.2	1,150.4	5,839.8
M	Professional, scientific and technical activities	5,404.5	2,458.3	2,560.4	10,423.2
N	Administrative and support service activities	-3,009.2	1,589.4	1,773.5	353.8
Q	Human health and social work activities	-2.0	26.4	64.3	88.7

Table 6 Inward direct investment positions in Poland at the end of 2016, geographical breakdown (in PLN million)

DSD code	Description	Equity	Debt instruments	Total
W0	All countries	580,101.0	198,545.1	778,646.1
	including:			
NL	Netherlands	123,111.1	26,833.4	149,944.5
DE	Germany	105,705.6	23,651.1	129,356.7
LU	Luxembourg	72,986.8	30,758.0	103,744.8
FR	France	41,182.6	37,546.7	78,729.3
ES	Spain	30,608.8	14,783.8	45,392.6
GB	United Kingdom	32,894.1	6,698.4	39,592.5
IT	Italy	32,629.5	-175.1	32,454.4
AT	Austria	22,266.0	9,027.2	31,293.3
BE	Belgium	11,707.7	15,504.9	27,212.6
CY	Cyprus	20,064.3	5,922.9	25,987.2
CH	Switzerland	16,342.4	4,844.0	21,186.4
US	United States of America	12,178	7,436	19,614
SE	Sweden	14,968	623	15,591
DK	Denmark	11,460	1,947	13,407
FI	Finland	3,668	2,344	6,011
IE	Ireland	1,244	4,336	5,580
NO	Norway	4,056	1,220	5,276
PT	Portugal	4,414	103	4,517
JP	Japan	1,911	1,307	3,218
KR	South Korea	4,030	-1,103	2,927
CZ	Czech Republic	1,148	1,159	2,307
MT	Malta	1,784	301	2,085
	including economic areas:			
B5	European Union (28 countries)	535,717.6	182,083.5	717,801.1
I8	Euro area (19 countries)	473,296.7	171,589.3	644,886.1
R2	European Free Trade Association (EFTA)	20,577.3	6,181.4	26,758.7
P0	Organisation for Economic Co-operation and Development (OECD)	554,753.8	190,678.9	745,432.7
R3	North American Free Trade Agreement (NAFTA)	15,250.7	7,219.4	22,470.1
R14	CIS	550.8	-327.2	223.7
R4	ASEAN	262.3	-54.9	207.4
R5	OPEC	126.4	-69.8	56.6
A8	Latin America	2,008.7	-205.8	1,802.9
R6	African, Caribbean and Pacific States (ACP)	-20.0	79.7	59.7
9A	International organisations, excluding the European Union institutions	0.0	0.0	0.0

Table 7 Inward direct investment position in Poland at the end of 2016 broken down by economic activity (in PLN million)

DSD code	Description	Equity	Debt instruments	Total
FDI_T	Total	580,101.0	198,545.1	778,646.1
	including:			
A	Agriculture, forestry and fishing	2,438.3	1,332.6	3,770.9
B	Mining and quarrying	395.2	1,465.4	1,860.6
C	Industrial processing	221,966.4	23,450.2	245,416.6
D35	Electricity, gas, steam and air conditioning supply	9,445.1	12,250.3	21,695.4
E	Water supply; sewerage, waste management and remediation activities	1,139.9	551.8	1,691.7
F	Construction	14,415.9	22,231.4	36,647.3
GTU	Total services	330,300.2	137,263.7	467,563.9
	including:			
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	88,391.5	25,758.7	114,150.3
H	Transportation and storage	8,952.6	819.7	9,772.3
I	Accommodation and food service activities	3,587.7	347.9	3,935.6
J	Information and communication	29,048.7	19,535.8	48,584.5
K	Financial and insurance activities	134,295.8	13,559.5	147,855.3
L	Real estate activities	18,822.8	45,373.8	64,196.6
M	Professional, scientific and technical activities	39,929.5	24,666.3	64,595.8
N	Administrative and support service activities	5,399.6	4,209.9	9,609.6
Q	Human health and social work activities	1,222.6	1,892.6	3,115.2

Table 8 Income on inward direct investment in Poland in 2016, geographical breakdown (in PLN million)

