# 1 International Investment Income

## 1.1 International Investment Income and BOP

Globalization is the product of the integration of markets across borders, including financial flows as well as trade in goods and services and the migration of labor. The inflows and outflows of these movements are recorded in the balance of payments, which records a country's transactions with the rest of the world. In the case of financial flows, these investments can yield income in the forms of profits, dividends and interest payments, and bank fees. Those flows also appear in the balance of payments.

International transactions are measured through the use of double-entry bookkeeping, an accounting method. This system was first developed in the fifteenth century by banks and firms in Italy (Mills 1994). Each transaction is recorded as a credit or debit to fulfill the accounting requirement:

$$\text{Assets} = \text{Liabilities} + \text{Equity} \tag{1}$$

These transactions are recorded in the balance of payments, which was developed during the age of mercantilism. Mercantilism, an economic doctrine developed in the sixteenth century, assumed that a country's wealth included its holdings of precious metals, particularly gold (Reinert 2021). A country received gold when it had more exports than imports and the surplus was settled through an inflow of gold from the economy with a deficit. The balance of trade, a component of the balance of payments, was used to track these payments.

Mercantilism fell out of favor in the eighteenth century after criticism by economists such as David Hume and Adan Smith, and the balance of payments received less attention. It regained its usefulness in the nineteenth century as international trade and financial flows rose in importance (High 2000). The first versions of the balance of payments were calculated in that period as more data regarding international transactions were recorded. The League of Nations published balance of payments statistics during the interwar period, in part to establish a common accounting framework that could be used to compare the balance of payments of different countries (Badger 1951). The IMF took over this task after World War II. The rules for recording transactions in the balance of payments are periodically revised and updated.

Table 1 shows the modern balance of payments (BOP), which has three components: the current account (CUR), the capital account (CAP), and the financial account (FIN):

$$\text{BOP} = \text{CUR} + \text{CAP} + \text{FIN} \tag{2}$$

**Table 1** Balance of payments

| **Balance of Payments** | **Credits** | **Debits** |
|---|---|---|
| Current Account | | |
| Balance of Trade | | |
| Primary Income | | |
| Compensation of Employees | | |
| *Investment Income* | | |
| *Direct Investment* | | |
| *Portfolio Investment* | | |
| *Other Investment* | | |
| *Reserve Assets* | | |
| Other Primary Income | | |
| Secondary Income | | |
| Capital Account | | |
| Financial Account | | |
| Direct Investment | | |
| Portfolio Investment | | |
| Financial Derivatives | | |
| Other Investment | | |
| Reserve Assets | | |
| Net Errors and Omissions | | |

**Source:** IMF (2013)

The current account measures international trade, primary income that is derived from productive factors, and secondary income arising from transfers. The financial account records transactions in financial assets, and the capital account registers nonfinancial asset transactions. (The IMF uses a different methodology to record the acquisition of assets and liabilities.) Each of those items includes credits and debits that can be utilized to calculate the net flows of each of the components, which show a surplus or deficit. While the overall balance of payments must balance due to double entry bookkeeping, the individual components may show surpluses or deficits that offset the net flows of the other components.

## 1.2 Current Account

Table 1 also includes the separate components of the current account, which include the balance of trade (BOT), primary income (PRI), and secondary income (SEC):

$$CUR = BOT + PRI + SEC \quad (3)$$

The trade balance records exports and imports of goods and services. Primary income consists of the income received for providing productive resources, including the payments to resident workers from foreign firms and payments to foreign workers from domestic firms (LAB), receipts and payments on financial holdings (INV), and payments for the use of natural resources (NAT):

$$PRI = LAB + INV + NAT \quad (4)$$

For most countries, returns on investments exceed the other sources of primary income.

Investment income includes the earnings on foreign direct investment undertaken by multinational firms (DIR), dividends and interest payments on portfolios of equity and debt (POR), and a "other" category (OTH) that keeps track of payments for international banks among other items. There are also the earnings that a country's central bank earns on its reserve holdings (RES).

$$INV = DIR + POR + OTH + RES \quad (5)$$

Net secondary income is the last category in the current account, and it includes the transfer of funds, either between private residents (TRP) or governments (TRG).

$$SEC = TRP + TRG \quad (6)$$

Table 2 shows the net current accounts and its components for Brazil and the United States in 2022. Brazil recorded a current account deficit of $48,253 million, despite achieving surpluses in its balance of trade and secondary income. The deficit in primary income ($56,530 million), which was due to the substantial deficits in direct investment income ($34.792 million) and portfolio income payments ($20,650 million), greatly exceeded those surpluses.

