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Barbados' Balance of Payments Statistics: The Transition to BPM6^{*}

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Abstract

In 2009, the International Monetary Fund (IMF) released the Balance of Payments and International Investment Position Manual Sixth Edition (BPM6) in response to developments in the structure of multinational corporations, cross-border production processes and international finance. The compilation of Barbados' balance of payments (BOP) statistics under BPM6 guidelines started with data from the year 2011. Prior to BPM6, BOP statistics were compiled following the standards of the Balance of Payments Manual Fifth Edition (BPM5). In order to have a consistent time series of BOP statistics, the External Sector Unit at the Central Bank of Barbados embarked on an exercise to bring the historical data for the period, 1967 – 2010 in line with BPM6 standards. This paper explains the conversion exercise as well as the core concepts and conventions of BPM6. In addition, recommendations are made to the IMF on the treatment of virtual currencies, vouchers and loyalty rewards in external sector statistics.

March 2018

^{*} We thank Mr. John Joisce (retired Senior Economist, IMF) for providing clarity on the rationale behind some of the conventions of external sector statistics. Thanks are also extended to Mr. Trevor Campbell (retired Senior Economist, Central Bank of Barbados) for shedding light on the compilation practices during the early years of Barbados' balance of payments statistics.

The views expressed in this paper are those of the authors and do not necessarily represent those of the Central Bank of Barbados.

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1. Introduction

The balance of payments (BOP), a major component of external sector statistics, is a statistical report that systematically summarises economic transactions between residents and nonresidents during a specific time period. Central to the understanding of external sector statistics, is the definition of residency used in macroeconomic statistics. In statistical terms, a resident of Barbados is an individual or organisation that resides or intends to reside in Barbados either indefinitely or over a finite period of time (a minimum of one year). However, medical patients from abroad, foreign students, diplomats, foreign military personnel, embassies as well as regional and international organisations are considered nonresidents even though they may reside in Barbados for more than a year. The concept of residence as explained in Chapter 4 of the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) is consistent throughout the other macroeconomic statistics frameworks such as the System of National Accounts, Government Finance Statistics and Monetary and Financial Statistics.

The Central Bank of Barbados (hereafter the Bank) is the primary source of external sector statistics for Barbados and has been compiling BOP statistics since 1976. In the years preceding 1976, the Barbados Statistical Service (BSS) was responsible for the compilation of the statistics.

Barbados' external sector statistics are produced from data that are largely collected through the use of the Bank's annual BOP and International Investment Position (IIP) Survey. Currently the survey forms are sent to enterprises via email in Microsoft Excel. Other sources of external sector data include: the Banks' Foreign Exchange & Export Credits Department; reports on foreign exchange transactions from deposit-taking institutions; the Caribbean Tourism Organisation; money transfer agents; and various Government departments. External sector statistics are crucial to the management of the Barbadian economy since they are used to provide explanations for changes in the foreign reserves of the monetary authorities, and give a sense of how much of the island's economic development is attributable to international trade, income, transfers and finance. In addition, the statistics are used in the estimation of Gross Domestic Product (GDP) and other indicators of aggregate demand.

The International Monetary Fund (IMF) is the institution responsible for the development of guidelines that govern the compilation of BOP statistics worldwide. The first BOP manual (BPM1) was published by the IMF in January 1948. Subsequently, the second edition (BPM2) was published in 1950, followed by the third edition (BPM3) in 1961 and the fourth edition (BPM4) in 1977. The fifth edition of the BOP manual (BPM5) and *System of National Accounts 1993* were both released in 1993 and for the first time there was a deliberate attempt to establish congruence between the two manuals. The production of BPM6 was in response to developments in the structure of multinational corporations, cross-border production processes and international finance. The manual was produced in parallel with the update of the *OECD Benchmark Definition of Foreign Direct Investment*, and the *System of National Accounts 2008*

(SNA 2008) to ensure harmony across these manuals. The pre-publication drafts of BPM6 were released in 2007 and 2008, and in 2009 the final version of the manual was published.

The Central Bank of Barbados adopted the BPM6 guidelines in 2012 but the compilation of BOP statistics under BPM6 started with data from the year 2011. Prior to BPM6, Barbados' BOP statistics were compiled following the standards of BPM5. In order to have a consistent time series of BOP statistics that provide an enhanced level of detail relative to BPM5 and are compliant with current international best practice, the External Sector Unit at the Bank embarked on an exercise to bring the historical data for the period, 1967 – 2010 in line with BPM6 standards. As such, this paper documents the conversion exercise as well as the core concepts and conventions of BPM6. The paper also discusses data sources and some of the compilation practices of the Bank.

Campbell and Bynoe-Mayers (1996) documented the results of a similar exercise when Barbados implemented BPM5 in 1995 and the BPM4 statistics from 1979 to 1994 were converted to the BPM5 standard. The authors concluded that the higher level of detail required by BPM5 improved the ability for the statistics to be thoroughly analysed.

The rest of the paper is as follows. Section 2 defines and explains the key concepts of international accounts and how these accounts were affected by the adoption of BPM6 guidelines. In Section 3, the treatment of companies operating within the offshore financial sector is explored. Section 4 provides the concluding remarks and recommendations.

2. Review of International Accounts and Conversion Exercise

External sector statistics cover the international accounts of an economy. The international accounts, which are graphically depicted in Figure 1, summarise the economic relationships between residents of a given economy and nonresidents. They comprise the following:

- (a) the balance of payments (BOP), which is defined in Section 1;
- (b) the international investment position (IIP), a statement that shows the value of foreign financial assets and foreign liabilities of residents of an economy at a point in time; and
- (c) the *other changes in financial assets and liabilities account*, which captures non-transaction changes such as fluctuations in the price of securities, real estate revaluations, exchange rate movements and other volume changes, reconciles the BOP and IIP for a specific period.