DSD code	Description	Dividends	Reinvested earnings	Interest	Total
W0	All countries	36,079.2	34,224.0	8,670.4	78,973.6
	including:				
NL	Netherlands	8,043.1	9,005.5	1,363.1	18,411.8
DE	Germany	6,397.9	8,395.0	528.6	15,321.4
LU	Luxembourg	6,665.6	3,150.5	1,390.9	11,207.0
FR	France	2,459.9	1,459.8	1,513.8	5,433.5
IT	Italy	1,946.6	1,590.5	33.3	3,570.5
US	United States of America	1,859.1	1,347.9	356.5	3,563.6
ES	Spain	1,464.7	609.7	1,044.7	3,119.1
GB	United Kingdom	1,638.6	1,121.2	333.7	3,093.5
CH	Switzerland	847.3	1,606.1	151.3	2,604.6
SE	Sweden	843.6	1,479.1	260.5	2,583.2
CY	Cyprus	988.4	717.5	249.7	1,955.6
AT	Austria	814	676	320	1,809
BE	Belgium	276	783	452	1,511
DK	Denmark	497	558	60	1,115
FI	Finland	336	177	145	657
IE	Ireland	323	10	199	532
CZ	Czech Republic	10	427	72	509
PT	Portugal	42	404	7	453
KR	South Korea	13	225	2	240
MT	Malta	37	174	28	239
JP	Japan	138	-4	13	146
KY	Kayman Islands	0.0	-143.7	11.4	-132.3
	including economic areas:				
B5	European Union (28 countries)	32,967.5	30,943.9	8,022.7	71,934.1
I8	Euro area (19 countries)	29,888.9	27,345.5	7,291.4	64,525.7
R2	European Free Trade Association (EFTA)	955.1	1,553.7	202.7	2,711.5
P0	Organisation for Economic Co-operation and Development (OECD)	34,956.9	33,178.0	8,333.1	76,467.9
R3	North American Free Trade Agreement (NAFTA)	1,919.7	1,391.0	364.5	3,675.2
R14	CIS	56.5	-34.5	22.5	44.5
R4	ASEAN	2.8	65.7	-5.7	62.8
R5	OPEC	0.0	40.4	8.7	49.2
A8	Latin America	0.6	-0.4	2.0	2.2
R6	African, Caribbean and Pacific States (ACP)	0.0	-6.6	1.9	-4.8

Table 9 Income on inward direct investment in Poland in 2016 broken down by economic activity (in PLN million)

DSD code	Description	Dividends	Reinvested earnings	Interest	Total
FDI_T	Total	36,079.2	34,224.0	8,670.4	78,973.6
	including:				
A	Agriculture, forestry and fishing	137.0	207.4	43.5	387.9
B	Mining and quarrying	36.9	-396.3	65.9	-293.5
C	Industrial processing	14,989.9	13,949.0	1,534.9	30,473.9
D35	Electricity, gas, steam and air conditioning supply	274.9	-1,127.3	595.2	-257.1
E	Water supply; sewerage, waste management and remediation activities	72.0	86.3	22.1	180.4
F	Construction	1,181.7	448.2	1,208.9	2,838.7
GTU	Total services	19,386.8	21,056.7	5,189.3	45,632.7
	including:				
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	5,638.0	5,874.9	586.9	12,099.8
H	Transportation and storage	1,230.6	925.8	59.3	2,215.7
I	Accommodation and food service activities	274.6	57.2	20.1	351.9
J	Information and communication	775.9	4,061.0	492.2	5,329.1
K	Financial and insurance activities	6,094.3	3,515.7	341.1	9,951.0
L	Real estate activities	1,692.1	2,539.2	2,389.5	6,620.8
M	Professional, scientific and technical activities	2,251.8	2,458.3	976.4	5,686.5
N	Administrative and support service activities	1,329.4	1,589.4	170.8	3,089.6
Q	Human health and social work activities	11.1	26.4	85.3	122.8

Table 10 Polish outward direct investment transactions in 2000–2016 (in PLN million)

Year	Equity	Reinvestment of earnings	Debt instruments	Total
2000	488.0	-52.0	-362.0	74.0
2001	-196.0	37.0	-704.1	-863.1
2002	1,115.0	-297.0	-263.0	555.0
2003	404.0	-44.0	-1,528.5	-1,168.5
2004	822.5	83.0	-298.9	606.7
2005	4,069.8	182.0	105.6	4,357.3
2006	11,702.1	1,806.0	-1,537.8	11,970.3
2007	5,995.1	-229.0	-1,115.5	4,650.7
2008	2,858.9	576.0	1,042.9	4,477.8
2009	10,046.3	-4,304.0	-106.2	5,636.1
2010	2,504.8	921.0	15,109.8	18,535.6
2011	1,940.2	636.2	464.8	3,041.2
2012	5,573.8	4,215.0	-341.6	9,447.2
2013	4,029.9	-671.8	-4,784.2	-1,426.1
2014	17,480.8	1,609.6	-9,948.2	9,142.2
2015	16,469.2	21.8	2,339.8	18,830.7
2016	22,656.8	1,852.9	7,323.1	31,832.9

Table 11 Polish outward direct investment positions at the end of the year in 2000–2016 (in PLN million)

