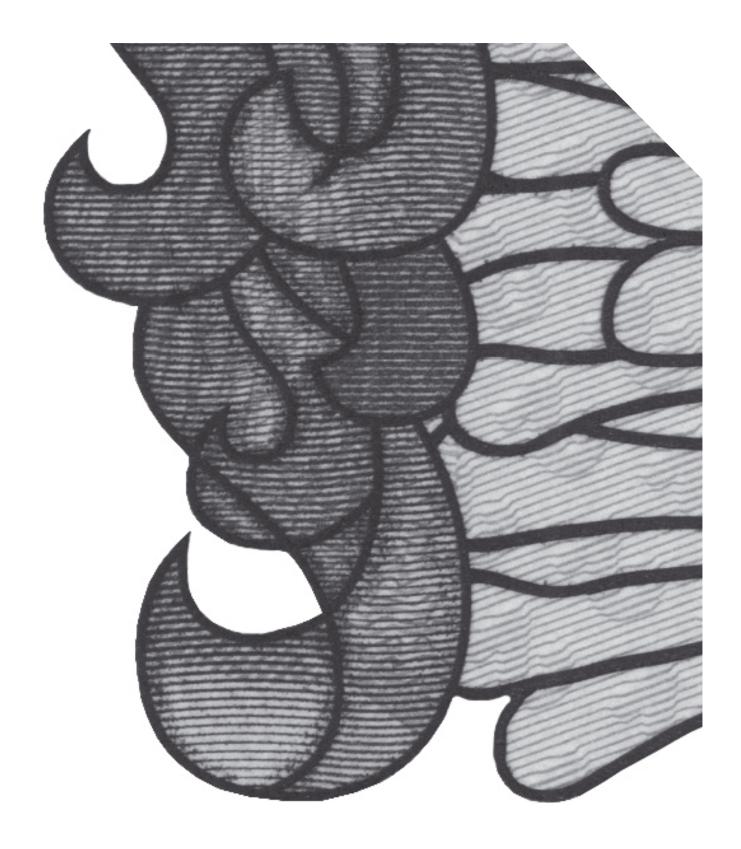


Direct Investment Report 2018





Direct Investment Report 2018



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Introduction

The Direct Investment Report presents statistical analyses regarding direct investment in Brazil in 2017. The report features flows and positions of direct investment assets and liabilities, as well as Equity —main focus of this publication — and Debt Instruments. The report also includes income flows related to direct investment.

Direct investment is the most important category of foreign investment in Brazil. At the end of 2017, as in previous years, direct investment liabilities accounted for approximately half of the country's total external liabilities. Direct investment liabilities also register net inflows throughout the entire monthly series available and have been systematically less volatile than portfolio and other investment categories (such as loans and trade credits, among others). Direct investment assets position accounted for 44% of the total foreign assets at the end of 2017. Besides being private sector's investment category with the highest volume, it is only surpassed by the official reserves assets.

According to international methodological standards, a direct investment is considered to occur when an investor from one economy holds at least 10% of voting power in any given enterprise of another economy¹. Under such condition, a direct investor would be expected to effectively participate on decisions and strategies of the company, keeping a more stable and long-term interest in the business. Direct investment is divided in two components: Equity and Debt Instruments. The Equity component, as liabilities, refers to nonresident ownership of shares² of resident enterprises in Brazil. As assets, it refers to investment of residents in Brazil in companies residing abroad. Debt Instruments, as liabilities, refer to credit granted to resident enterprises by nonresident enterprises belonging to the same economic group³. As assets, they refer to credits granted by resident companies in Brazil to nonresident companies belonging to the same economic group.

The major data source for the compilation of direct investment liabilities statistics presented in this report is the survey Census of Foreign Capitals in Brazil (Census). Launched in 2010, a Quinquennial Census is performed every base year ending

¹ See paragraphs 6.8 to 6.14 of the 6^{th} edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6), and paragraphs 11 and 12 of the 4^{th} edition of the OECD's Benchmark Definition of Foreign Direct Investment (BMD4).

² According to Paragraph 4.113 of the BPM6 "...residence of each institutional unit is the economic territory with which it has the strongest connection, expressed as its center of predominant economic interest." The concept of residence should not be confused with the concept of nationality. An economic group of the same nationality, depending on its headquarters location, may be composed of companies residing in different economies.

³ Strictly speaking, enterprises should be part of the same direct investment chain, as in paragraph 6.14 of BPM6.

in zero or five — it is a population survey encompassing all resident enterprises in Brazil which part of the equity is owned by non-resident investors. In the other years, an Annual Census (a sample survey, despite the name) collects data from a group of respondents comprising only large corporations (net worth equal to or higher than US\$100 million). Estimates for enterprises not included in Annual Censuses are based on complementary data and the estimation process is described in the methodological annex. The Censuses also collects data on the recipient enterprises' earnings, which are then used to compile transactions in the primary income account of the balance of payments.

While the Censuses collect data of different dimensions and details regarding direct investment Equity, the Electronic Declaratory Registry – Financial Operations Registry Module (RDE-ROF) is the source for the compilation of Debt Instruments liabilities positions.

The data source for the compilation of the direct investment assets positions is the Brazilian Capital Abroad survey (BCA). In its annual edition, the BCA is filled in by residents holding assets abroad equal to or above US\$100 thousand, while in its quarterly edition it is filled by residents holding assets abroad equal to or above US\$100 million. The BCA also collects data on earnings from direct investment assets enterprises, which are used to compile primary income statistics of the balance of payments.

Statistics on direct investment transactions are obtained from an integrated system of exchange settlements. Regulation of the foreign exchange market in Brazil guarantees a high degree of coverage and precision for balance of payments transactions by capturing information such as the economic nature of transactions, names and features of counterparties (e.g. non-financial corporations, banks, international organizations, etc.) and their relationship (e.g. headquarter, branches, without bond, etc.).

This report has the following structure: Introduction; Chapter 1: overview of direct investment in 2017; Chapter 2: breakdown of changes in positions according to balance of payments transactions, price and exchange rate variations and other adjustments, from 2015 to 2017; Chapter 3: implicit rates of return on direct investment positions, evolution of direct investment income flows and review of the earnings series from 2010 to 2017; Chapter 4: distribution of investment position by direct investment host and investing regions, including a broader set of statistics for Chinese direct investment in Brazil, and distribution of voting power in resident direct investment enterprises; Chapter 5: preliminary results for the identification of ultimate host countries for direct investment assets; Chapter 6: joint distribution of direct investment assets and liabilities positions by country and sector of economic activity; Chapter 7: characteristics of Brazilian direct investment companies abroad; Methodological Annex: descriptions of data sources, means of collection and methodology for statistics compilation.

Overview of Direct Investment

1.1 Overview of Direct Investment Liabilities

In 2017, direct investment liabilities position has grown 9% and net inflows amounted to US\$68.5 billion (3.3% of GDP).

Overall direct investment liabilities position reached US\$768 billion in 2017, US\$540 billion in Equity and US\$228 billion in Debt Instruments. The overall position has increased by US\$64 billion (9.2%), compared to 2016. Figure 1 shows that the 2017 overall direct investment liabilities position has reached the highest value of the series.

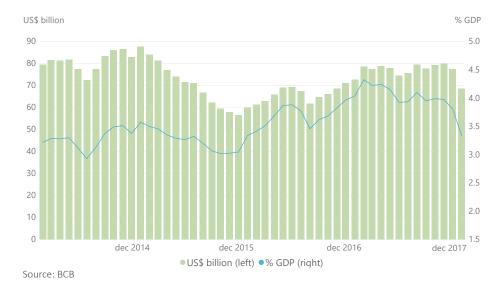
US\$ billion EquityDebt instruments

Figure 1 – Overall direct investment liabilities position

Source: BCB

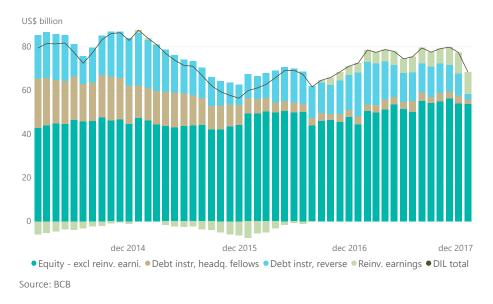
Direct investment liabilities net inflows have remained above 3% of GDP since 2014 (Figure 2). In 2017, net inflows reached US\$68.5 billion, or 3.3% of GDP. Compared to 2016, Debt Instruments inflows have diminished by US\$19.2 billion, offset by an increase of US\$15.2 in Equity net inflows —which include reinvested earnings.

Figure 2 - Direct investment liabilities - twelve month accumulated net inflows



In 2017, Equity flows (including reinvested earnings) accounted for 93.4% of total direct investment liabilities flows, reaching US\$64 billion, while Debt Instruments flows totaled US\$5 billion. The share of Debt in direct investment liabilities flows has declined over the last three years, reaching 6.6% in 2017. Reinvested earnings generated a negative contribution to Equity from 2014 to mid-2016, and a positive contribution in the subsequent period. Figure 3 shows the evolution of the components of direct investment liabilities flows.

Figure 3 – Composition of twelve month accumulated direct investment liabilities net flows



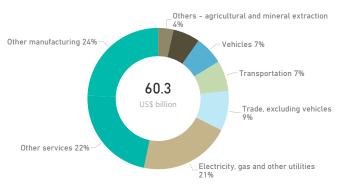
The increased Equity inflows, from US\$53.3 billion in 2016 to US\$60.3 billion in 2017, excluding reinvested earnings, have been concentrated in transactions above US\$1.0 billion and, to a lesser extent, in transactions in the range of US\$100 million to US\$500 million (Figure 4). Transactions above US\$1.0 billion accounted for 7.4% of the gross Equity inflows in 2016 and 24% in 2017.

Figure 4 – Equity direct investment liabilities, excluding reinvested earnings – gross inflows according to transaction value ranges



The sector breakdown of Equity inflows, excluding reinvested earnings, shows concentration of investments in the sectors of electricity, gas and other utilities, trade (excluding vehicles) and transportation. Gross inflows to these sectors reached US\$12.6 billion, US\$5.5 billion and US\$4.2 billion, respectively, in 2017.