The international accounts are governed by a set of accounting principles. The three main principles are: the double-entry system, accrual accounting and the market-price valuation principle.

Given the nature of the project, this paper focuses mainly on the BOP, which consists of three broad accounts: the current account, capital account and financial account. A double-entry accounting system is followed, that is, each transaction is represented by a debit and a credit of equal values. For the current and capital accounts, the outflow of resources is recorded as a debit, while the inflow of resources is recorded as a credit. In the financial account, a debit represents either an increase in financial assets or a decrease in liabilities, while a credit represents either an increase in liabilities or a decrease in financial assets. In theory, the sum of all the debit entries should equate to the sum of all the credit entries. However, this does not hold in practice because of less-than-perfect source data, survey coverage and survey response rates. The difference between debits and credits results in the category *net errors and omissions*. Table 1 categorises different types of transactions into debits and credits.

Figure 1: Outline of International Accounts

	Current Account Capital Account	BOP	
Beginning of Period Net IIP	Financial Account Transactions	Other Changes in Financial Assets and Liabilities Account 1. Revaluations: – Exchange rate changes – Price changes 2. Other changes in volume	End of Period Net IIP

Accrual accounting records flows at the time economic value is created, transformed, exchanged, transferred, or extinguished. This means that under the accrual system flows are registered when the economic ownership of a good or asset changes, and services are provided. In other words, transactions are recorded in the period they occur, rather than the time the payment is made or received.

Market prices for transactions refer the value that willing buyers pay to acquire goods, other assets, services and labour from willing sellers, solely on the basis of commercial considerations. Positions of financial assets and liabilities should reflect their market values on the reporting date of the IIP.

It is important to note that while BOP statistics are typically used to help track the movement of an economy's foreign reserves, the transactions included in the BOP need not involve the exchange of foreign currencies. In other words, a BOP transaction may be settled in the local currency of the compiling economy, barter, or without any compensation at all. The critical criterion is that there is an exchange of a resource between a resident and nonresident.

Table 1: The Balance of Payments Recording System

Debits	Credits
Current Account	
Imports of goods and services	Exports of goods and services
Wages and salaries paid to nonresident employees	Wages and salaries earned from nonresident employers
Income expense on equity	Income from equity investments
Interest expense	Interest income
Rental expense related to the use of natural resources	Rent earned from the provision of natural resources
Taxes and subsidies on products and production paid to nonresidents	Taxes and subsidies on products and production from nonresidents
Current transfers to nonresidents	Current transfers from nonresidents
Capital Account	
Acquisition of nonproduced, nonfinancial assets	Disposal of nonproduced, nonfinancial assets
Capital transfers to nonresidents	Capital transfers from nonresidents
Financial Account	
Net acquisition of financial assets	Net incurrence of liabilities
Debit (+)	Credit (+)
Credit (-)	Debit (-)

The revision exercise was aided significantly by the use of the BPM5 to BPM6 Conversion Matrix (in Microsoft Excel) that was provided by the IMF's Statistics Department. In order to take full advantage of the conversion matrix, the historical statistics from 1967 to 1978 were converted from BPM3 to BPM5 basis, since statistics from 1979 to 2010 were already following BPM5 principles. Given the information available in the BPM3 statistical tables, the conversion from BPM3 to BPM5 involved the following steps:

- (1) for the merchandise trade balance, the use of imported goods valued at cost, insurance and freight (CIF) was replaced with imports valued on a free on board (fob) basis;

(2) insurance claims were removed from insurance services and placed under current transfers;

(3) the sale of goods procured in ports to nonresidents (formerly Stores and Bunkers) were moved from transportation credits to merchandise exports;

(4) investment income and salaries paid to staff that are employed by foreign embassies and international organisations were separated from services and relocated to the Income Account, which was established under BPM5;

(5) all transactions reported under capital account were moved to the financial account because in BPM3 the term capital account was used to describe the account that captured the *net acquisition of financial assets* and the *net incurrence of liabilities*.

2.1. Current Account

The current account shows flows of goods, services, primary income, and secondary income between residents and nonresidents. The balance on the current account is difference between the credits and debits of the *goods and services account*, *primary income account*, and *secondary income account*. The current account to an economy is very similar to that of an income statement to a company, except for the fact that the current account only records transactions between residents and nonresidents. Throughout this section, the linkages between the current account and the SNA will be expressed algebraically.

2.1.1. Goods and Services Account

The *goods and services account* shows transactions between residents and nonresidents that are outcomes of production activities. As such, this account can be divided into two main components, international trade in goods and international trade in services. The export of goods and services are credit entries, while the import of goods and services are debit entries. The balance on the goods and services account is equivalent to the net trade of goods and services with rest of the world. This balance is also featured in the national accounts identity of an open economy shown in Equation 1, where GDP Y is the sum of non-capital goods and services consumed by households and non-profit organisations C , Government's consumption of non-capital goods and services G , investment (or gross capital formation) I and the export of goods and services X , minus the import of goods and services M .

$$Y=C+G+I+(X-M) \tag{1}$$

2.1.1.A. Goods

Goods are tangible items for which ownership right can be established and whose economic ownership can be transferred from one entity to another through transactions. The goods component of the goods and services account captures the change in economic ownership of a

good from a resident to a nonresident or vice versa. In the standard presentation of BOP, goods are broken out into three sub-categories: *general merchandise on BOP basis*, *net exports of goods under merchanting* and *nonmonetary gold*. Table A1 shows changes in the goods and services account.