Year	Equity	Debt instruments	Total
2000	3,605.0	-2,495.4	1,109.6
2001	3,982.0	-2,768.4	1,213.6
2002	4,852.0	-3,195.4	1,656.6
2003	6,060.0	-4,629.6	1,430.4
2004	5,905.5	-3,817.6	2,088.0
2005	9,324.3	-3,530.8	5,793.5
2006	17,269.2	-4,457.1	12,812.1
2007	21,925.0	-4,199.9	17,725.1
2008	28,387.2	-4,085.8	24,301.4
2009	36,753.4	-3,964.0	32,789.5
2010	43,566.2	5,064.4	48,630.7
2011	56,053.9	8,629.3	64,683.2
2012	72,050.8	8,855.3	80,906.1
2013	84,492.1	-984.4	83,507.7
2014	101,476.9	-4,128.5	97,348.4
2015	108,624.3	-1,374.7	107,249.6
2016	123,110.5	-712.0	122,398.4

Table 12 Income on Polish outward direct investment in 2000–2016 (in PLN million)

Year	Dividends	Reinvested earnings	Interest	Total
2000	76.0	-52.0	-157.9	-133.9
2001	74.0	37.0	-228.3	-117.3
2002	70.0	-297.0	-187.2	-414.2
2003	57.0	-44.0	-165.7	-152.7
2004	131.0	83.0	-183.5	30.5
2005	139.0	180.0	-182.7	136.3
2006	188.0	1,804.0	-233.5	1,758.5
2007	404.0	-228.0	-290.7	-114.7
2008	1,426.0	576.0	-339.8	1,662.2
2009	1,056.0	-4,305.0	-313.8	-3,562.8
2010	1,074.0	921.0	-402.2	1,592.8
2011	-1,218.8	636.2	-191.2	-773.8
2012	474.3	4,215.0	-359.2	4,330.1
2013	1,912.9	-671.8	43.3	1,284.4
2014	3,329.5	1,609.6	97.5	5,036.6
2015	2,653.0	21.8	397.1	3,071.9
2016	2,624.8	1,852.9	396.4	4,874.2

Table 13 Polish outward direct investment transactions in 2016, geographical breakdown (in PLN million)

DSD code	Description	Equity	Reinvestment of earnings	Debt instruments	Total
W0	All countries	22,656.8	1,852.9	7,323.1	31,832.9
	including:				
LU	Luxembourg	18,844.0	408.1	-203.4	19,048.8
SE	Sweden	1.6	49.9	3,850.3	3,901.8
HU	Hungary	2,982.8	186.8	487.6	3,657.2
CA	Canada	1,831.2	-9.9	948.1	2,769.4
NL	Netherlands	809.4	-7.1	448.5	1,250.8
CH	Switzerland	1,044.0	16.0	175.8	1,235.9
DK	Denmark	1.1	1.8	1,119.3	1,122.2
DE	Germany	1,582.3	470.8	-1,002.8	1,050.3
LT	Lithuania	-63.6	451.2	570.8	958.5
CL	Chile	0.0	-0.2	867.2	867.1
MT	Malta	538.1	132.3	41.0	711.3
BG	Bulgaria	53	1	502	556
RS	Serbia	241	32	244	517
CZ	Czech Republic	1,055	392	-945	502
RO	Romania	124	-164	539	499
HR	Croatia	200	7	252	459
BS	Bahamas	0	0	335	335
SK	Slovakia	79	89	127	295
NO	Norway	140.2	-117.3	-492.5	-469.6
IE	Ireland	1.9	-3.9	-818.3	-820.4
GB	United Kingdom	-780.7	-771.9	613.3	-939.3
CY	Cyprus	-6,653.5	0.5	223.2	-6,429.8
	including economic areas:				
B5	European Union (28 countries)	19,259.4	1,431.9	5,620.4	26,311.7
I8	Euro area (19 countries)	15,621.5	1,730.4	-798.3	16,553.7
R2	European Free Trade Association (EFTA)	1,184.2	-97.7	-318.1	768.5
P0	Organisation for Economic Co-operation and Development (OECD)	28,118.2	959.6	4,933.0	34,010.8
R3	North American Free Trade Agreement (NAFTA)	1,875.8	-52.9	880.8	2,703.6
R14	CIS	30.0	421.6	-272.0	179.6
R4	ASEAN	-4.1	-11.6	-16.9	-32.6
R5	OPEC	-0.6	131.5	-36.4	94.5
A8	Latin America	1.4	-15.3	868.0	854.1

Table 14 Polish outward direct investment transactions in 2016 broken down by economic activity (in PLN million)