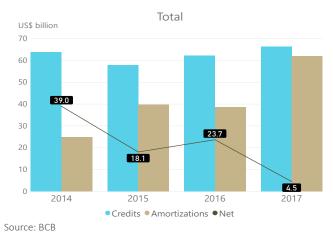
Figure 5 – Equity direct investment liabilities, excluding reinvested earnings – gross inflows per sector of economic activity – 2017



Source: BCB

Debt net inflows decreased 80.9%, from US\$23.7 billion, in 2016, to US\$4.5 billion in 2017. Analysis by location of corporate headquarters allows the identification of most of the contraction. Debt net inflows from parent companies abroad to subsidiaries in Brazil or between fellow enterprises was positive (US\$1.9 billion), but lower than the net inflow in 2016 (US\$3.7 billion). A more significant decline was observed in Debt reverse investment transactions — when resident parent companies borrow from subsidiaries abroad—, from US\$20 billion, in 2016, to US\$2.6 billion in 2017. The net reduction reflected amortizations paid to subsidiaries abroad, which have grown from US\$4.4 billion (2016), to US\$20.8 billion (2017).

Figure 6 - Debt Instruments direct investment liabilities flows



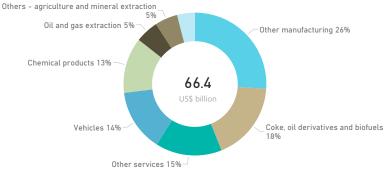
Headquarters abroad to subsidiaries in Brazil and between Subsidiaries abroad to headquarters in Brazil (reverse investment) fellow enterprises US\$ billion US\$ billion 45 45 40 40 35 35 30 30 25 25 20.0 20 20 14.7 15 15 10 10 7.1 11.0 3.7 5 5 2.6 2014 2015 2017 2014 2015 2016 2017 2016

Source: BCB

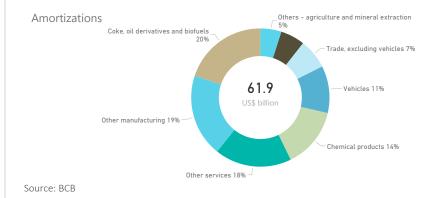
Most of the outstanding Debt reverse investment comes from transactions related to foreign trade of goods. Exporting sectors related to oil and extraction of metallic minerals are the most representative in this kind of operation.

Figure 7 – Debt Instruments direct investment liabilities flows – distribution per sector of economic activity – 2017





⁴ In 2017, 52% of intercompany external Debt position was due in goods. Resident parent companies receive loans from non-resident subsidiaries, assuming commitment to amortize the debt through exports of goods. Therefore, payments of these liabilities, do not directly affect the domestic foreign exchange market.

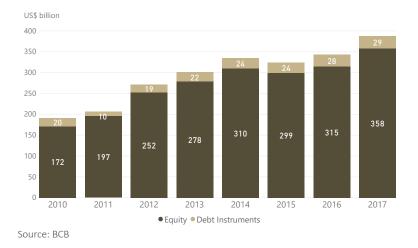


1.2 Overview of Direct Investment Assets

In 2017, direct investment assets position grew 13% and net outflows increased 32%, reaching US\$19.4 billion.

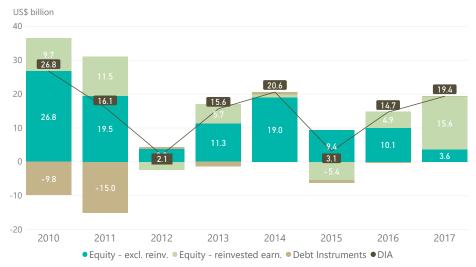
The overall direct investment assets position reached US\$387 billion in 2017, US\$358 billion in Equity and US\$29 billion in Debt Instruments. The overall position increased by US\$44 billion (12.8%) compared to 2016. The 2017 direct investment assets position is the highest value of the series (Figure 8).

Figure 8 – Overall direct investment assets position



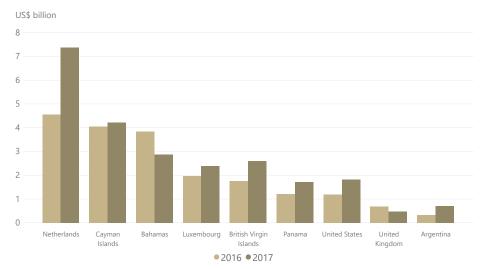
Direct investment assets net inflows totaled US\$19.4 billion in 2017, an increase of 31.7% when compared to 2016 (Figure 9). Equity direct investment assets, including reinvested earnings, accounted for most of the flows, with relatively lower values for Debt Instruments, a regular pattern in the entire series. Reinvested earnings as Equity amounted to US\$15.6 billion in 2017. Therefore, the decision of the parent companies in Brazil to maintain significant part of foreign-generated earnings represented the largest contribution to the flows in the period.

Figure 9 – Direct investment assets net outflows composition



According to the immediate host country criterion, direct investment assets outflows tend to be directed to financial intermediary and low taxation countries (Figure 10). On this sense, the increase in direct investment assets outflows to the Netherlands in 2017 is noteworthy.

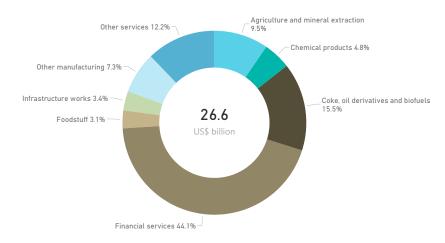
Figure 10 – Equity direct investment assets gross outflows, including reinvested earnings – distribution by immediate host country – selected countries



Source: BCB

Equity direct investment assets gross outflows reached US\$27 billion in 2017 and financial services companies were the target of almost half of those flows (Figure 11).

Figure 11 – Direct investment assets gross outflows, including reinvested earnings – distribution per sector of economic activity – 2017



2

Breakdown of Changes in Positions

Changes in direct investment positions — as well as other investments— from one period to another arise from (i) transactions (flows), (ii) exchange rate and price movements, and (iii) other adjustments.

The transactions correspond to the net flows of direct investment recorded in the balance of payments. For direct investment liabilities flows, transactions occur between resident recipient companies and their direct investors or other enterprises from the same non-resident investor group. For direct investment assets flows, transactions occur between resident households and corporations and their directed invested enterprises abroad or other enterprises of the same economic group abroad.

Changes in exchange rates correspond to changes in positions resulting from changes in the exchange rate between the Brazilian real (BRL) and other currencies. Position varies given that: (i) in direct investment liabilities, direct investment companies in Brazil have their balance sheets expressed in BRL, meaning that fluctuations in the nominal exchange rate will affect their USD-denominated value; (ii) in direct investment assets, directed invested enterprises abroad usually present balances expressed in local currencies, also subject to fluctuations in nominal exchange rates, unless the balances are already USD-denominated.

Changes in market prices (preferred criterion for valuation of positions) are due to changes in share prices of companies listed on stock exchanges, or of companies that present market value different from their equity value, due to the valuation method used (e.g. discounted cash flow, recent trading value of equity share, or expert valuation).

The "other adjustments" item is calculated as residue, taking into account reclassifications (e.g. from portfolio investments to direct investments, when the 10% of voting power threshold is exceeded by subsequent investments of the same investor) and discrepancies between statistical sources.

Equity direct investment liabilities position increased by US\$118.5 billion, or 32.7%, from 2015 to 2016 (Figure 12). Exchange rates movements contributed to this increase in US\$75.2 billion (thanks to BRL's 17% nominal appreciation), followed

by transactions (US\$48.7 billion), and prices (US\$15 billion). "Other adjustments" had a negative impact of US\$20.4 billion. Between 2016 and 2017, Equity direct investment liabilities position increased by US\$58.9 billion, or 12.2%. Transactions and prices contributed to the increase, US\$63.9 billion and US\$21.5 billion, respectively. Conversely, exchange rates had a negative impact of US\$9.3 billion while "other adjustments" were also negative (US\$17.2 billion).

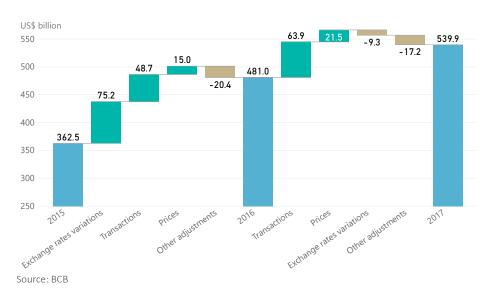


Figure 12 - Breakdown of changes in Equity direct investment liabilities position

Figure 13 presents the breakdown of changes in Equity direct investment assets position from 2015 to 2017. From 2015 to 2016, Equity direct investment assets position increased by 5.3% (US\$15.9 billion). Transactions and prices contributed to the increase by US\$14.9 billion and US\$1.4 billion, respectively. Exchange rates movements generated a reduction of US\$0.4 billion in the 2016 position. From 2016 to 2017, Equity direct investment assets position increased by 13.6% (US\$42.9 billion). Transactions brought the most positive impact (US\$19.2 billion) followed by "other adjustments" (US\$17.5 billion), and exchange rates variations (US\$7 billion). Prices contributed to a reduction of US\$0.8 billion.

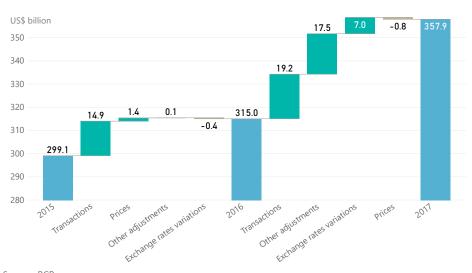


Figure 13 – Breakdown of changes in Equity direct investment assets position

3

Direct Investment Income

Direct investment liabilities position returns declined to 2.1% in 2015, but increased to 5.3% in 2016 and 2017.

3.1 Methodological Issues of Direct Investment Income

The direct investment income registered at the balance of payments refers to earnings which direct investors are entitled to, and to interest paid and received in Debt Instruments. Earnings are composed of remittance of dividends to direct investors and reinvestment in the direct investment enterprises⁵.

In balance of payments, earnings from direct investment enterprises are compiled based on their operating activities, that is, excluding extraordinary items and capital gains and losses that affect their accounting result⁶. In order to calculate the direct investment income — Equity component —, such earnings are weighted according to the capital share held by the direct investor.

Enterprises resident in Brazil receiving direct investment generate Equity direct investment liabilities income. Part of this income can be sent abroad, as dividends or reinvested in the own resident enterprise in Brazil. Debt Instruments direct investment liabilities income comprehends interest paid to non-resident creditors with which the debtor enterprise in Brazil has a direct investment relationship, that is, direct investors, direct investees and fellow enterprises.