As it relates to *general merchandise on BOP basis*, the Bank receives exports (f.o.b.) and imports (c.i.f.) from the Barbados Statistic Service (BSS) who obtains the raw data from the Barbados Customs Department. This trade data is then adjusted to correct for a number of issues that may distort values of the merchandise exports and imports. For example, adjustments are made for returned goods; timing of the change in economic ownership; goods acquired or sold by carriers away from territory of residence; and the exclusion of international transport and insurance charges from the value of imports (c.i.f.).

In BPM6, exceptions to the ownership principle that affected the value of general merchandise exports and imports under BPM5 have been eliminated. For instance, the personal effects of individuals changing residency are no longer captured under *general merchandise* or anywhere else in the international accounts. The shipment of *goods for processing* (such as goods sent abroad for processing and goods returned from abroad after processing) between economies have been removed from *general merchandise* because no change in the ownership of the goods occurred. However, the processing fee should be captured as a service under *manufacturing services on physical inputs owned by others* rather than having the value of the service reflected in the value of the processed good.

For Barbados, petroleum made up the majority of *goods for processing*. From the late 1990s up until mid-2015 Barbados' national oil company sent locally-mined crude oil overseas to be processed into fuel oil. The exclusion of such goods that cross borders for processing from *general merchandise* led to substantially lower values of exports and imports compared to previously published statistics on *general merchandise*. On the services side, the processing fees paid to the nonresident refinery by the national oil company translated into an increase in the import of services.

Other BPM6 changes include the procurement of goods in ports by carriers are now being captured as general merchandise rather than as a separate item under goods. Goods for own use or to be given away acquired by travelers that are in excess of customs thresholds are included in general merchandise, rather than travel services as was the case with BPM5. Repairs on goods, now referred to as *maintenance and repair services not included elsewhere* have been moved from goods to services.

Merchanting of goods occurs when goods are purchased by a resident (of the compiling economy) from a nonresident and subsequently resold to another nonresident without the goods ever physically crossing the borders of the compiling economy. This activity is no longer classified as a service. Instead, it has been renamed *net exports of goods under merchanting* and

is classified as trade in goods under BPM6 guidelines. Since *net exports of goods under merchanting* over the review period averaged close to 10% of Barbados' exports of goods and services, the adoption of BPM6 caused a significant reduction in the trade in services surplus and an improvement in the merchandise trade deficit.

2.1.1.B. Services

Services are activities (or intangible products) that change the conditions of the consuming agents, or facilitate the exchange of goods or financial assets. Table A1 illustrates some of the changes in services from BPM5 to BPM6.

Travel services, Barbados' single largest net export category, did not undergo any methodological or conceptual changes due to BPM6. The bulk of Barbados' statistics on travel exports are obtained from the Caribbean Tourism Organisation who collects the estimated expenditure of tourists in Barbados via the use of exit surveys. The expenditure of non-leisure travellers such as foreign students and nonresidents travelling for medical purposes are obtained by the Bank through the survey of scholastic institutions and health care facilities. Data on travel imports, however, are collected through the Banks' BOP and IIP Survey and reports on foreign exchange transactions prepared by commercial banks and other authorised foreign exchange dealers.

Goods and services acquired by a nonresident construction company from the economy where the construction work is being undertaken are now classified as construction services export of that economy, rather than *other business services* as previously recorded in BPM5. The purchase and sale of patents and copyrights were included in the capital account but since they are now classified as produced assets, they are recorded under research and development services.

Under BPM6, nonlife insurance services are calculated as *Gross premium earned + Premium supplements – (Claims plus adjustment for claims volatility, if necessary)*, while life insurance services are calculated as *Gross premium earned + Premium supplements – Benefits due – Increase (+ decrease) in life insurance reserves*. Premium supplements represent income attributable to policy holders from insurance reserves. In BPM5, the calculation of insurance services was simply *Gross premiums earned – Claims*. During a technical assistance mission in 2012, the Bank determined that the ratio of insurance services to the gross premiums tends to fall within the vicinity of 15% for both exports and imports of insurance services. As such, exports and imports of insurance services are estimated as 15% of gross premiums earned and gross premiums expensed, respectively. The remaining 85% of gross premiums are considered to be current transfers in the case of nonlife insurance, and an increase in life insurance reserves in the financial account for life insurance.

Postal and courier services have been moved from communication services to transport services, which was previously called transportation services. *Royalties and license fees* are now called *charges for use of intellectual property not included elsewhere*.

Financial Intermediation Services Indirectly Measured (FISIM) and other implicit financial services traded between residents and nonresidents are included in services, with a calculation method that is based on a reference rate of interest. However, the Bank does not account for FISIM in the BOP statistics because the available information is sufficient to estimate FISIM imports.

2.1.2. Primary Income Account

The primary income account, previously referred to as the income account in BPM5, shows the cross-border income receipts and expenses related to the production process, financial instruments, and the rental and use of natural resources. This account comprises: compensation of employees, investment income, rent as well as *taxes and subsidies on products and production*. Net primary income flows provide a bridge between gross domestic product (GDP) and gross national income (GNI).

Compensation of employees covers remuneration in cash or kind for the labour input to the production process. It arises when the employer and the employee are resident in different economies. Cross-border compensation of employees arises only when there is an employee-employer relationship between the resident and nonresident.

Investment income represents income on equity, and income on debt instruments. Income on equity consists of dividends and reinvested earnings. On the other hand, income on debt refers to interest usually related to debt securities and other debt instruments.