DSD code	Description	Equity	Reinvestment of earnings	Debt instruments	Total
FDI_T	Total	22,656.8	1,852.9	7,323.1	31,832.9
	including:				
A	Agriculture, forestry and fishing	-10.0	2.8	-44.8	-52.0
B	Mining and quarrying	1,999.9	-162.3	1,481.6	3,319.2
C	Industrial processing	1,985.5	1,584.0	-3,459.9	109.7
D35	Electricity, gas, steam and air conditioning supply	-64.9	19.5	62.7	17.4
E	Water supply; sewerage, waste management and remediation activities	1.1	-1.0	9.7	9.8
F	Construction	2,113.9	-26.5	26.6	2,114.0
GTU	Total services	16,228.6	429.3	8,958.9	25,616.8
	including:				
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	3,632.5	177.3	101.7	3,911.5
H	Transportation and storage	0.3	8.9	436.1	445.3
I	Accommodation and food service activities	165.0	129.8	329.8	624.7
J	Information and communication	65.6	46.1	6,704.0	6,815.7
K	Financial and insurance activities	1,206.0	310.1	-1,001.4	514.6
L	Real estate activities	957.7	120.9	1,894.3	2,972.9
M	Professional, scientific and technical activities	9,907.0	-578.2	38.9	9,367.8
N	Administrative and support service activities	585.1	382.8	509.4	1,477.4
Q	Human health and social work activities	0.2	-0.6	2.9	2.5

Table 15 Polish outward direct investment positions at the end of 2016, geographical breakdown (in PLN million)

DSD code	Description	Equity	Debt instruments	Total
W0	All countries	123,110.5	-712.0	122,398.4
	including:			
LU	Luxembourg	45,762.0	-1,539.8	44,222.2
CY	Cyprus	14,757.7	218.2	14,975.9
CH	Switzerland	8,022.6	1,071.6	9,094.2
CZ	Czech Republic	7,316.2	1,169.7	8,485.9
NL	Netherlands	7,960.0	182.0	8,142.0
HU	Hungary	4,950.4	751.5	5,701.9
CA	Canada	1,829.3	3,669.1	5,498.4
DE	Germany	4,640.3	826.0	5,466.3
LT	Lithuania	3,291.5	1,110.5	4,402.0
US	United States of America	2,504.9	1,185.9	3,690.7
GB	United Kingdom	2,758.2	925.3	3,683.5
RU	Russian Federation	1,981	1,044	3,026
MT	Malta	3,019	1	3,021
FR	France	2,852	65	2,917
RO	Romania	1,002	1,467	2,469
SK	Slovakia	1,210	506	1,716
NO	Norway	-126	1,609	1,484
CL	Chile	14	1,349	1,363
TR	Turkey	-44	1,243	1,199
DK	Denmark	86	1,103	1,189
IL	Israel	1,132	-22	1,110
SE	Sweden	793.4	-20,440.8	-19,647.4
	including economic areas:			
B5	European Union (28 countries)	103,337.3	-14,004.0	89,333.2
I8	Euro area (19 countries)	86,481.2	-26.2	86,455.0
R2	European Free Trade Association (EFTA)	7,902.5	2,669.6	10,572.1
P0	Organisation for Economic Co-operation and Development (OECD)	94,637.5	-7,654.2	86,983.3
R3	North American Free Trade Agreement (NAFTA)	4,339.4	4,914.0	9,253.5
R14	CIS	3,240.6	800.0	4,040.6
R4	ASEAN	285.3	551.9	837.2
R5	OPEC	755.2	-42.3	712.9
A8	Latin America	77.1	1,511.6	1,588.6
R6	African, Caribbean and Pacific States (ACP)	694.4	681.9	1,376.3
9A	International organisations, excluding the European Union institutions	0.0	0.0	0.0

Table 16 Polish outward direct investment positions at the end of 2016 broken down by economic activity (in PLN million)

DSD code	Description	Equity	Debt instruments	Total
FDI_T	Total	123,110.5	-712.0	122,398.4
	including:			
A	Agriculture, forestry and fishing	10.9	-1.1	9.8
B	Mining and quarrying	2,611.9	6,262.7	8,874.6
C	Industrial processing	16,374.8	667.3	17,042.1
D35	Electricity, gas, steam and air conditioning supply	185.5	-5,716.8	-5,531.3
E	Water supply; sewerage, waste management and remediation activities	18.0	3.2	21.2
F	Construction	2,645.4	-596.0	2,049.4
GTU	Total services	100,556.0	-2,054.3	98,501.7
	including:			
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	9,693.4	1,307.1	11,000.5
H	Transportation and storage	2,221.9	403.0	2,624.9
I	Accommodation and food service activities	1,211.3	-122.0	1,089.3
J	Information and communication	2,404.8	-2,626.2	-221.4
K	Financial and insurance activities	46,899.9	-5,669.8	41,230.1
L	Real estate activities	740.7	1,551.6	2,292.3
M	Professional, scientific and technical activities	19,669.1	2,221.5	21,890.5
N	Administrative and support service activities	16,381.0	670.2	17,051.2
Q	Human health and social work activities	33.4	-9.4	23.9

Table 17 Polish outward direct investment income in 2016, geographical breakdown (in PLN million)