Foreign enterprises receiving Brazilian direct investment generate Equity direct investment assets income. Such income may also have two destinations: either be sent to Brazil as dividends or reinvested in the foreign enterprise. Regarding Debt Instruments, direct investment assets income refers to interest paid to resident creditors by overseas debtors, whether direct investors, direct investees or fellow enterprises.

⁵ Paragraphs 11.24 and 11.34 of BPM6.

⁶ See paragraph 11.44 of BPM6 and paragraph 208 of BMD4, which define the Current Operating Profit Concept (COPC), used in the direct investment statistics compiled in Brazil.

3.2 Return on Direct Investment Positions

On this Report, the implicit rate of return on direct investment positions is calculated as the ratio between the earnings generated during a given year and the Equity direct investment position at the end of the year.

The average rate of return of the Equity direct investment liabilities position between 2010 and 2017 stood at 5.6%. The highest rate of return (9.1%) was observed in 2010 and the lowest (2.1%), in 2015 – see Figure 14.

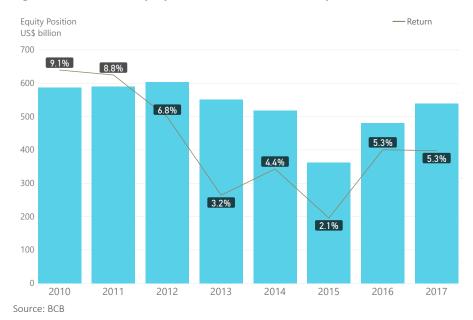


Figure 14 - Return on Equity direct investment liabilities position

Equity direct investment assets position presented an average return of 3% between 2010 and 2017, lower than the liabilities position. The highest Equity direct investment assets rate of return was observed in 2011 (6.8%) and the lowest in 2015 (-0.8%). The negative return was due to the aggregate loss of direct investment assets companies in that year. Similarly to the Equity direct investment liabilities positions rates of return, there was a recovery in assets position return, after the minimum value observed in 2015 (Figure 15).

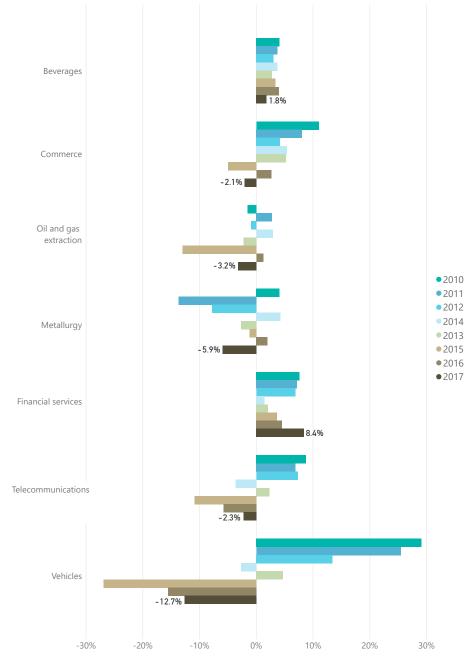
Equity Position --- Return US\$ billion 400 350 300 6.8% 250 6.2% 4.8% 200 150 2.5% 2.5% 100 0.7% 0.9% 50 -0.8% 2011 2012 2013 2014 2015 2016 2017

Figure 15 – Return on Equity direct investment assets position

3.3 Return on Direct Investment Positions by Host Sector

Returns on Equity direct investment liabilities positions were distinct amongst the different sectors of economic activities, some of them showing to be more sensitive to the economic activity contraction in Brazil during 2015 and 2016 (Figure 16).

Figure 16 — Return on Equity direct investment liabilities position — selected sectors



Equity direct investment assets also present differences of magnitude and volatility in rates of return among sectors, as shown in Figure 17.

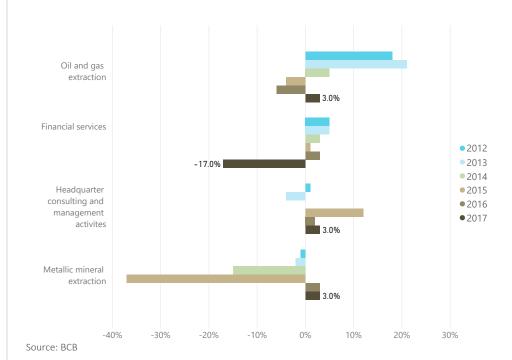


Figure 17 – Return on Equity direct investment assets position – selected sectors

3.4 Direct Investment Income Flows Behavior

Figure 18 shows the distribution of direct investment liabilities income (reinvested earnings, remitted dividends and Debt interest) in the period 2010 to 2017. Direct investment liabilities income reached the highest levels in 2010 and 2011, US\$65.3 billion and US\$62.4 billion, respectively. The lowest value occurred in 2015, US\$13.5 billion. From then on, the income returned to relatively higher levels, reaching US\$37.1 billion in 2017.

Remitted dividends averaged 70% of the total direct investment liabilities income from 2010 to 2017. Annual amounts ranged from US\$16.4 billion, in 2015, to US\$33.7 billion in 2010. Reinvested earnings show a more volatile behavior, including negative values⁷ between 2013 and 2015. The highest value, US\$31.2 billion, occurred in 2011, year in which direct investment liabilities' total income was also a record.

Debt interest payments grew in value and proportion to the total direct investment liabilities income during the same period, from US\$2.8 billion (4.3% of direct investment liabilities income), in 2010, to US\$8 billion (21.7% of direct investment liabilities income) in 2017.

⁷ Total earnings are the sum of remitted dividends and reinvested earnings over a given period. Therefore, negative reinvested earnings imply both remittance of dividends in an amount higher than the total earnings in a given period (such earnings come from prior periods) or aggregate losses of direct investment enterprises.

Figure 18 - Direct investment liabilities income composition



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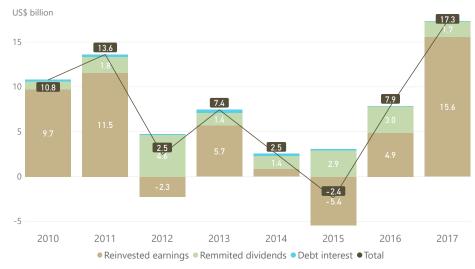
Figure 19 shows the distribution of direct investment assets income from 2010 to 2017.

The maximum value of direct investment assets income in the series occurred in 2017 (US\$17.3 billion), about 90% being reinvested in companies abroad. The other two largest values occurred in 2011 (US\$13.6 billion) and in 2010 (US\$10.8 billion), both years in which reinvestment percentages surpassed 85%. There was a negative value of direct investment assets income (-US\$2.4 billion) in 2015, period when foreign host enterprises recorded aggregate losses.

Resident investors usually prefer to reinvest the income earned in foreign companies instead of internalize such income in Brazil as dividends. Systematically, the volume of reinvested earnings as a proportion of total profits is higher for direct investment assets as compared to direct investment liabilities.

Debt interest represents a small share of direct investment assets income, reflecting the higher volume of Equity in the composition of the total direct investment assets position. The highest Debt interest value occurred in 2013, US\$370 million, 4% of the year's direct investment assets income.

Figure 19 - Direct investment assets income composition



3.5 Direct Investment Assets and Liabilities Income Statistics Review

Direct investment earnings consist of dividends and reinvested earnings. Credits of direct investment earnings in the balance of payments correspond to earnings from the shares of resident investors in the capital of non-resident companies, as direct investment. Debits of direct investment earnings in the balance of payments correspond to earnings generated in resident direct investment enterprises, belonging to nonresident direct investors.

In the balance of payments, dividends reflect the enterprises' decision to allocate a portion of the profit earned in current or previous period to direct investors. Reinvested earnings represent the portion of non-resident direct investors retained, and therefore not distributed, earnings.

If an enterprise earns X in a reference period and distributes a Y value of dividends in that same period, the difference (X minus Y) is posted as reinvestment in the balance of payments. It is not unusual to companies not to distribute earnings for some periods. In this case, Y would be equal to zero and all X earned is accounted for as reinvestment, leading to capital increases. It is also possible that Y is greater than X, thus generating negative reinvested earnings. This occurs when the distributed earnings are greater than the enterprise's earnings in the reference period, either when both are positive and Y exceeds X, or when X is less than zero, in case of operating loss in the period.⁸

The previous data source for the compilation of distributed dividends, the Brazilian International Transactions Reporting System (ITRS), was replaced by the statistical surveys Census and BCA, for the 2010–2017 period. The surveys were already being used as data source for the total earnings item, since 2010. Thus, the BCB reviewed the balance of payments direct investment income account for 2010 to 2017. From 2018 onwards, the income statistics compilation will use the surveys as definitive data sources for direct investments earnings. For periods in which survey data won't be yet available, estimates based on indexes of profitability and sectorial activity, for total earnings, and ITRS data, for dividends, will be used.

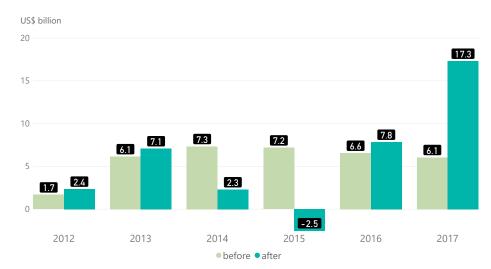
The review also improves the estimation of direct investments liabilities earnings for non-respondents of the Annual Censuses, which are mandatory only to large companies. Figures 20 and 21 compare direct investments liabilities and assets earnings statistics before and after the review.

⁸ Paragraph 11.46 of BPM6.

Figure 20 – Direct investment liabilities total earnings



Figure 21 – Direct investment assets total earnings



4

Investing and Host Regions

4.1 Direct Investment Positions in 2017

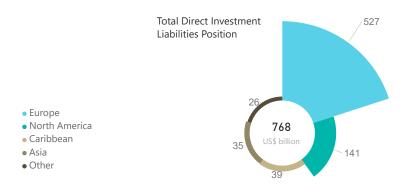
Europe is the main investing region; the Caribbean is the main hosting region.