The United States also had a current account deficit of $1,012,103 million, but its deficit was due to its trade deficit of $944,770 million. This amount was partly offset by a net primary income surplus of $115,961 million, largely due to net investment income of $154,151 million. This surplus reflected net receipts of income from direct investments abroad of $288,748 million, which was partly offset by a deficit in net payments on portfolio equity and debt of $157,573 million. US-based multinationals received large amounts of income from their foreign subsidiaries (Section 3), while the United States obtains funds from the rest of the world by issuing stocks and bonds.

**Table 2** Current accounts: Brazil, United States (2022)

| | Brazil (million $) | United States (million $) |
|---|---|---|
| Current Account | −48,253 | −1,012,103 |
| Balance of Trade | 4,536 | −944,770 |
| Primary Income | −56,530 | 115,961 |
| Compensation of Employees | 101 | −17,379 |
| *Investment Income* | −56,631 | 154,151 |
| *Direct Investment Income* | −34,792 | 288,748 |
| *Portfolio Investment Income* | −20,650 | −129,681 |
| *Other Income* | −7374 | −27,892 |
| *Reserve Assets* | 6,181 | 2,165 |
| Other Primary Income | 0 | 0 |
| Secondary Income | 3,742 | −183,294 |

**Source:** IMF, *Balance of Payments Statistics*

Net investment income flows vary greatly among countries. Figure 1 shows the countries with the largest surpluses in 2022. These were recorded in Japan ($263.885 million), the United States ($164,602 million), Germany ($160,745 million), and France ($48,892 million).

Figure 2 shows the countries with the largest deficits. These include China (−$203,140 million), Ireland (−$150,727 million), Australia (−$73,949 million), and Brazil (−$61,998 million).

The net flows depend largely on a country's international investment position. Table 3 lists the components of the stock of foreign financial assets held by domestic residents and the domestic liabilities owned by their foreign counterparts.

To calculate the net international investment position (NIIP) the latter is subtracted from the former; a nation with a positive (negative) NIIP is a creditor (debtor) nation.

$$\begin{aligned} &\text{Foreign assets owned by domestic residents} \\ &- \text{Domestic assets owned by foreign residents} \\ &= \text{Net International Investment Position (Creditor (+)/ Debtor (−))} \end{aligned} \tag{7}$$

The United States, which borrowed extensively in the nineteenth century to finance its own development, became a creditor nation after World War I and retained that position until 1989, when government borrowing pushed the country into debtor status. By the end of 2023, the United States had a net

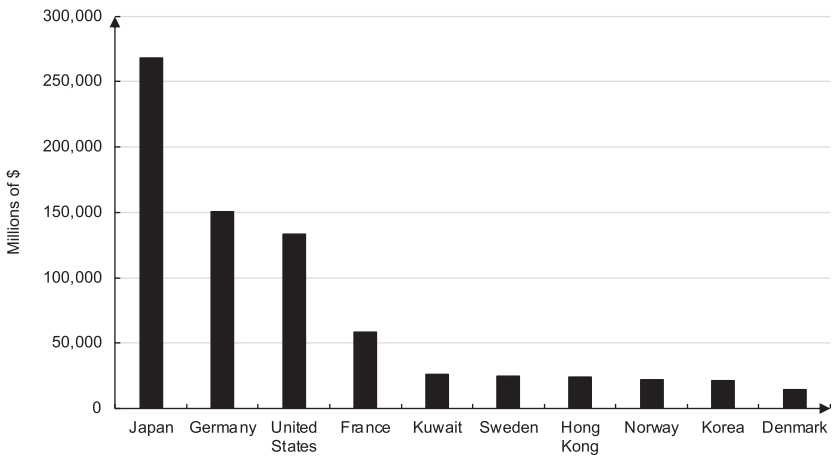


**Figure 1** Largest international investment income surpluses (2022)

**Source:** IMF, *Balance of Payments Statistics*

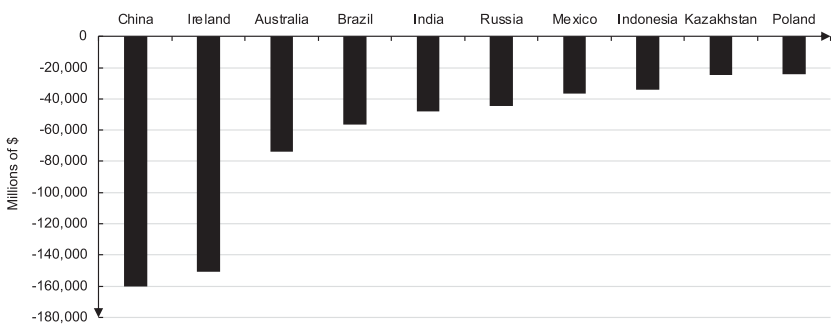


**Figure 2** Largest international investment income deficits (2022)

**Source:** IMF, *Balance of Payments Statistics*

external position of −$19.8 trillion, which represented about 72% of its GDP. Japan, on the other hand, is a net creditor with more foreign assets owned by Japanese residents and firms than foreigners hold in Japan, and its NIIP in 2023 was $3.5 trillion, equal to about 71% of its economy. The NIIP status of emerging market countries differ: China is a net creditor (13% of its GDP), while Brazil is a debtor (−40% of GDP).