DSD code	Description	Dividends	Reinvested earnings	Interest	Total
W0	All countries	2,624.8	1,852.9	396.4	4,874.2
	including:				
LT	Lithuania	691.6	451.2	2.1	1,145.0
LU	Luxembourg	259.0	408.1	262.0	929.1
DE	Germany	296.8	470.8	9.3	776.9
CZ	Czech Republic	148.0	392.0	63.4	603.3
CY	Cyprus	483.9	0.5	31.8	516.1
UA	Ukraine	9.9	297.7	11.1	318.7
HU	Hungary	45.2	186.8	-8.3	223.7
MT	Malta	82.6	132.3	0.1	215.0
SK	Slovakia	119.3	89.0	3.5	211.8
CA	Canada	0.0	-9.9	184.8	174.9
RU	Russian Federation	31.5	89.7	15.4	136.6
AE	United Arab Emirates	0	133	-3	130
NL	Netherlands	67	-7	67	127
CH	Switzerland	84	16	21	121
TR	Turkey	1	90	12	102
CL	Chile	0	0	88	87
NO	Norway	0.0	-117.3	65.4	-51.9
LK	Sri Lanka	0.0	-52.1	0.0	-52.1
PK	Pakistan	0.0	-91.7	0.0	-91.7
RO	Romania	22.4	-164.3	19.3	-122.6
SE	Sweden	23.2	49.9	-529.2	-456.1
GB	United Kingdom	25.3	-771.9	8.4	-738.3
	including economic areas:				
B5	European Union (28 countries)	2,403.8	1,431.9	-124.2	3,711.5
I8	Euro area (19 countries)	2,133.1	1,730.4	301.4	4,165.0
R2	European Free Trade Association (EFTA)	84.1	-97.7	86.3	72.8
P0	Organisation for Economic Co-operation and Development (OECD)	1,266.8	959.6	200.7	2,427.1
R3	North American Free Trade Agreement (NAFTA)	52.9	-52.9	210.5	210.5
R14	CIS	65.5	421.6	45.6	532.7
R4	ASEAN	3	-11.6	48.6	39.9
R5	OPEC	0.0	131.5	-1.6	129.9
A8	Latin America	0.0	-15.3	94.8	79.4

Table 18 Polish outward direct investment income in 2016 broken down by economic activity (in PLN million)

DSD code	Description	Dividends	Reinvested earnings	Interest	Total
FDI_T	Total	2,624.8	1,852.9	396.4	4,874.2
	including:				
A	Agriculture, forestry and fishing	0.0	2.8	0.0	2.8
B	Mining and quarrying	9.7	-162.3	558.9	406.3
C	Industrial processing	828.8	1,584.0	-34.0	2,378.8
D35	Electricity, gas, steam and air conditioning supply	-0.8	19.5	-191.2	-172.5
E	Water supply; sewerage, waste management and remediation activities	0.2	-1.0	0.2	-0.6
F	Construction	36.6	-26.5	-40.1	-30.0
GTU	Total services	1,719.7	429.3	103.1	2,252.1
	including:				
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	373.3	177.3	58.0	608.6
H	Transportation and storage	3.7	8.9	4.8	17.4
I	Accommodation and food service activities	28.0	129.8	-20.7	137.1
J	Information and communication	94.8	46.1	-3.9	137.0
K	Financial and insurance activities	350.8	310.1	-89.8	571.1
L	Real estate activities	17.0	120.9	80.0	217.8
M	Professional, scientific and technical activities	538.4	-578.2	53.9	14.1
N	Administrative and support service activities	129.4	382.8	0.7	512.9
Q	Human health and social work activities	0.6	-0.6	-0.2	-0.2

Table 19 Inward direct investment positions in Poland at the end of 2016, by the country of the ultimate controlling parent's seat and the country of immediate direct investor's seat (in PLN million)

Country	According to the seat of ultimate controlling parent	% total	According to investor's country	% total
Germany	151,026.9	19.4	129,356.7	16.6
United States	79,033.1	10.2	19,613.9	2.5
France	80,456.3	10.3	78,729.3	10.1
United Kingdom	44,861.6	5.8	39,592.5	5.1
Italy	33,226.8	4.3	32,454.4	4.2
Poland	34,907.8	4.5	0.0	–
Spain	35,675.9	4.6	45,392.6	5.8
Netherlands	61,133.2	7.9	149,944.5	19.3
Austria	23,011.4	3.0	31,293.3	4.0
Switzerland	24,679.0	3.2	21,186.4	2.7
Japan	13,199.0	1.7	3,218.4	0.4
Sweden	14,099.3	1.8	15,590.7	2.0
Denmark	12,067.1	1.5	13,406.8	1.7
Portugal	9,432.1	1.2	4,516.6	0.6
Belgium	6,966.2	0.9	27,212.6	3.5
Canada	7,587.0	1.0	1,015.8	0.1
Luxembourg	7,721.6	1.0	103,744.8	13.3
Finland	7,754.3	1.0	6,011.3	0.8
Cyprus	0.0	–	25,987.2	3.3
Unknown country	90,429.2	11.6	0.0	–
Other countries	41,280.4	5.3	30,378.3	3.9
Total	778,548.0	100.0	778,646.1	100.0