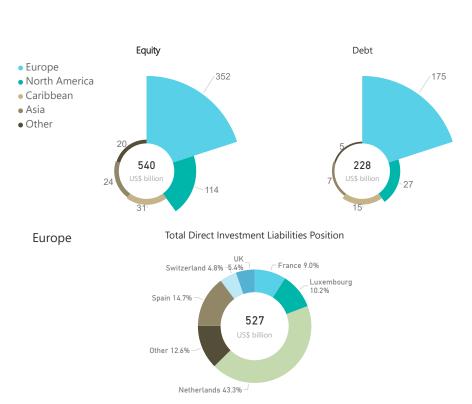
According to the criterion of immediate investor country, Europe is the region with the highest direct investment position in 2017, US\$ 527 billion of the total US\$768 billion (68.8%), Figure 22. Such value reflects the volume of direct investment from the Netherlands, which represents 24.8% of the foreign direct investment position in Equity and 41.3% in Debt, according to the immediate investing country criterion.

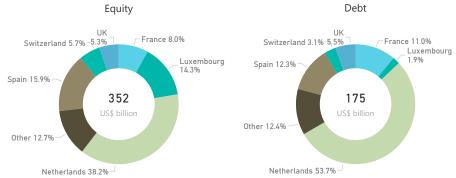
North America is the region with the second largest volume of Equity direct investment liabilities in 2017, 21.1% (US\$114 billion), with US\$95 billion from the United States.

Caribbean countries, Asia and South America together represent 12.1% of the 2017 direct investment liabilities position, 12.9% in Equity and 10.2% in Debt.

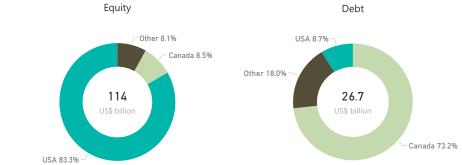
Figure 22 – Direct investment liabilities position by investing regions – immediate investing country – 2017









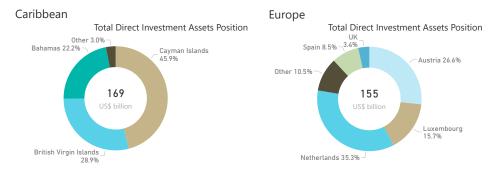


The main direct investment assets positions, using the immediate investing country criterion, are held in the Caribbean and European regions. These regions represent 43.3% and 39.8% of the total (US\$387 billion), respectively. In the Caribbean region, the Cayman Islands (20.1%) and the British Virgin Islands (12.7%) are the most important destinations. In Europe, the most significant countries are the Netherlands (14.1%), and Austria (10.7%).

The main direct investment assets positions in Equity are also from the Caribbean (46.2%) and Europe (39.8%), while the main positions in Debt Instruments are from Europe (43.5%), North America (15.8%), and the Caribbean (10.4%). It should be noted the reduced weight of Debt in the direct investment assets composition, comparatively to its weight in direct investment liabilities.

Figure 23 – Direct investment assets by investing regions – immediate investing country criterion – 2017





4.2 Immediate vs. Ultimate Investing Countries

By the ultimate investing country criterion, the Netherlands fall from the 1^{st} to the 5^{th} position in the largest investor country ranking; the USA climbs up to the 1^{st} position.

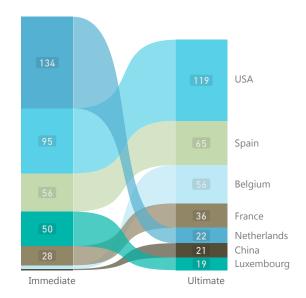
The assessment of Equity direct investment liabilities positions indicates that some countries hold significantly higher positions when compiled by the immediate investing country criterion compared to the ultimate investing country criterion. This is the case of the Netherlands and Luxembourg. These countries shelter intermediate enterprises that channel (pass-through) direct investment from ultimate investing to host countries.

Other countries hold higher Equity direct investment liabilities positions according to the ultimate investing country criterion, such as the USA, Spain, Belgium, France, the United Kingdom and China. These countries host enterprises that channel their investments by means of intermediate countries.

When comparing direct investment liabilities positions by immediate and ultimate investing country, the Netherlands present the most significant discrepancy: as an immediate investing country, the country's position is US\$134 billion, falling to US\$22 billion under the ultimate investing country concept (Figure 24). Belgium shows the larger discrepancy in the opposite way: a position of US\$5 billion by the immediate investing country criterion rises to US\$56 billion under the ultimate investing country criterion.

⁹ The identification of the country of origin uses two concepts: country of the immediate investor and country of the ultimate investor. The immediate investing country is considered the country of domicile of the non-resident that invested directly in the Brazilian subsidiary. The ultimate investing country is the country of effective control and economic interest.

Figure 24 – Equity direct investment liabilities positions – immediate vs. ultimate investing country for selected countries – 2017 – US\$ billion

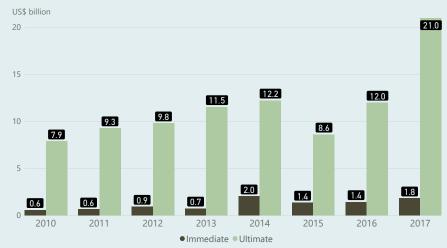


Chinese Direct Investment Liabilities

Chinese direct investment liabilities represented the 25^{th} largest position in 2017 by the immediate investing country criterion. However, by the ultimate investing country criterion, Chinese direct investment liabilities jump to the 9^{th} position. Such difference shows that significant amounts of China's direct investment in Brazil is channeled through intermediary countries.

Figure 25 – Chinese direct investment liabilities positions

Immediate vs. ultimate investing country



Source: BCB

The channeling through intermediary countries can also be observed from the balance of payments transactions. In accordance with international statistical standards, bilateral figures for these flows are disseminated using the immediate investing country criterion. The data source for direct investment liabilities flows are ITRS individual transactions that identify, for each operation, the pairs composed of non-resident investors and resident direct investment enterprises, as well as the amount. In addition, ITRS individual transactions inform about the country of the bank account originating the funds, which allows for inferring the country of the immediate investor.¹⁰

Direct investment flows from China were also estimated, in a complementary way, according to the ultimate investing country criterion for the years 2014 to 2017 and the first half of 2018 by crossing Census micro-data and foreign exchange settlements^{11.} These flows reached US\$20.7 billion, more than half, US\$11.2 billion, in 2017 alone. Figure 26 shows that the amount of transactions was substantially lower between 2014 and the first half of 2018, US\$2.7 billion, by the criterion of the immediate investing country.

¹⁰ The country of origin of the disbursement is not necessarily the same as the country of residence of the immediate investor, since the immediate investor can send his investment to Brazil from bank accounts in third countries.

¹¹ The individual identification of each Census' respondent who reported China as the ultimate investing country were first grouped. To them were added other individual identifications of controlled enterprises in Brazil. Refinements were made based on information from the RDE-IED and on research of the enterprises' names in the specialized press. For operations above US\$20 million, an individual assessment was also performed.

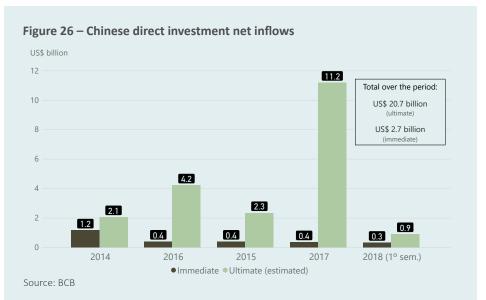
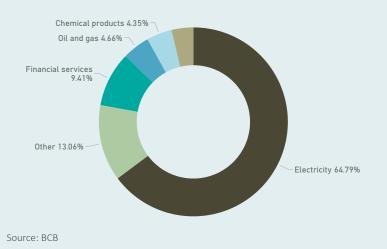


Figure 27 describes the sectoral profile of gross inflows of Chinese direct investment liabilities between 2014 and the first half of 2018. Most investment was directed to the electricity and gas sectors, especially in 2017.

Figure 27 – Chinese direct investment gross inflows – 2014 to first half of 2018Distribution by sector of economic activity – ultimate investing country (estimate)



Statistics and estimates of direct investment liabilities transactions represent actual inflows recorded under foreign exchange settlements. Statistics on direct investment liabilities flows therefore differ from data related to investment announcements, which generally comprise investments that will be disbursed over several years.

Statistics on direct investment liabilities flows also tend to differ from the overall amount of external funds channeled to direct investment enterprises. Operations are only considered direct investment liabilities if channeled for equity and credit operations, from the parent enterprise or other enterprises from the same group abroad. Other funds that eventually contribute to the financing of the enterprise's economic activity, such as loans from banks headquartered abroad, do not constitute direct investment liabilities, although they are intended to finance the expansion of direct investment enterprises.

Direct Investment Liabilities Position – Distribution of voting power by value and sector

The direct investment relationship requires that at least one non-resident investor holds at least 10% of voting power in the direct investment enterprise. In practice, the share of non-residents in the capital of direct investment liabilities enterprises is usually much higher than 10%.

In direct investment liabilities position of 2017, almost two-thirds of the Equity position of US\$540 billion refer to enterprises whose non-resident investors hold 99% or more of the voting power (Figure 28). Of these two-thirds, the vast majority, 78.2%, have a single non-resident investor.

Figure 28 – Equity direct investment liabilities – distribution of value by voting power of non-resident investors

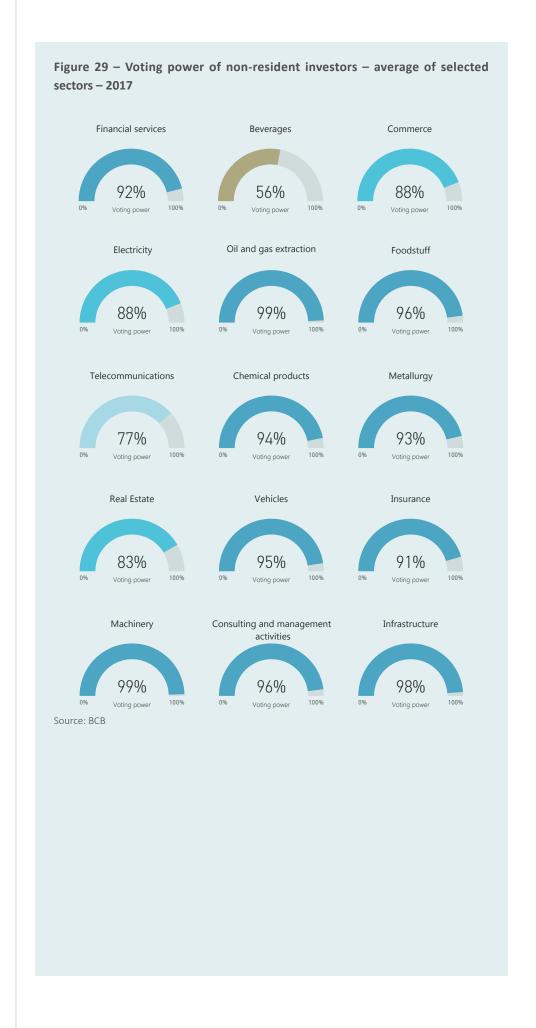


Source: BCB

In 2017, US\$34 billion (6.3%) of the Equity direct investment liabilities position corresponded to enterprises with a voting power of non-residents between 90% and 98.99%, US\$133 billion (24.7%) between 50.01% and 89.99%, and US\$29 billion (5.4%) between 10% and 50%.