Usually we expect countries with positive (negative) NIIPs to have positive (negative) investment income flows. However, both France and the United States had had negative NIIPs in recent years but surpluses in their net investment incomes. The reason for this anomaly lies in how the income is generated. Investment income depends not only on a country's stocks of assets and

**Table 3** International investment position

| Assets | Liabilities |
|---|---|
| Direct Investment of domestic firms | Direct Investment of foreign firms |
| Portfolio investment of residents | Portfolio investment of foreign residents |
| Financial Derivatives of residents | Financial Derivatives of foreign residents |
| Other investments of residents | Other investments of foreign residents |
| Reserve Assets of central bank | |

**Source:** IMF (2013)

liabilities, but also on the returns earned or paid on these. A higher return received from the assets than the yield paid on the liabilities can offset the larger amount of liabilities, and result in an income surplus (Section 3).

## 1.3 GDP vs GNI vs GNDI

In open economies, there is a divergence between Gross Domestic Product (GDP), the value of all final goods and services produced within a country, and Gross National Income (GNI), the value of all final goods and services produced with a country's productive resources, either domestically or in another country. Primary income, the net value of the international payments of the factors of production, records the difference between the two measurements:

$$GNI = GDP + PRI \tag{8}$$

In a closed economy the two aggregates are equal, but open economies have primary income surpluses and deficits. For most countries the difference between the two is relatively small, but in some countries with significant international activity, there can be a gap between domestic output and the value of domestic and foreign activities.

Ireland, for example, is the host for many multinational firms that have manufacturing and other facilities located there. Among the firms with local affiliates are Google, IBM, Medtronic, and Dell. These local units are profitable, in part because of Ireland's low corporate tax rate (Section 3). Their profits are recorded as debits in investment income and the primary balance, which results in GNI per capita lower than GDP per capita. The differences can be relatively significant: in 2022, for example, Ireland's per capita GDP of 98,745 Euros greatly surpassed per capita GNI of 70,913 Euros.

But the inequality can go the other way. Kuwait has a large oil surplus and invests part of the proceeds in foreign firms, financial institutions, and governments. This extra income pushes GNI per capita above GDP per capita. The

difference is not as stark as in Ireland, but 2022's GNI per capita was 15% greater than its GDP per capita.

An analysis of a country's domestic income based solely on GNI would not include the value of the net transfers that are recorded in the secondary income balance. The net flows can be used to derive another macro aggregate: Gross National Disposable Income (GNDI):

$$\text{GNDI} = \text{GDP} + \text{PRI} + \text{SEC} \tag{9}$$

For countries that receive relatively large amounts of remittances, such as Liberia and Haiti, the extra amount of income included in the GNDI can be considerable.

## 1.4 Current Account Adjustment

Most analyses of the current account focus on the trade balance and ignore primary and secondary income. The standard policy prescription response to an unsustainable current account deficit includes an exchange rate depreciation to facilitate expenditure switching from imports to exports and contractionary macro policies to induce expenditure reduction. However, the growth in the size of primary income, largely due to investment income, has shown that current account deficits can no longer be attributed solely to trade deficits. There are countries where primary income deficits have exceeded trade deficits and dominated the current account, including Brazil, Colombia, and South Africa (Forbes, Hjortsoe, and Nenova 2017). Moreover, in most countries, the current account balance has a large and positive correlation with the trade balance. Primary income, on the other hand, is negatively correlated with the trade balance (Colacelli, Gautam, and Rebillard 2021). Wacker (2024) points out that income balances are much more persistent than the trade balances, and therefore an assessment of a country's current account imbalance should differentiate between deficits due to the income balance and those reflecting a trade deficit.

The exchange rate has a direct impact on domestic value of the income balance. In the case of a country with assets denominated in a foreign currency but liabilities denominated in the domestic currency, an exchange rate depreciation will raise the value of the income credits while lowering the value of the income debits. The domestic value of foreign currency denominated assets will increase. The exchange rate change can also affect the values of the assets and liabilities in the NIIP. The domestic value of foreign currency denominated assets will increase. But if the liabilities are also denominated in the foreign currency, then a depreciation will raise the value of both, with the net effect depending on the amounts and denomination of the assets and liabilities (Bénétrix, Lane, and Shambaugh 2015).