Table 20 Inward direct investment positions in Poland at the end of 2016 by voivodeship (in PLN million)

Region	Total	C – Industrial processing	K – Financial intermediation expectations	G – Trade	Other sections	Germany	Netherlands	Luxembourg	Other countries
Dolnośląskie	43,974.4	28,279.5	5,532.4	5,322.1	4,840.4	14,967.9	5,829.1	4,167.0	19,010.4
Kujawsko-Pomorskie	11,489.7	9,155.8	27.6	1,779.6	526.7	2,531.6	3,624.8	498.3	4,835.1
Lubelskie	6,113.2	4,796.9	0.0	460.3	856.1	749.6	202.1	1,952.1	3,209.4
Lubuskie	7,917.6	7,142.9	0.0	68.0	706.7	1,808.3	50.3	313.6	5,745.4
Łódzkie	20,839.4	14,704.9	1,012.1	3,088.7	2,033.7	3,975.6	5,282.4	3,053.1	8,528.3
Małopolskie	35,751.7	17,430.9	1,158.5	8,250.7	8,911.5	3,565.7	4,880.0	10,279.6	17,026.4
Mazowieckie	422,161.0	35,450.7	111,613.1	65,231.7	209,865.5	59,095.9	75,945.1	40,520.9	246,599.1
Opolskie	6,159.5	5,331.4	36.5	389.0	402.7	1,827.4	1,677.4	178.2	2,476.5
Podkarpackie	15,961.1	13,999.0	0.0	363.4	1,598.6	4,818.9	3,620.8	1,196.8	6,324.6
Podlaskie	2,268.0	1,932.6	1.4	103.8	230.2	116.0	202.7	172.5	1,776.7
Pomorskie	26,294.0	7,541.1	3,519.2	2,461.6	12,772.0	4,396.1	4,638.6	7,372.0	9,887.2
Śląskie	82,551.6	48,667.0	20,426.5	4,189.1	9,268.9	9,228.6	25,136.8	14,009.1	34,177.1
Świętokrzyskie	7,343.8	4,701.8	0.0	167.5	2,474.5	871.7	953.8	467.0	5,051.3
Warmińsko-Mazurskie	4,382.3	3,846.9	0.0	119.2	416.2	392.7	162.9	89.6	3,737.1
Wielkopolskie	69,870.1	36,554.1	2,019.0	20,271.3	11,025.6	19,450.9	15,275.5	14,076.6	21,067.1
Zachodniopomorskie	15,568.9	8,538.5	172.3	3,221.7	3,636.4	3,075.5	2,857.2	809.2	8,826.9
Total	778,646.1	248,074.2	145,518.6	115,487.6	269,565.7	130,872.2	150,339.5	99,155.7	398,278.6

Table 21 Inward direct investment transactions in innovative industries and other industries in Poland in 2011–2016 (in PLN million)

Year	Innovative industries	Other industries
2011	10,823.8	36,360.0
2012	9,628.9	30,828.8
2013	16,946.6	-5,487.9
2014	17,272.9	27,738.4
2015	16,411.0	41,152.4
2016	24,382.5	30,531.9

Table 22 Inward direct investment positions in innovative industries and other industries in Poland in 2011–2016 (in PLN million)

Year	Innovative industries	Other industries
2011	172,646.9	389,257.1
2012	177,596.8	439,078.9
2013	192,574.3	497,676.2
2014	207,394.5	534,322.0
2015	235,054.7	490,496.8
2016	235,462.1	543,184.0

Table 23 Inward direct investment transactions in innovative industries in Poland in 2011–2016 (in PLN million)

Innovative industries	2011	2012	2013	2014	2015	2016
C innovative	9,001.7	5,734.6	2,550.1	5,612.5	8,570.6	11,753.2
J innovative	2,272.1	580.0	8,531.9	6,215.5	2,797.0	8,979.6
Other innovative industries	-450.0	3,314.3	5,864.6	5,444.9	5,043.4	3,649.7

C – innovative mean divisions 15, 21, 23–29 and 31–33 of Section C in PKD 2007,
J – innovative mean divisions 58 and 61–63 of Section J according PKD 2007.