The updated BOP manual clarified the treatment of superdividends, the time recording of dividends and reinvested earnings as a new terminology. Superdividends are exceptional payments by corporations to their shareholders that are made out of accumulated reserves or sales of assets. Such flows should not be treated as dividends but rather, they should be reported as a reduction in equity in the financial account. Dividends are to be recorded at the time the shares go ex-dividend. The term reinvested earnings is used for all direct investment enterprises and thus subsumes the BPM5 term undistributed branch profits.

Rent covers income for putting natural resources at the disposal of another economic agent. Previously, rent was a part of other investment income.

Taxes and subsidies on products and production include value-added tax, import duties, export taxes, excise, payroll taxes, recurrent taxes on buildings and land, and business licenses. To be conceptually consistent with the SNA, these taxes and subsidies were reclassified from current transfers in BPM5 to primary income, since they are part of the measure of transactions at market prices.

If net primary income account balance PI is added to Equation 1, the result is gross national income (GNI):

$$GNI = C + G + I + (X - M) + PI \quad (2)$$

2.1.3. Secondary Income Account

The secondary income account, previously referred to as current transfers in BPM5, records current transfers between residents and nonresidents. A transfer describes a situation where one party provides a good, services or some other resource to another party without receiving anything in return. In the case of current transfers, the goods and services provided must be of a non-capital nature and the funds must be used to finance current expenditure. Examples of current transfers include but are not limited to: food supplies, clothing, medical services and/or funds for acquisition of such goods and services. Current transfers tend to increase the income and consumption possibilities of the recipient, while decreasing the income and consumption possibilities of the donor.

When the secondary income account balance (net current transfers from nonresidents) CT are added to Equation 2, gross national disposable income (GNDI) is the outcome:

$$GNDI = C + G + I + (X - M) + PI + CT \quad (3)$$

National savings S is the amount remaining after private sector and government consumption is subtracted from GNDI:

$$S = GNDI - C - G = I + (X - M) + PI + CT \quad (4)$$

Since,

$$Current\ Account\ Balance = (X - M) + PI + CT = CAB \quad (5)$$

The *Current Account Balance* can be expressed as,

$$CAB = S - I \quad (6)$$

2.2. Capital Account

The capital account comprises: the *acquisition and disposal of nonproduced, nonfinancial assets* and *capital transfers*. Often, the term capital account is incorrectly used when making reference to what are actually financial account transactions. The reason for the misunderstanding is that BOP manuals prior to BPM5, captured changes in financial assets and liabilities in an account called the capital account. In the BPM6 presentation, the capital account is shown as a separate and distinct from the financial account.

Acquisition and disposal of nonproduced, nonfinancial assets records transactions between residents and nonresidents that involve the outright sale or purchase of natural resources, contracts, leases, licenses, and marketing assets (goodwill). The purchase of land by the Government of Barbados in a foreign territory is an example of an *acquisition* of a *nonproduced, nonfinancial asset*. Under BPM5, the purchase and sale of patents and copyrights were included

in this category but since they are now classified as produced assets, they are recorded in the services component of the current account. The acquisition and disposal of nonproduced, nonfinancial assets are rarely recorded in the BOP due to the infrequent nature of the activity and the difficulty in tracking items such as goodwill.

Capital transfers consist of debt forgiveness and other capital transfers between residents and nonresidents. Debt forgiveness describes a situation where an entity forgives all, or part of the debt obligation of a debtor under a mutual agreement. It is important to note that debt forgiveness is different from a debt write-off in the sense that debt forgiveness is based on a bilateral agreement, while write-offs are unilateral in nature. Debt write-offs between residents and nonresidents are not reported in the international accounts as a transaction, but rather as a negative entry in *other volumes changes* of the Integrated IIP. Other forms of capital transfers include large legacies, and the donation of fixed assets, nonproduced assets, services directly related to the formation of fixed capital and cash for the purpose of improving or acquiring a fixed asset. For Barbados, the conveyance of legacies to nonresidents is the most common transaction recorded under capital transfers.

In BPM6, *migrant transfers* (the cross-border movement of personal effects, financial assets and liabilities of persons changing residency) are no longer recorded under capital transfers because such movements are not resident-to-nonresident transactions. The personal effects of migrants are not captured anywhere in the international accounts. However, the cross-border movement of financial assets and liabilities of persons changing residency is recorded in *other volumes changes* of the Integrated IIP.

2.3. Financial Account

The financial account as shown in Table 2 records transactions that involve financial assets and liabilities that take place between residents and nonresidents. Financial assets are claims on entities for which rights are enforced and from which economic benefits may flow to the owner of the asset. In the international accounts, there are five types of financial assets: equity, debt instruments, financial derivatives, employee stock options and monetary gold. Worthy of note, nonparticipating preference shares are classified as debt instruments rather than equity because they generate a fixed income but do not provide for participation in the distribution of the residual value of an incorporated enterprise on dissolution. All financial assets, with the exception of gold bullion held as reserve assets, have counterpart liabilities. Therefore, the liability side of the financial account has the same categories as the asset side, except for monetary gold. For debt instruments on the assets and liabilities sides of the financial account and IIP, accrued interest not yet paid should be included with the outstanding principal amount of the financial asset or liability on which it accrues.

In business accounting, most liabilities tend to be debt instruments. Debt describes an arrangement where one party has a claim on another party that requires the payment of principal

and/or interest at some time in the future. Financial derivatives and employee stock options are sometimes classified as liabilities but they are not debt instruments based on the definition. Unlike business accounting, the equity of an enterprise is recorded as a liability in macroeconomic statistics. Hence, the value of an equity investment in a Barbadian entity by foreign investor is captured on the liability side of the financial account and IIP.