The voting-power concentration of non-resident investors varies according to the sector of economic activity. Figure 29 shows that out of the fifteen sectors with the highest direct investment liabilities position in 2017, only four held a voting power¹² by non-resident investors lower than 90%: beverages, telecommunications, real estate, and electricity.

¹² Weighted by the enterprise's value.



5

Ultimate Host Countries of Brazilian Direct Investment Abroad

The Cayman Islands, the Netherlands, the British Virgin Islands, Austria, the Bahamas and Luxembourg are the immediate destination of 3/4 of the direct investment assets; the US shows the fastest growing position by the ultimate host criterion.

Direct investment assets — as well as direct investment liabilities — are also examined by the criteria of immediate host country and ultimate host country.

The ultimate host country of the direct investment assets is that of the enterprise at the end of the chain of control. Figure 30 shows a simplified outline of an ownership chain of a direct investment assets enterprise. After the resident investor in Brazil, country A is the country of immediate investment. The immediate host enterprise directly controls, with a participation of 100%, the holding enterprise in country B. At the end of the chain of control, the enterprise with final operational activities is located in country C, the ultimate host of investment.

Resident investor

• Brazil

Immediate host enterprise

• Country A

Holding

• Country B

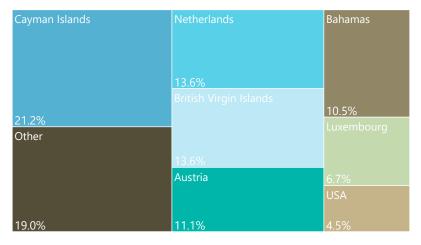
Enterprise with final operational activities

• Country C

Figure 30 - Example of a chain of investment abroad

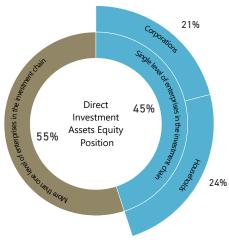
Equity direct investment assets compiled under the criterion of the immediate host country are concentrated in tax havens or low-tax countries (Figure 31). Three-quarters of these investments are located in the Cayman Islands, the Netherlands, the British Virgin Islands, Austria, the Bahamas and Luxembourg.

Figure 31 – Main equity direct investment assets destinations – immediate host country criterion



In 2017, the BCA began to include questions related to foreign investment chains in order to establish the final destination of the direct investment assets. In 55% of the direct investment assets position, there are more than one level of enterprises in the investment chain, e.g., the immediate host enterprise overseas controls other enterprises (Figure 32). The remaining 45% correspond to investment in enterprises abroad that do not control other enterprises. This share of the direct investment assets, in relation to the type of investor in Brazil, is placed as follows: 53% of investors are households and 47% are corporate resident.

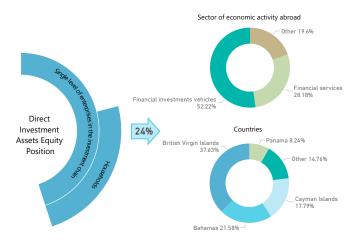
Figure 32 – Framework of Brazilian direct investment abroad – levels in the investment chain of host enterprises



Source: BCB

In 24% of direct investment assets for which overseas host enterprises do not control other enterprises and resident investors are households, 52% were established as a vehicle for investments in financial assets; and 28% for operating in financial services activities (Figure 33). These enterprises are mainly located in tax havens: the British Virgin Islands (38%), the Bahamas (22%), the Cayman Islands (18%), and Panama (8%).

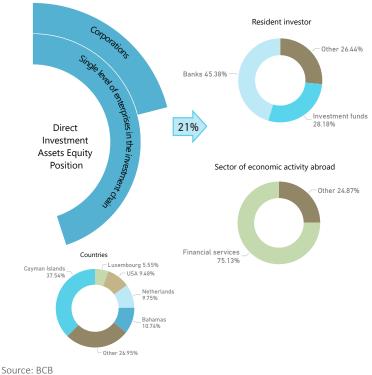
Figure 33 - Framework of Brazilian direct investment abroad - single investment level household investors



These enterprises have characteristics of intermediaries for accessing international financial markets or portfolio diversification for resident investors, such as: single level of investment, e.g. not controlling other enterprises; operating mostly in financial services activities, and located in tax havens.

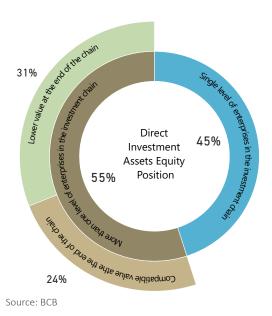
For the 21% of the direct investment assets position for which overseas host enterprises do not control other enterprises, and resident investors are corporations, nearly three-quarters have banks and investment funds as investors. The activities carried out abroad by host enterprises are financial services, and most of them are located in the Cayman Islands, the Bahamas, the Netherlands, the United States and Luxembourg (Figure 34).

Figure 34 - Framework of Brazilian direct investment abroad - single investment level corporate investors



In 55% of the direct investment assets position, immediate host enterprises control others enterprises abroad.

Figure 35 – Framework of Brazilian direct investment abroad – more than one investment level



For 31% of direct investment assets equity position, the value of enterprises at the end of the chain is lower when compared to the immediate invested position. In those cases, in order to match the total position under immediate and ultimate host criteria, the first level excess is allocated in the immediate host country measure.

Figure 36 illustrates the strategy to allocate the direct investment assets position in ultimate host countries. The example shows an investment of US\$100 in an enterprise in country A and economic activity 1. This enterprise controls enterprise B with a 70% equity in country B, economic activity 2, and a value of US\$50. Enterprise A indirectly controls enterprise D in country D, value of US\$20, with 50% in equity and economic activity 3.

In the example, the direct investment assets position by immediate investment has a value of US\$100 in country A, economic activity 1. However, considering the ultimate host country criterion, the direct investment assets position would be, initially, US\$35 (US\$50 x 70%) in country B and economic activity 2, and US\$10 (US\$20 x 50%) in country D and economic activity 3. In this approach, the remainder of the immediate position (US\$100- US\$35- US\$10) is allocated in country A and economic activity 1, now under the ultimate destination criterion. Enterprise C is not considered because it is not at the end of the control chain.

Figure 36 – Distribution strategy of direct investment assets position into ultimate host countries

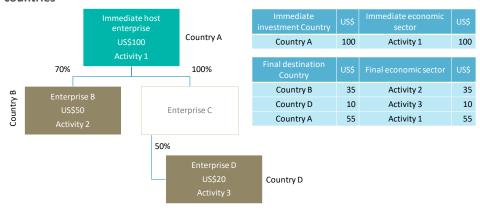
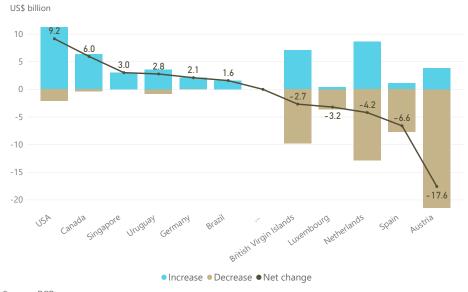


Figure 37 – Direct investment assets position – change in equity – immediate vs. ultimate host country



From the total of US\$357.9 billion of direct investment assets position, immediate country criterion, in the form of Equity in 2017, the compilation by ultimate host country leads to a reallocation in country positions of US\$84.2 billion. Figure 37 shows that the United States presents the largest increase (US\$9 billion) when the ultimate host country concept is used. On the other side, Austria is the country with the sharpest decline (US\$17.6 billion).



Direct Investments Liabilities and Assets: Country Vs. Sector Matrices

The distribution of direct investment liabilities positions by sector of economic activity and immediate investing country is shown in Table 1 and Table 2, for Equity and for Debt Instruments, respectively, for the most significant sectors and countries.

Table 1 – Equity direct investment liabilities position – sector of economic activity and immediate investing country

.US\$ million	Agriculture and mining	Crop, livestock and related services	Oil and gas extraction	Metallic mineral extraction	Manufacturing	Foodstuff	Pulp, paper and paper products	Coke, oil derivatives and biofuels	Chemical products	Metallurgy	Other transportation equipments Services	Commerce, except vehicles	Telecommunications
Total		5,355	24,571	6,816		22,328	7,713	2,914	15,718	15,547	4,258	30,891	22,155
Europe		3,028	19,229	4,461		15,868	3,471	1,971	12,376	13,148	3,750	22,188	16,469
Netherlands		1,127	4,043	1,581		4,975	933	985	4,344	4,609	1,588	11,823	185
Spain		576	4,997	119		435	86	6	1,061	3,536	83	461	12,395
Luxembourg		308	5,181	1,933		2,457	1,979	(c)	2,148	2,291	-	960	3,695
France		17	266	206		567	(c)	195	945	1,995	46	4,561	1_
United Kingdom		99	574	34		1,809	(c)	497	134	61	(c)	1,582	28
Switzerland		516	-	-		4,518	(c)	-	1,555	16	(c)	862	83
Italy		61	-	-		24	(c)	(c)	169	277	1,058	243	19
Germany		118	(c)	(c)		124	38	-	1,405	156	26	736	(c)
Belgium		41	-	-		813	-	(c)	135	-	14	186	(c)
Austria		10	-	-		9	(c)	-	57	(c)	(c)	135	
Portugal		16	-	(c)		64	(c)	-	44	2	(c)	66	20
North America		1,716	3,552	342		4,839	501	132	1,910	961	107	4,830	5,030
United States of America	a	1,420	3,552	121		4,202	25	130	1,829	102	99	2,865	527
South America		140	(c)	(c)		245	2,574	(c)	365	122	17	1,322	207
Chile		0	-	-		33	2,565	-	96	(c)	(c)	1,023	-
Central America		67	(c)	-		15	-	(c)	27	(c)	(c)	169	(c)
Oceania		24	193	811		174	-	-	(c)	-	-	26	-
Africa		-	(c)	(c)		-	-	-	-	-	<u> </u>	163	-
Caribbean		138	1,470	581		226	70	(c)	58	97	(c)	326	36
British Virgin Islands		82	(c)	569		69	70	-	17	67	(c)	161	3
Cayman Islands		50	297	-		154	-	-	(c)	-	-	121	(c)
Asia		118	119	570		781	1,097	-	939	1,196	378	1,861	414
Japan		51	24	460		753	1,097	-	848	877	350	1,450	(c)

(c): confidential, less than three observations.