Table 24 Income on inward direct investment in innovative industries and other industries in Poland in 2011–2016 (in PLN million)

Year	Innovative industries	Other industries
2011	22,056.6	32,759.6
2012	21,407.7	31,071.1
2013	26,656.6	32,186.7
2014	26,347.4	37,780.2
2015	29,507.8	37,999.1
2016	30,063.5	48,910.1

Table 25 Profitability ratios due to inward direct investment broken down into innovative industries in Poland in 2012–2016 (in %)

Year	Innovative industries	Other industries	Total
2011	11.4	6.1	7.6
2012	14.0	5.6	7.9
2013	12.7	6.0	7.9
2014	13.5	5.8	8.0
2015	12.9	8.3	9.7
2016	11.4	6.1	7.6

Table 26 Foreign direct investment transactions with resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	41,050.0	41,050.0	0.0
2001	22,840.9	22,840.9	0.0
2002	16,443.0	16,443.0	0.0
2003	15,487.5	15,487.5	0.0
2004	45,501.1	44,404.7	1,096.5
2005	31,444.6	26,541.3	4,903.2
2006	57,040.2	45,236.3	11,803.9
2007	59,905.5	54,905.7	4,999.9
2008	33,397.9	29,592.8	3,805.1
2009	37,093.8	31,324.1	5,769.7
2010	38,582.8	38,584.6	-1.8
2011	54,097.1	47,183.8	6,913.3
2012	23,185.2	40,457.7	-17,272.5
2013	8,641.2	11,458.7	-2,817.5
2014	43,279.8	45,011.3	-1,731.4
2015	54,460.3	57,563.4	-3,103.2
2016	55,389.4	54,914.4	475.0

Table 27 Inward direct investment positions with resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	138,700.6	138,700.6	0.0
2001	161,024.6	161,024.6	0.0
2002	181,557.6	181,557.6	0.0
2003	209,895.4	209,895.4	0.0
2004	252,595.4	251,499.0	1,096.5
2005	287,598.2	281,598.5	5,999.7
2006	354,184.9	337,012.1	17,172.8
2007	419,056.1	400,241.1	18,815.0
2008	465,514.2	439,582.4	25,931.8
2009	504,283.0	477,137.5	27,145.6
2010	579,212.4	556,071.7	23,140.8
2011	596,887.4	561,904.0	34,983.4
2012	630,252.3	616,675.7	13,576.6
2013	698,827.4	690,250.5	8,576.9
2014	748,641.7	741,716.5	6,925.2
2015	729,271.0	725,551.5	3,719.5
2016	782,784.1	778,646.1	4,138.0

Table 28 Inward direct investment income with resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	2,837.1	2,837.1	0.0
2001	2,651.7	2,651.7	0.0
2002	2,943.8	2,943.8	0.0
2003	7,934.3	7,934.3	0.0
2004	34,596.5	34,596.5	0.0
2005	29,834.3	29,834.3	0.0
2006	40,495.5	40,495.5	0.0
2007	51,522.3	51,522.3	0.0
2008	30,060.2	30,060.2	0.0
2009	43,280.2	43,280.2	0.0
2010	50,964.8	50,964.8	0.0
2011	54,106.1	51,773.2	2,332.9
2012	52,802.9	52,030.6	772.3
2013	58,235.6	58,234.7	0.9
2014	64,708.9	64,127.6	581.3
2015	68,079.8	67,506.9	573.0
2016	79,576.9	78,973.6	603.3

Table 29 Outward direct investment transactions of resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	74.0	74.0	0.0
2001	-863.1	-863.1	0.0
2002	555.0	555.0	0.0
2003	-1,168.5	-1,168.5	0.0
2004	1,703.1	606.7	1,096.5
2005	9,260.6	4,357.3	4,903.2
2006	23,774.2	11,970.3	11,803.9
2007	9,650.5	4,650.7	4,999.9
2008	8,282.9	4,477.8	3,805.1
2009	11,405.8	5,636.1	5,769.7
2010	18,533.8	18,535.6	-1.8
2011	10,876.8	3,041.2	7,835.6
2012	-8,649.7	9,447.2	-18,096.9
2013	-4,254.5	-1,426.1	-2,828.4
2014	9,709.0	9,142.2	566.8
2015	12,842.8	18,830.7	-5,987.9
2016	32,234.0	31,832.9	401.1

Table 30 Outward direct investment positions of resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	1,109.6	1,109.6	0.0
2001	1,213.6	1,213.6	0.0
2002	1,656.6	1,656.6	0.0
2003	1,430.4	1,430.4	0.0
2004	3,184.4	2,088.0	1,096.5
2005	11,793.2	5,793.5	5,999.7
2006	29,984.9	12,812.1	17,172.8
2007	36,540.1	17,725.1	18,815.0
2008	50,233.2	24,301.4	25,931.8
2009	59,935.0	32,789.5	27,145.6
2010	71,771.4	48,630.7	23,140.8
2011	99,699.7	64,683.2	35,016.5
2012	95,773.8	80,906.1	14,867.7
2013	92,340.3	83,507.7	8,832.6
2014	105,090.6	97,348.4	7,742.2
2015	108,978.5	107,249.6	1,728.9
2016	124,199.6	122,398.4	1,801.1

Table 31 Outward direct investment income of resident special purpose entities in 2000–2016 (in PLN million)