Transaction changes in financial assets are referred to as *net acquisition of financial assets*, while the transaction changes in liabilities are referred to as *net incurrence of liabilities*. The *net acquisition of financial assets* and *net incurrence of liabilities* are reported under the five functional categories of the financial account: direct investment, portfolio investment, financial derivatives, other investment, and reserve assets (for *net acquisition of financial assets* only).

Transactions in the financial account may have corresponding entries either in the current account, the capital accounts or the financial account. For example, the import of engineering services is a debit entry in the current account and the corresponding credit entry may be applied to financial account as a reduction in either *currency & deposits* assets or *reserve assets*, or it may result in the incurrence of a liability under *trade credits and advances*.

The overall balance of the financial account indicates whether an economy is a net lender or net borrower with the rest of the world. An economy is a net lender if their net acquisition of financial assets outweighs their net incurrence of liabilities on a consistent basis. For the economy that is a net borrower, net acquisition of financial assets are usually outweighed by the net incurrence of liabilities. In principle, the financial account is equal to the sum of the balances on the current and capital accounts. In the case of Barbados where the current and capital accounts are usually in deficit, it is said that these deficits are financed by the financial account.

Table 2: Overview of Financial Account

Financial Account			
	Net Acquisition of Financial Assets	Net Incurrence of Liabilities	Financial Account Balances (Net Lending/Net Borrowing)
Total Financial Account Flows			
Direct Investment			
Equity			
Debt instruments			
Portfolio Investment			
Equity			
Short term debt securities			
Long term debt securities			
Financial Derivatives and Employee Stock Options			
Other investment			
Equity			
Debt instruments			
Reserve Assets			
Monetary Gold			
Equity			
Debt instruments			
Financial derivatives n.i.e.			

In BPM5, increases in financial assets were shown with a negative sign (-) and decreases were represented by a positive number. However, in BPM6, this convention is abandoned for the more intuitive presentation where increases in financial assets are shown as positive numbers. Another conventional difference between the two manuals is that the financial account balance is now calculated as *net acquisition of financial assets* minus *net incurrence of liabilities*, rather than *net incurrence of liabilities* minus *net acquisition of financial assets*. As a consequence, there is a sign change on the financial account balance in the standard BOP presentation prescribed by BPM6. It should be noted that the change in signage on financial account balance is not featured in the version of Barbados' BOP statistics that are disseminated on the Bank's website. This decision was taken because the sign change will result in a negative financial account balance for Barbados and the Bank found it counterintuitive to think of the deficits on the current and capital accounts being financed by a negative financial account balance.

As noted earlier, there are five function categories. These categories are the primary classifications used for financial transactions. The remainder of this section focuses on each functional category.

2.3.1. Direct Investment

Direct investment, commonly referred to as foreign direct investment (FDI), describes a situation where a resident in one economy has a significant degree of influence on the management of an enterprise in another economy. This influence is achieved when an entity owns equity in a nonresident that gives rise to 10% or more of the controlling interest in the nonresident entity, or indirectly by having control in another entity that has at least 10% voting control in the nonresident entity. One should note that entities in a direct investment relationship are referred to as affiliates or affiliated enterprises. Therefore, FDI statistics represent the flows and positions of equity and debt between affiliated enterprises such as direct investors, direct investment enterprises and fellow enterprises.

In order to fully understand direct investment, the terms related to the concept must be clearly defined. Below are some critical definitions related to FDI.

A direct investor (DI) is an enterprise, resident in an economy, which owns equity that entitles it to 10% or more of the voting power in a nonresident direct investment enterprise. The equity component of FDI covers both the ownership of shares and real estate. Debt finance provided by direct investors and other affiliates is also considered to be FDI. In the first four balance of payments manuals, direct investment was based a 25% equity rule rather than a 10% rule.

A direct investment enterprise (DIE) is an entity subject to the control or influence of a direct investor. As such, a direct investment enterprise can either be a subsidiary or an associate.

Fellow enterprises (FE) are those entities that share a common direct investor, but which neither is a direct investor in the other, e.g. sister companies in different countries. Fellow enterprises were not addressed in BPM5.

Reverse investment arises when a direct investment enterprise extends a loan to its direct investor(s) or purchases shares in its direct investor(s), provided the shares account for less than 10% of the voting power.

Reinvestment earnings represent the portion of a direct investment enterprise's retained earnings (or accumulated losses) that is attributable to the immediate DI. The direct investor's share of the retained earnings of the DIE is equivalent to the percentage share ownership of the DI in the DIE. Reinvestment earnings are recorded in the financial account under direct investment equity, while the counterpart entry is reported in the primary income account as reinvested earnings. For BOP statistics published by the Bank, both entries in the primary and financial accounts are referred to as reinvested earnings to avoid any confusion that may arise due to the subtle difference in terminology.

In terms of the changes from BPM5 in the direct investment category, the most significant changes include the introduction of fellow enterprises and the switch from presenting FDI on a directional basis to the gross asset/liability basis. Under the directional basis, investment in the form of equity and debt by the DI in the DIE were shown net of reverse investment. However, the gross asset/liability principle dictates that there be no netting of reverse investment from the investment that runs from the DI to the DIE, rather, assets and liabilities are kept on separate sides of the financial account and IIP.

Since BPM5, flows and positions related to nonpermanent debt between selected affiliated financial corporations (deposit-taking institutions, investment funds, and other financial intermediaries except insurance companies and pension funds) were excluded from direct investment category of the financial account and IIP. However, this calculation of direct investment was not adopted by the Bank previously. With the release of BPM6, this convention was extended to permanent debt as well. As such, during the conversion exercise, the opportunity was also taken by the Bank to correct the misclassification of debt between the selected affiliated financial corporations. Therefore, debt between the aforementioned affiliated financial corporations was shifted from *direct investment* to long-term loans under *other investment* (since the debt instruments are assumed to be long-term loans that are not in the form of securities).