Table 2 – Debt Instruments direct investment liabilities – sector of economic activity and immediate investing country

US\$ million	Agriculture and mining	Oil and gas extraction	Metallic mineral extraction	Foodstuff	Pulp, paper and paper products	Coke, oil derivatives and biofuels	Chemical products	Metallurgy	Other transportation equipments	Services Commerce, except vehicles	Telecommunications	Enterprise aimed to acquire financial assets	Office services and other services rendered to corporations
Total		15,221	21,027	16,40	5 6,842	51,856	9,780	13,911	5,540	9,871	14,734	11,885	6,013
Europe		7,803	18,865	14,04	2 5,431	51,656	9,121	10,165	4,483	4,749	14,508	6,758	5,490
Netherlands		(c)	(c)	4,19		50,486	4,313	(c)	4,187	875	12,899	2,734	853
Spain		-	0	68		372	73	347	121	72	(c)	266	(c)
Luxembourg		201	(c)	3,56		(c)	(c)	5,767	-	618	1,560	1,602	2,410
France		2,400	(c)	8		(c)	287	-	10	191	(c)	604	158
United Kingdom		(c)	3,092	77		(c)	672	1,165	-	766	14	892	36
Switzerland		(c)	(c)	36		(c)	(c)	(c)	(c)	1,643	4	6	(c)
Italy		(c)	-	1		-	40	5	4	52	(c)	72	(c)
Germany		-	-	3		(c)	33	54	23	107	-	28	26
Belgium		(c)	-	38		5	1,954	(c)	-	112	(c)	2	1,191
Austria		(c)	-	3,84		-	6	700	7	147	-	(c)	422
Portugal		-	-		0 -	(c)	0	(c)	-	35	0	98	(c)
North America		5,545	1,571	74		(c)	378	743	111	3,520	206	1,574	(c)
United States of Americ	a	(c)	1,059	69		(c)	377	405	111	1,611	206	1,519	165
South America		(c)	-	26		(c)	20	7	(c)	113	17	518	7
Chile		(c)	-	2		-	11	-	-	22	12	427	0
Central America		(c)	(c)		4 -	-	2	-	(c)	11	(c)	(c)	5
Oceania		-	577		2 -	-	6	-	-	3	-	24	14
Africa		-	-	-	(c)	-	-	-	-	4	-	(c)	4
Caribbean		1,505	7	1,30		(c)	223	2,907	(c)	1,233	(c)	2,166	34
British Virgin Islands		277	2		4 -	1	9	1,819	2	59	1	112	18_
Cayman Islands		(c)	-	1,05		24	(c)	1,088	645	454	-	(c)	
Asia		313	1	4		(c)	29	(c)	282	235	2	766	26
Japan		258		3	9 -	-	25	86	49	108	1	-	3_
(c) confidencial less than t	hraa ohe	an/ations											

(c): confidencial, less than three observations.

Source: BCB

Table 3 (Equity) and Table 4 (Debt Instruments) present the distribution of direct investment assets by sector of economic activity and immediate host country. The tables show the most significant sectors and countries.

Table 3 – Equity direct investment assets – sector of economic activity and immediate host country

US\$ million	Crop, livesto		Oil and gas extraction	Metallic mineral extraction	Mining support service activities Manufacturing	Foodstuff	Beverages	Pulp, paper and paper products	Coke, oil derivatives and biofuels	Chemical products	Pharmaceuticals	Metallurgy	Machinery and equipments	Vehides, trailers, semi-trailers : related parts	Other transportation equipments		Services Infrastructure	Commerce, except vehicles	Food and beverage service activities	Telecommunications
Total	1,5		763	314	879	324	241	449	25	1,079	465	792	393	1,355	188	216	2,375	9,217	354	386
Europe	4.		675	214	773	83	80	323	22	150	140	200	149	416	23	22	34	5,112	201	283
Netherlands	2	39	604		335	(c)	(c)	(c)	(c)	3	(c)	9	21	(c)	-	(c)	3	4,534	113	8_
United Kingdom		0	3	171	176	10	(c)	(c)	(c)	17	(c)	0	25	30	-	2		86	74	(c)
Switzerland		79	(c)		(c)	48	(c)	(c)		17	7	(c)	1	-	-		-	279	14	(c)
Germany Portugal		_	(c)	-	(c)	(c)	1	-	-	79	32	114	38 (c)	90	(c) 1	(c)	- 28	13 20	(c)	241
France		1		-		(c)	-	- 1		(c) 14	25	17	(c) 28	100	16	(c) 3		41	-	(c)
North America		38	(c) 35	96	(c) 73	130	13	45	- 0	568	120	221	132	262	157	163	9	589	42	40
United States of America		39 39	35	(c)	71	120	8	45	(c)	512	100	211	64	124	157	159	1	570	28	37
Mexico		39 39	(c)	- (c)	1	6	4	(c)	(0)	47	20	7	37	136	(c)	3	8	19	14	4
South America		47	21	-	25	82	141	81	2	310	142	251	79	638	0	25	1.546	1.166	106	24
Argentina		93	(c)	-	1	32	34	14	(c)	176	40	40	57	552	- 0	8	33	88	73	12
Venezuela			- (0)	-	(c)	31	-		- (0)	1	75	(c)	(c)	(c)	-	-	1.357	6	-	(c)
Uruguay		(c)	-	-	(c)	2	91	(c)		65	6	1	(c)	(c)	-	(c)	16	1.024	11	(c)
Colombia		(c)	(c)	-	5	2	1	- (0)	(c)	15	7	179	1	9	-	1	36	14	(c)	8
Chile		1	(c)	-	0	6	(c)	(c)	- (-/	30	11	1	13	21	(c)	14	0	16	(c)	(c)
Central America		0	-	-	1	2	0	0	-	15	22	5	0	-	- (-/	-	13	16	2	0
Panama		(c)	-	-	(c)	(c)	(c)	0	-	6	18		(c)	-	-	-	10	15	(c)	(c)
Costa Rica			-	-	-	0	-	(c)		7	-	5	- 1-7		-		(c)	0	2	(c)
Africa	2	08	4	0	3	2	0	0	-	3	1	0	2	14	-	3	436	2	2	
South Africa		10	-	-	(c)	(c)	(c)	(c)	-	2	1	0	1	6	-	(c)	(c)	2	-	-
Caribbean	3	72	14	4	1	7	7	0	-	0	37	2	0	-	-	0	333	1,816	0	31
Cayman Islands		c)	11	-	1	-	-	-	-	-	-	-	-	-	-		(c)	710	-	-
British Virgin Islands	3	58	-	(c)	0	(c)	-	-	-	-	(c)	-	-	-	-	-	-	18		
Bermuda		5	-	-	-	-		-	-	-	-	-	-		-		-		-	31
Oceania		1	0	-	0	1	0	-	-	1_	0	0	1_	2	-	0	-	3	-	-
Australia		1	(c)	-	0	(c)	(c)	-	-	1	(c)	0	1	2	-	(c)	-	3	-	
Asia	2		14	-	3	16	1	0	1	32	2	113	29	23	8	2	4	514	1_	7
Singapore	2		13	-	(c)	-	-	-	(c)	8	-	48	11	1	(c)	0		197	-	-
China (c): confidencial, less than thre		13	(c)	-	(c)	1	0	-	-	4	(c)	4	9	4	(c)	0	-	213	(c)	

Table 4 – Debt Instruments direct investment assets – sector of economic activity and immediate host country

<u>US\$ million</u>	Agriculture and mining	Crop, livestock and related services	Oil and gas extraction	Metallic mineral extraction	Manufacturing	Foodstuff	Beverages	Pulp, paper and paper products	Coke, oil derivatives and biofuels	Chemical products	Other transportation equipments	Services	Infrastructure	Commerce, except vehicles	Telecommunications
Total		2,491	35,562	26,133		5,344	14,283	55	24	657	5		3,237	4,456	1,271
Europe		894	35,373	26,130		4,951	11,867	32	7	11	-		537	2,283	1,204
Netherlands		(c)	35,354	-		16		-	-	-	-			1,223	34
Spain		-		-		(c)	1,527	-		(c)	-		225	198	(c)
United Kingdom			(c)			110		-	(c)	-	-			130	
Portugal		5	1_	-		14	6	-	-	8	-		(c)	26	(c)
Italy		0				10	(c)			(c)			0	2	(c)
North America		20	0	0		11	2	-	17	202	1_		82	426	0
United States of America		19	0	0		8	2	-	(c)	26	1		77	406	(c)
Mexico		(c)	-			3		-	-	176	-		4	19	(c)
South America		980	13	2		54	1,370	23	-	411	1_		1,708	733	20
Chile		5	- ()	-		13 17	(c)	- ()	-	58	- ()		13	73 237	(c)
Argentina		41	(c)	-			1,274	(c)	-	294	(c)		123		8
Uruguay		344	-	-		(c)	(c)	-	-	33	-		-	331	
Venezuela		517	- ()	- ()		- ()	-	- ()	-	(c)	-		1,062	1	(c)
Paraguay			(c)	(c)		(c)	-	(c)	-	(c)	-		(c)	30 15	- ()
Peru Colombia		(c) 48	- ()	(c)		- ()	-	-	-	1 11	-		391	15 36	(c)
			(c)	-		(c)		-	-		- 1		83 87	52	6
Central America		-	0	-		-	547	-	-	9					-
Panama		- 0	(c)	_		2	(c)	-	-	-	(c)		47	52 78	-
Africa		(c)	0	-			-	-	-	-	-		438 352	15	-
Angola South Africa			-	-		(c)	-	-	-	-	-			62	
Caribbean		592	176			(c) 297	497	-		24	1		(c) 384	859	46
				- (-)				-			_		184	580	
Cayman Islands British Virgin Islands		(c) 373	(c)	(c)		(c)	(c)	-		(c)	- 1		106	66	(c)
Bahamas		(c)		(C)		(C)	(c)	-		(c)			-	110	(C)
Oceania		(C)	-			-	(C) 1	-	-	(C)	- 0		-	10	-
Asia		- 4				29	0	-		1	- 0		1	17	
China		- 4				(c)		-		(c)	-			3	
Ullila						(0)		-		(0)				<u> </u>	

(c): confidential, less than three observations.