Year	Total	Excluding special purpose entities	Special purpose entities
2000	-133.9	-133.9	0.0
2001	-117.3	-117.3	0.0
2002	-414.2	-414.2	0.0
2003	-152.7	-152.7	0.0
2004	30.5	30.5	0.0
2005	136.3	136.3	0.0
2006	1,758.5	1,758.5	0.0
2007	-114.7	-114.7	0.0
2008	1,662.2	1,662.2	0.0
2009	-3,562.8	-3,562.8	0.0
2010	1,592.8	1,592.8	0.0
2011	1,514.4	-773.8	2,288.3
2012	5,416.3	4,330.1	1,086.1
2013	1,280.2	1,284.4	-4.2
2014	5,511.2	5,036.6	474.5
2015	3,565.9	3,071.9	494.0
2016	5,393.5	4,874.2	519.3

Table 32 Inward direct investment transactions in Poland, including mergers and acquisitions in 2011–2016 (in PLN million)

Year	Total	New investment	Mergers and acquisitions
2011	47,183.8	46,161.4	1,022.4
2012	40,457.7	47,241.2	-6,783.5
2013	11,458.7	30,538.5	-19,079.8
2014	46,742.3	44,824.5	1,917.8
2015	57,563.4	63,308.4	-5,745.0
2016	54,914.4	59,333.4	-4,419.0

Table 33 Polish outward direct investment transactions, including mergers and acquisitions in 2011–2016 (in PLN million)

Year	Total	New investment	Mergers and acquisitions
2011	3,041.2	1,972.7	1,068.6
2012	9,447.2	5,870.6	3,576.6
2013	-1,426.1	-3,153.3	1,727.2
2014	9,142.2	-1,029.0	10,171.2
2015	18,830.7	8,558.7	10,272.0
2016	31,832.9	10,937.9	20,895.0

Table 34 Profitability ratio broken down by economic activity of foreign direct investment entities in Poland in 2012–2016

DSD code	Description	2012	2013	2014	2015	2016
FDI_T	Total	9.4	9.4	9.3	9.1	10.9
	including:					
C	Industrial processing	10.9	10.8	12.7	13.0	13.0
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	10.0	10.3	11.1	10.3	10.9
K	Financial and insurance activities	8.3	5.6	6.5	5.8	7.6
L	Real estate activities	4.7	7.4	6.1	6.4	11.0

Table 35 Foreign direct investment positions in Poland at the end of the year according to the assets/liabilities principle and to the directional principle in 2011–2016 (in PLN million)

Year	Presentation according to the assets/liabilities principle			Presentation according to the directional principle														
	Direct investment																	
				Polish direct investment abroad							Foreign direct investment in Poland							
					equity			debt instruments				equity			debt instruments			
	Assets	Liabilities	Net	Total	assets	liabilities	total net	assets	liabilities	total net	Total	liabilities	assets	total net	liabilities	assets	total net
1	2 = 6 + 9 + 14 + 17	3 =13 + 16 + 7 + 10	4 = 2 - 3 / 4 = 5 - 12	5 = 8 + 11	6	7	8 = 6 - 7	9	10	11 = 9 - 10	12 = 15 + 18	13	14	15 = 13 - 14	16	17	18 = 16 - 17
2011	220,450.7	717,947.6	-497,496.9	92,747.3	95,694.3	534.9	95,159.4	38,922.6	41,334.7	-2,412.1	590,244.2	467,777.3	6,657.5	461,119.8	208,300.7	79,176.3	129,124.4
2012	212,012.0	753,324.1	-541,312.1	97,510.5	88,979.2	304.6	88,674.6	39,717.9	30,882.0	8,835.9	638,822.6	509,267.4	6,060.6	503,206.8	212,870.1	77,254.3	135,615.8
2013	207,053.6	813,511.8	-606,458.2	92,341.3	93,769.0	444.3	93,324.7	38,536.3	39,519.7	-983.4	698,799.5	555,087.6	6,261.6	548,826.0	218,460.2	68,486.7	149,973.5
2014	222,816.6	867,184.7	-644,368.1	97,348.4	96,485.4	-4,991.5	101,476.9	40,991.9	45,120.4	-4,128.5	741,716.5	572,549.5	3,432.9	569,116.6	254,506.3	81,906.4	172,599.9
2015	241,200.6	859,502.4	-618,301.8	107,249.6	109,004.4	380.1	108,624.3	43,018.1	44,392.8	-1,374.7	725,551.5	546,719.0	3,422.5	543,296.5	268,010.6	85,755.6	182,255.0
2016	272,302.9	928,550.5	-656,247.6	122,398.4	123,373.3	262.8	123,110.5	45,401.1	46,113.1	-712.0	778,646.1	583,879.7	3,778.6	580,101.0	298,294.9	99,749.8	198,545.1

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