The IMF argues that the exclusion of debt transactions and positions between the aforementioned affiliated financial corporations is motivated by the idea that the flow of funds related to debt between such entities is generally used to provide loans to customers. They believe that the mere provision of loans to clients is not strongly connected to the concept of FDI. Although the Bank embraces the treatment of these debt flows for the sake of international comparability of statistics, this is one aspect of the manual that the authors find difficult to rationally accept. The difficulty stems from the fact that at the core, debt between affiliated financial corporations are no different from debt between enterprises in other industries, in the sense that the funds are used to finance the business activity of the borrowing entity.

Given that the equity requirement for direct investors was reduced from 25% to 10% with the release of BPM5, the FDI statistics for the period 1967-1978 are a bit inconsistent with those from 1979 onward.

2.3.2. Portfolio Investment

Portfolio investment covers international transactions and positions involving equity and debt securities, other than those categorised under direct investment or reserve assets. There are three types of portfolio investment: equity and investment fund shares; short-term debt securities and long-term debt securities. Securities are financial instruments that are designed to be easily traded in organised exchanges or over the counter.

Equity and investment fund shares are cross-border transactions and positions involving equity securities that give rise to less than 10% voting power in an unaffiliated entity. The new guidance as outlined in BPM6 designated the reinvestment of earnings in investment funds (such as mutual funds) as an additional component in equity and investment fund shares under portfolio investment. However, information on the reinvestment of earnings in investment funds by portfolio investors is not currently collected by the Bank.

Short-term debt securities are debt securities with original maturities of one year or less that are traded between unaffiliated parties. Examples of short-term debt securities include money-market instruments such as treasury bills and certificates of deposits. On the other hand, long-term debt securities are those with original maturities that exceed one year, such as bonds and debentures.

It should be noted that the portfolio investment statistics prior to 1979 are based on the less-than-25% equity rule rather than the less-than-10% rule.

2.3.3. Financial Derivatives (other than reserves) and Employee Stock Options

Financial derivatives and employee stock options have similar features, such as a strike price and some of the same risk elements. However, employee stock options are different because they are designed to be a form of remuneration.

2.3.3.A. Financial Derivatives (other than reserves)

A financial derivative is a financial instrument that is linked to another financial instrument, commodity or indicator. Essentially, the derivative itself is a contract between two or more parties through which, financial risks such as interest rate risk, foreign exchange risk, equity and commodity price risks or credit risk can be traded in their own right in financial markets. The value of a financial derivative is determined by fluctuations of the underlying item. The most common underlying items include stocks, debt instruments, commodities, currencies and market indexes. In the international accounts, transactions and positions in financial derivatives are treated separately from the values of any underlying items to which they are linked because derivatives speak to risk transfer rather than supply of resources.

The risk embodied in financial derivatives can be traded either by trading the contract itself or by creating a new contract (with equal but opposite risks characteristics) to offset the risks of the existing contract. In many cases, derivatives contracts are settled by payments of net amounts in cash, rather than by the delivery of the underlying items. Once a financial derivative reaches its settlement date, any unpaid amount is reclassified as accounts receivable/payable.

There are two broad types of financial derivatives: forward-type contracts and options. A forward-type contract is an unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item at an agreed contract price (the strike price)

on a specified date. Forward-type contracts include futures and swaps (other than central bank swap arrangements, gold swaps, and credit default swaps). In this situation, the term unconditional means that there is an obligation to settle the contract on a specified date. On the other hand, with an option, the purchaser pays a premium to the seller (writer) for the right but not the obligation to buy (call option) or sell (put option) a particular underlying item at a strike price on or before a specified date.

Three major differences exist between forward-type contracts and options. For options, an upfront premium payment is usually required at inception, whereas no such payment is required for forward-type contracts. Under an option contract, the buyer has an asset, and the seller has a liability, and this creditor/debtor relationship remains unchanged throughout the life of the contract, while for forward-type contracts the creditor/debtor relationship may change at several points during the life of the contract. For options, the decision of whether or not to settle the contract at maturity is made by the buyer, whereas redemption at maturity is unconditional for a forward-type contract.

Financial derivatives help to reduce transaction costs and price exposure by hedging against financial risks. A financial derivative contract can be considered financial assets because it represents a resource over which ownership rights are enforced and from which future economic benefits may flow to the owner. One must understand that financial derivatives are neither debt nor equity. They cannot be classified as debt since no principal amount is advanced that must be repaid. Financial derivatives also fail to meet the definition of equity because they do not represent a claim on the residual value of an entity. Furthermore, derivatives are not used to raise or provide finance. Therefore, no investment income accrues on financial derivatives.

The international accounts record financial derivative flows and positions between residents and nonresidents. The value that accrues over the life of the contract, commonly referred to as gains/losses, is recorded as revaluations of derivative assets and liabilities in the Integrated IIP Statement. Any payments made at settlement are recorded as transactions in financial derivative assets and liabilities. Derivatives are characterised by small positions and large flows. Transactions and revaluations are often of similar magnitude but with opposite signs.

When recording financial derivatives on a gross basis, a cash payment is generally reflected as a negative transaction change in derivative liabilities, and a cash receipt is shown as a negative transaction change in derivative assets. See Boxes 1 and 2 for examples of the treatment of forward-type contracts and option contracts, respectively.