7

Brazilian Direct Investment Assets: Enterprises Features, Investor Category and Sector of Economic Activity

7.1 Invested Enterprises Features

The number of direct investment assets enterprises has grown continuously and substantially over the past ten years.

In 2007, there were around five thousand direct investment assets enterprises, according to the respondents to the BCA survey. The 2007–2013 period registered an annual average growth rate of 12% in that number. In 2014, the number jumped to 19.4 thousand, due to the Special Regime of Foreign Exchange and Tax Regularization (RERCT)¹³. Since then, the number of declared direct investment assets enterprises kept growing, on average, 9% every year. As shown in Figure 38, in 2017 there were 25.3 thousand direct investment assets enterprises.

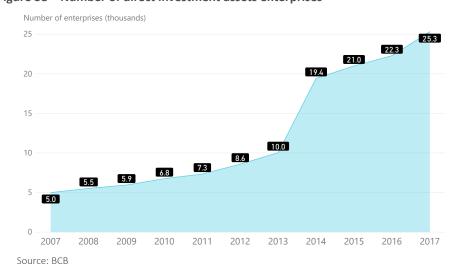


Figure 38 – Number of direct investment assets enterprises

¹³ Law 13,254, of January 13, 2016, established the Special Regime of Foreign Exchange and Tax Regularization (RERCT) for funds, goods or rights previously not declared abroad. Participation in the RERCT required responding to the BCA survey, with information about foreign assets position, including direct investment assets companies. See methodological annex on BCA for further details.

Indeed, the total value of the direct investment assets position also rose significantly between 2007 and 2017, from US\$111 billion to US\$352 billion, a 217% increase.

Figure 39 – Total direct investment assets position, except real estate

Source: BCB

The average value invested in each direct invested enterprise declined from US\$22 million, in 2007, to US\$14 million in 2017. The reduction was due to the large number of smaller enterprises that were included in the BCA from 2014 onward due to the RERCT.

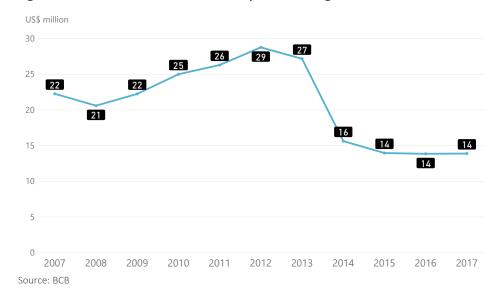


Figure 40 - Direct investment assets enterprises - average invested value

Direct Investment Assets: Household and Corporate Investors

The voting power of the resident investor in Brazil is above 90% in more than 80% of the Equity direct investment assets position. Table 5 shows the number and value of direct investment assets enterprises according to voting power and category of the resident investor (household or corporations).

Table 5 – Equity direct investment assets features by voting power range – 2017

Household investor					
Voting power range - Invested enterprise abroad	Number of enterprises	%	Investment US\$ millon	%	Median investment US\$ million
greater than or equal to 10% and less than 20%	959	4%	6,558	5%	0.28
greater than or equal to 20% and less than 50%	2,936	12%	13,658	11%	0.37
Controlled					
greater than or equal to 50% and less than 90%	5,312	22%	16,273	13%	0.49
greater than or equal to 90%	14,594	61%	87,156	70%	1.26

Corporate investor					
	Number of enterprises	%	Investment	%	Median investment
Voting power range - Invested enterprise abroad			US\$ millon		US\$ million
greater than or equal to 10% and less than 20%	116	5%	2,192	1%	1.10
greater than or equal to 20% and less than 50%	186	7%	12,524	5%	1.80
Controlled					
greater than or equal to 50% and less than 90%	257	10%	15,508	7%	1.57
greater than or equal to 90%	1,993	78%	197,789	87%	1.26

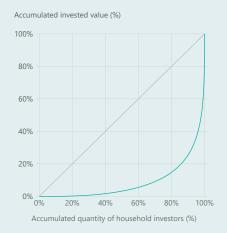
Source: BCB

For household resident investors, 83% of direct investment assets (in value and number of enterprises) are related to controlled enterprises with more than 50% of voting power. In addition, shares equal to or above 90% of voting power represent 61% of the number of enterprises and 70% of the total investment, with a median value of US\$1.3 million.

Similar concentration is also in place for corporate resident investors. Investment in foreign controlled enterprises (voting power equal to or above 50%) comprises 88% of the number of enterprises and 94% of the total investment. Holdings above 90% correspond to 78% of the number of enterprises and 87% of the total investment. The median value is the same as for household investors, US\$1.3 million.

Figure 41 illustrates the concentration observed for direct investment assets positions for household and corporate investors for 2017.

Figure 41 – Equity direct investments assets position – accumulated percentage of investors and accumulated percentage of invested value





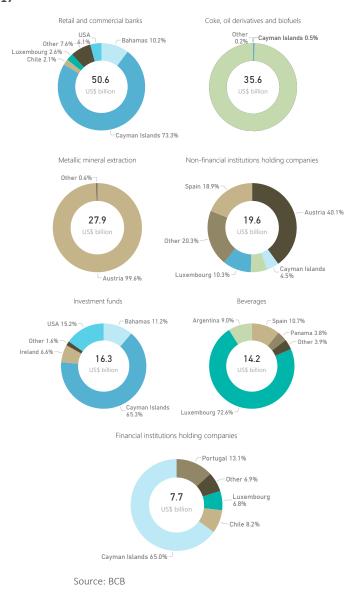
7.2 Investment Abroad: Location and Sector of Economic Activity

Resident investors from the oil and metallic minerals extraction sectors concentrate more than 99% of their direct investment assets enterprises in the immediate destinations of the Cayman Islands (coke, oil and biofuels) and Austria (metallic minerals extraction).

Banking sector enterprises in Brazil hold US\$51 billion of Equity direct investment assets position, almost 75% in the Cayman Islands and 10% in the Bahamas. The Cayman Islands also gather direct investment assets enterprises whose Brazilian resident investors are investment funds and holding companies of financial institutions.

Direct investment assets from resident household are concentrated in tax havens, such as the British Virgin Islands (37%), the Bahamas (27%), the Cayman Islands (15%) and Panama (6%).

Figure 42 – Brazilian resident investors: sector and location of direct investment assets – 2017

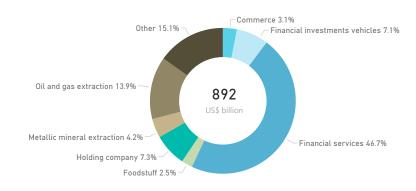


7.3 Assets Held by Direct Invested Enterprises

47% of the assets held by direct invested enterprises belong to hosting entities in financial activities.

Direct invested enterprises held assets worth US\$892 billion in 2017. Companies operating in financial services held 47% of that total, followed by oil and natural gas extraction enterprises, 14% (Figure 43). Other representative sectors are holding companies, financial investments vehicles, metallic minerals extraction, commerce, foodstuff, infrastructure, beverages and telecommunications.

Figure 43 – Direct invested enterprises by sector of economic activity – assets allocation – 2017



Methodological Appendix

Census of Foreign Capital in Brazil (Census)

The Census of Foreign Capital in Brazil (Census) survey is the main source of data for compiling direct investment liabilities statistics presented in this report. The Census legal basis is Law 4,131, (http://www.planalto.gov.br/Ccivil_03/leis/L4131. htm). The Census' first edition has happened in 1996, gathering data for base year 1995. Its main objective is to measure direct investment liabilities position, although information on other external liabilities are also collected in the survey.

From 1996 to 2006, the Census was conducted every five years, collecting information for the 1995, 2000 and 2005 reference years. It was mandatory for the following entities: (i) companies funded by external credits; and ii) companies hosting foreign direct or indirect investments, with direct or indirect participation of non-residents of at least 10% of voting rights, or at least 20% in the capital.

Since 2011, the Census has been annual, comprising a sample of the enterprises' population. The Quinquennial Census remains mandatory for all companies in which a nonresident investor holds shares in the capital stock, while the Annual Census covers a subset of these respondents, basically, large companies.

Methodological and operational upgrades have been introduced in the Quinquennial and Annual Censuses, such as: i) adoption of market value as preferential measure of value for the hosting company, in line with the methodology for external sector statistics); ii) identification of immediate investors and ultimate controllers; and iii) consolidation of responses by economic group resident in Brazil, lowering compliance cost and number of respondents.

The Annual Census must be declared by:

- corporations headquartered in Brazil with direct participation of nonresidents in the capital stock and with net equity equal to or greater than US\$100 million;
- investment funds, through its administrators, with non-resident shareholders and net equity equal to or greater than US\$100 million; and
- corporations headquartered in Brazil, with a total outstanding balance of short-term trade credits (payable up to 360 days) granted by non-residents equal to or greater than US\$10 million.

The base-date is December 31 of the reference year.

The Quinquennial Census, in base-years finished by zero or five, must be declared by:

- corporations headquartered in Brazil with direct participation of nonresidents in their capital stock;
- investment funds, through its administrators, with non-resident shareholders; and
- corporations headquartered in Brazil with a total outstanding balance of short-term trade credits (payable up to 360 days) granted by non-residents equal to or greater than US\$1,0 million.

The base-date is December 31 of the reference year.

The number of respondents to the Quinquennial Census has been increasing. In its first edition (1995), there were 6,322 respondents (Figure 44). In the following editions, the number of respondents kept growing to 11,404 (2000) and 17,605 (2005).

In 2010, the survey was streamlined to allow companies that control economic groups in Brazil to respond to the questionnaire by consolidating information from their subsidiaries. As a result, the number of respondents declined to 16,844, increasing to 19,537 in 2015.