Box 1: Numerical Example of the Treatment of a Forward-Type Contract in the International Accounts

At Jan 1, 2014, a Barbadian entity and a UK entity entered swap arrangement where BDS\$300.00 is exchanged for pounds at a strike price of £1: BDS\$3. The swap will be reversed on Jan 1, 2015. Below the swap is illustrated in Barbados' international accounts in BDS\$.

In 2014, the Barbadian entity acquires a financial asset by holding British Pounds but at the same time Barbados incurred a liability because the UK entity has a claim on the Central Bank of Barbados by virtue of holding Barbados dollars. No transactions are recorded under financial derivatives because at inception a forward contract usually involves an exchange of risk exposures of equal market values.

2014						
	Opening Position	Transactions	Exchange Rate Changes	Price Changes	Other Volume Changes	Closing Position
ASSETS						
Currency & deposits	80,000	300				80,300
Financial Derivatives	0					0
LIABILITIES						
Currency & deposits	10,500	300				10,800
Financial Derivatives	0					0
Net IIP	69,500	0				69,500

On Jan 1, 2015, the prevailing market exchange rate was £1: BDS\$3.50. As a result, the Barbadian entity delivered BDS\$350 for £100 at the settlement date. Since the British Pound appreciated against the Barbados dollar, the Barbadian entity suffered a capital loss of BDS\$50 (350-300), which is recorded as a derivative transaction on the liability side of financial account and IIP.

2015						
	Opening Position	Transactions	Exchange Rate Changes	Price Changes	Other Volume Changes	Closing Position
ASSETS						
Currency & deposits	80,300	-350				79,950
Financial Derivatives	0					0
LIABILITIES						
Currency & deposits	10,800	-300				10,500
Financial Derivatives	0	-50	50			0
Net IIP	69,500	0	-50			69,450

Box 2: Numerical Example of the Treatment of an Option Contract in the International Accounts

At Jan 1, 2014, a Barbadian entity bought a call option from a US entity for BDS\$2,000 which gives the Barbadian company the right to buy 20,000 shares in the US entity for BDS\$3 per share (present market value) on Jan 1, 2015. Below the option is illustrated in Barbados' international accounts in BDS\$.

2014						
	Opening Position	Transactions	Exchange Rate Changes	Price Changes	Other Volume Changes	Closing Position
ASSETS						
Currency & deposits	80,000	-2,000				78,000
Financial Derivatives	0	2,000				2,000
Equity	7,000					7,000

On Jan 1, 2015, when the contract expired, the market price of the share was BDS\$4. By exercising the option, Country A effectively pays BDS\$60,000 for 20,000 shares with a market value of BDS\$80,000. Therefore, the Barbadian entity made a gain of BDS\$20,000 in 2015.

2015						
	Opening Position	Transactions	Exchange Rate Changes	Price Changes	Other Volume Changes	Closing Position
ASSETS						
Currency & deposits	78,000	-60,000				18,000
Financial Derivatives	2,000	-20,000		18,000		0
Equity	7,000	80,000				87,000

2.3.3.B. Employee Stock Options

An employee stock option (ESO) is a contract whereby an employer provides an employee with the option to purchase a set number of shares in the company at a predetermined price (strike price) either a stated date (vesting date) or within a period of time (exercise period). ESOs are a bit different from regular exchange-traded options because they are not generally transferable and there is no put option. If a stock option granted to employees can be traded on financial markets without restriction, it is classified as a financial derivative. Moreover, employees must wait a specified vesting period before being allowed to exercise the option. When an ESO is exercised, the transaction is recorded under ESOs and the corresponding entry can either be compensation of employees, direct investment or portfolio investment. Stock options offered by a company to providers of goods and services are also included as ESO transactions, although these are not employees of the company.

2.3.4. *Other Investment*

Other investment comprises: other equity; currency and deposits; loans; insurance, pensions, and standardise guarantee schemes; trade credits and advances; other accounts receivable/payable and allocation of SDRs. Positions and flows recorded under *other investment* are generally between unaffiliated entities.

Other equity is equity that is not in the form of securities and do not qualify as either direct investment or reserve assets. Participation in some regional and international organisations is not in the form of shares and so is classified as *other equity*. While *other equity* was not a separate category in BPM5, the guidelines stated that capital subscriptions to international nonmonetary organisations were to be classified under *other assets/liabilities*. From the Bank's first publication of BOP statistics in 1976, data on the Government of Barbados' capital subscriptions to regional and international organisations were reported. As such, the historical series for capital subscriptions were migrated to the asset side of *other equity* during the conversion exercise.

Currency and deposits, which comprise foreign currency holdings and deposits in nonresident deposit-taking institutions, did not undergo any changes in definition or coverage as a result of the new manual. Given the increased use of cryptocurrencies in recent times, the authors noticed that there are no guidelines for the treatment of virtual currencies in BPM6. According to He et al. (2016), "Virtual currencies are digital representations of value, [usually] issued by private developers and denominated in their own unit of account." Virtual currencies cover asset-backed virtual currencies, cryptocurrencies and rewards from select loyalty programmes. None of these products satisfy BPM6's definition of currency because they were not issued or authorised by any central bank or government and thus, do not represent a claim on a central bank or government. Virtual currencies which give rise to a claim on a nonresident provider of goods and services are best classified as *trade credits and advances*, while those that represent a claim on nonresident beyond goods and services should be reported as *other accounts receivable/payable*. On the other hand, those virtual currencies with no claim on the issuer, such as cryptocurrencies like Bitcoin, do not meet the definition of a financial asset or liability according to BPM6.