Number of respondents (thousands)

25

20

17.6

16.8

15

10

6.3

5

1995

2000

2005

2010

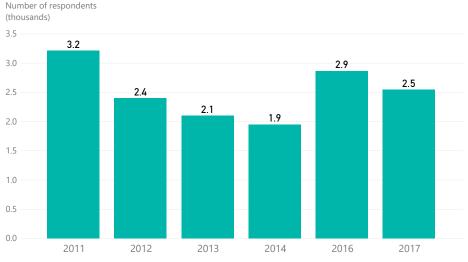
2015

Figure 44 - Quinquennial censuses - number of respondents

Source: BCB

The Annual Censuses, introduced in 2011, are answered by large companies (Figure 45). The largest number of respondents occurred in 2011, when 3,210 companies participated in the survey. From that year on, the number of respondents has declined until 2014, recovering in 2016 and marginally declining in 2017, when it reached 2,545 companies.

Figure 45 - Annual censuses - number of respondents



The behavior of the number of respondents can be attributed to the fact that many companies in the Quinquennial Census continue to participate in the Annual Census even if they are not obliged to. This behavior has been changing with the better understanding of the rules of mandatory declaration. Companies that do not comply with the Censuses or that delay the declaration are subject to administrative procedures and fines¹⁴.

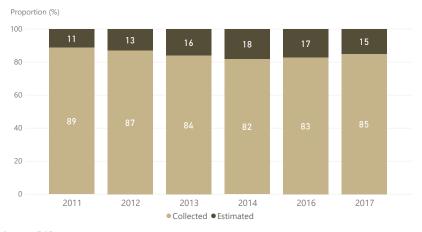
Although accounting for an average of only 14% of respondents to the Quinquennial Census, the Annual Census captures approximately 85% of the direct investment liabilities positions, since the reporting companies are the most significant. The experience shows that the Annual Censuses have been efficient for production of direct investment liabilities statistics, providing valuable information at low compliance costs.

The remaining 15% of the direct investment liabilities positions is estimated using diverse databases¹⁵, (Figure 46). It is worth noting that the direct investment liabilities data obtained through Census surveys are validated through multiple consistency checks. Eventual discrepancies in the declared information are double-checked with the reporting companies and corrected if necessary.

Law 13,506 (November 14, 2017) and section IV of Circular Banco Central do Brasil 3,857 (November 14, 2017).

Such as transactions recorded in foreign exchange contracts, system of Electronic Declaratory Registry- Foreign Direct Investment Module (RDE-IED) and from the Securities and Exchange Commission of Brazil (CVM), among others.

Figure 46 – Direct investment liabilities positions – annual census and complementary databases estimations



Brazilian Capital Abroad Survey (BCA)

The data source for compiling the statistics of direct investment assets positions and income presented in this report is the BCA survey.

Since 2002 (2001 base year), the BCA survey has been annually conducted by the BCB to measure foreign assets held by residents in Brazil on December 31 of each base year. The statement is mandatory for household and corporations resident in Brazil holding assets abroad equal to or greater than one hundred U.S. dollars.

BCA frequency became quarterly in 2011, with addition of reference dates of March 31, June 30 and September 30 of each year. The quarterly BCA is only mandatory for households and corporations resident in Brazil with assets abroad equal to or greater than one hundred million U.S. dollars.

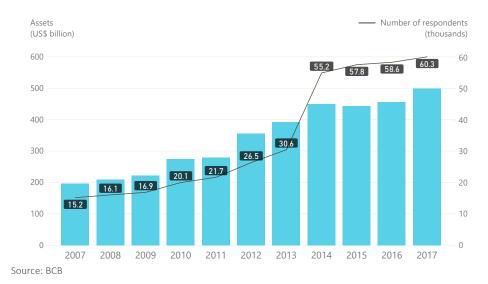
Table 6 – Annual and quarterly BCA – launch of survey, reference date and obligation to respond

	Begin of survey	Reference date	Obligation to respond (total assets abroad)
BCA Annual	2001	31/dec	US\$ 100 thousand
BCA Quarterly	2011	31/mar, 30/jun e 30/sep	US\$ 100 million

Source: BCB

The number of respondents in the annual BCA survey increased from around 15,000, in 2007, to more than 60,000 in 2017. In the period, the position of assets abroad increased from US\$197 billion to US\$499 billion, and direct investment assets position rose from US\$142 billion to US\$387 billion (Figure 47).

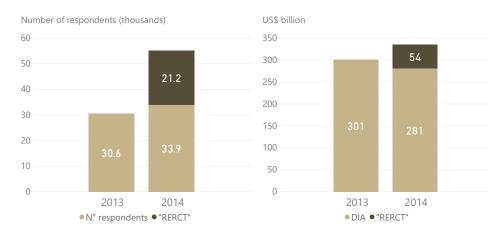
Figure 47 – Annual BCA – number of respondents and total assets position



The number of BCA respondents changed in 2014, also because of the implementation of the RERCT, which promoted the regularization of Brazilian residents' previously undeclared foreign assets. Implemented in two stages, the RERCT accounted for approximately 22,000 additional respondents to the BCA, and an increase of US\$55 billion in the statistics of the foreign asset position. RERCT's first stage, based on the base year position for 2014, resulted in more than 96%

Figure 48 – RERCT – impact on the number of respondents and in the direct investment assets position

of the total value of legalized assets.



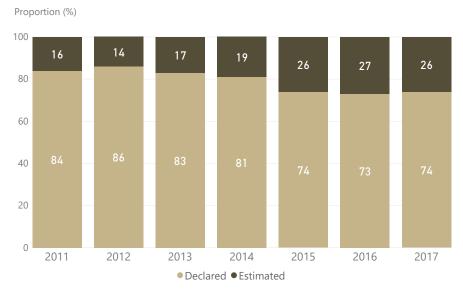
Source: BCB

The number of Quarterly BCA respondents is significantly lower than of the Annual BCA respondents, given the difference between mandatory reporting floors of US\$100 million and US\$100 thousand, respectively. The average number of quarterly respondents exceeded 500 between 2015 and 2017, less than 1% of the number of annual respondents. However, the Quarterly BCA has captured, on average, 79% of the total direct investment assets position since 2011. Direct

¹⁶ Nearly 100 investors resident in Brazil respond to the Quarterly BCA even if they have assets abroad in an amount less than US\$100 million, and therefore, they are not required to provide such information.

investment assets positions of non-respondent investors of the Quarterly BCA are estimated from the Annual BCA.

Figure 49 – Quarterly direct investment assets position (annual average) – declared vs. estimated



Source: BCB

Electronic Declaratory Registry – Financial Operations Registry (RDE-ROF)

The data source for Debt direct investment liabilities position is the Electronic Declaratory Registry- Financial Operations Registry (RDE-ROF) system. The RDE-ROF system stores granular information on financial transactions between resident debtors and non-resident creditors. The resident debtor is responsible for providing the information, which includes most debt instruments.

Each register receives an identifier and contains detailed information on the operations, such as: i) type of instrument (loan, bond, long-term import financing, among others); ii) principal amount and amortization characteristics, such as grace period, frequency and number of installments; iii) characteristics of interest payment, such as grace period, frequency, number of installments and interest rate; iv) amortization schedule; v) information on ancillary charges, such as fees and commissions; vi) currency; and vii) identification of participants and detailed classification of creditors, debtors and guarantors.

The RDE-ROF system also requires payments and modifications to be informed and accrued in the original agreement, capturing all transactions carried out through ITRS individual transactions or international transfers in BRL performed by automatic linkage between systems, in addition to transactions abroad without payment instruments registered in Brazil, if the declaration is available.

The existence of a RDE-ROF identifier is necessary for settlements of exchange contracts related to the operation, and all information is immediately available to statistical compilers.

The RDE-ROF system was revamped in 2018, simplifying registration of foreign capital procedures, and reducing costs of information providing by debtors. The changes also allowed for improvements on statistical compilation processes.

Sectorial Classification

The BCB elaborates direct investment liabilities and assets statistics by economic sector at the investment destination. The structure of the economic sectors follows closely the National Classification of Economic Activities (CNAE), version 2.0, defined by the Brazilian Institute of Geography and Statistics (IBGE).

The collection of external sector statistics by the BCB also includes the institutional sector of resident enterprises holding direct investments assets (Government, Central Bank, banks and individuals, among others).

Data from sectors related to the direct investment liabilities are obtained from censuses reporting enterprises, which can inform up to five economic activities. The weight of each economic activity is declaratory and can be estimated by enterprises according to the respective participation in revenues or profitability. In the case of economic groups or holding companies, the economic activities carried out by the subsidiaries are informed.

Data for the direct investments assets sectors come from the direct investor resident in Brazil, who informs, in the BCA, the main economic activity carried out by the direct investment enterprise abroad. Since 2017, with the improved BCA, the respondent may report as main economic activity, in addition to the sectors established in CNAE 2.0 (IBGE): (i) an enterprise incorporated to acquire financial assets and (ii) an enterprise incorporated to acquire real estate. In addition, respondents are also required to inform the main economic sector of the enterprises operating at the end of the control chain.

International Transactions Reporting System (ITRS)

The country's main source for the compilation of the balance of payments transactions, including direct investment, is the ITRS. Through this system, financial institutions authorized to operate in the foreign exchange market electronically inform the BCB about their foreign exchange transactions, which reflect transactions between residents and non-residents. The system contains the information required for the compilation of the balance of payments.

Foreign exchange codes identify direct investment transactions in the form of Equity, and distinguish direct investment liabilities from direct investment assets.

The compilation of direct investment transactions in the form of Debt Instruments, including the differentiation between operations from parent to subsidiary, fellow enterprises and subsidiary to parent (reverse investment), requires data sources other than the foreign exchange transactions.

Compilation of the Direct Investment Liabilities Position: Equity by Ultimate Investing Country

The direct investment liabilities ultimate controller is the enterprise or individual having the ultimate control over the decisions regarding the position invested in the resident host enterprise. Thus, the ultimate controller holds control over the immediate investor. The identification is carried out by examining the chain of control of the immediate investor, which occurs when the enterprise holds more than 50% of the voting power, until an individual or enterprise that is not itself controlled by another enterprise is found.

If there is no enterprise or individual controlling the immediate investor, then this investor is effectively considered as the ultimate investor in the resident ultimate host enterprise.

The country of residence of the ultimate controller is regarded as ultimate investing country.

The compilation of country-by-country direct investment position is performed by reallocating the entire position compiled from the viewpoint of the immediate investing country to the ultimate investing country. If there is more than one immediate investor in the resident host enterprise, the entire invested position, considering each investor, is reallocated to the country(ies) of residence of the ultimate controller of each immediate investor.¹⁷

¹⁷ See paragraphs 608 to 612 of the BMD4.