Using a host of scientific measures, Wilson-Nunn and Zenil (2014) show that the behavior of Bitcoin is quite similar to that of gold, silver and stocks as measured by the major stock market indices. In 2014, the Central Bank of Finland classified Bitcoin as a commodity. The authors agree with the decision taken by Finland and recommend that the IMF classify cryptocurrencies as an "intangible good" in the goods section of the current account. A new sub-category should be introduced under trade in goods to record the use of virtual currencies (which have no claim on their issuers) in the settlement of cross-border transactions. Additionally, central banks should seek to record the stock of these currencies in their economies at least at the end of each calendar year to enhance their surveillance of the financial sector and the wider economy. With this data recorded at the national level, the IMF can attempt to capture the data by possibly including an additional request in the supplementary-items section of their report form for BOP statistics.

Payments to nonresidents with these currencies should be recorded as an export of virtual currencies, while the receipt of such currencies from nonresidents should be reported as an import. The use of virtual currencies (which have no claim on their issuers) in international trade will resemble barter, from the perspective that a good is being exchanged for another good or service.

Insurance, pension, and standardised guarantee schemes includes prepayments of insurance premiums, outstanding insurance claims, claims and liabilities related to life insurance policies and pensions, as well as claims and liabilities associated with standardised schemes. This categorization was introduced in BPM6. As mentioned earlier, the Bank estimates 85% of gross life insurance premiums as contributions to the life insurance reserves of the relevant insurance company, while benefits due to policy holders are recorded as reductions in the reserves. In BPM5, insurance reserves, pension entitlements and standardised schemes were not recognised as financial assets and liabilities, but the prepayment of insurance premiums and outstanding insurance claims were recorded in *other assets/liabilities*.

Trade credits and advances consist of credit extended by suppliers of goods and services to their customers and advance payments by customers for goods and services not yet provided. The authors recommend that this definition be extended to include the physical and electronic possession of vouchers, gift cards and rewards from loyalty programmes such as airline miles that represent a claim on unaffiliated nonresident providers of goods and services. For instance, when a resident earns airline miles from a foreign airline, the BOP entries should reflect a credit in the secondary income account and a debit on the asset side of *trade credits and advances*. With the wider definition, *trade credits and advances* will cover a broader range of financial assets and liabilities that are directly related to international trade.

The allocation of SDRs to IMF members is included under *other investment* as the incurrence of a liability. The corresponding entry to SDR allocations, which is recorded under reserve assets as holdings of SDRs, represents the unconditional right of a member of the SDR Department to obtain foreign reserves (at an interest cost) from other members of the SDR Department. Prior to BPM6, allocation of SDRs was not recognised in the international accounts.

Other accounts receivable/payable, previously termed *other assets and liabilities*, includes receivables, payables and prepayments related to taxes, compensation of employees, dividends from portfolio investment and *other investment*, the purchase and sale of securities, as well as social contributions and benefits. Basically, this category accounts for transactions and positions of financial assets and liabilities other than those captured under direct investment, portfolio investment, financial derivatives and employee stock options, reserve assets, or the other categories of *other investment*.

2.3.5. Reserve Assets

Reserve assets consist of those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments needs, influencing the currency exchange rate of an economy, and for other purposes, such as maintaining confidence in economies. Reserve assets are composed of monetary gold (gold bullion and unallocated gold accounts), holdings of special drawing rights (SDRs), investments in debt instruments other than SDRs, equity and financial derivatives.

In the past the Central Bank of Barbados would have been using the concept of net international reserves, where foreign currency deposits of local commercial banks at the Bank are subtracted from reserve assets (or gross reserves). However, the Bank replaced net international reserves with reserve assets in the BOP statistics because the aforementioned foreign currency deposits are available to and controlled by the Bank.

2.4. International Investment Position

The international investment position (IIP) is a statement that shows the stock of external financial assets and liabilities at a point in time. In essence, the IIP is the balance sheet of an economy's claims on nonresidents, liabilities to nonresidents, gold bullion held as monetary gold. In other words, it shows stock values of the financial account categories at a particular point in time. The IIP is a subset of the national balance sheet. As such, the net IIP (the stock of external financial assets minus the stock of liabilities) combined with the stock of nonfinancial assets equals the net worth of the economy. In addition to the standard IIP statement, there is the Integrated IIP Statement (shown in Table 3) which reconciles the opening and closing investment positions for a given reporting period through the financial account and the *other changes in financial assets and liabilities account*.

Table 3: Overview of an Integrated International Investment Position Statement

	Start of Period IIP	Financial Account Transactions	Other Changes in Financial Assets and Liabilities Account			End of Period IIP
			Exchange Rate Changes	Price Changes	Other Volume Changes	
Net IIP						
Financial Assets						
Direct Investment						
Equity						
Debt Instruments						
Portfolio Investment						
Equity						
Debt Instruments						
Financial Derivatives (other than reserves) and Employee Stock Option						
Other Investment						
Equity						
Debt Instruments						
Reserve assets						
Monetary Gold						
Equity						
Debt Instruments						
Financial Derivatives n.i.e.						
Liabilities						
Direct Investment						
Equity						
Debt Instruments						
Portfolio Investment						
Equity						
Debt Instruments						
Financial Derivatives (other than reserves) and Employee Stock Option						
Other Investment						
Equity						
Debt Instruments						

3. Treatment of Companies Operating within the Offshore Financial Sector

Contrary to the guidelines of BPM6, offshore banks and offshore insurance companies are presently classified as nonresidents in Barbados' BOP and IIP. Therefore, the transactions and positions of these entities with nonresidents are excluded from the BOP and IIP, but transactions with resident staff, goods and services providers, and general government are included.

This treatment of offshore banks and insurance companies is linked to the fact that these entities provide services exclusively to nonresidents and are legally prohibited from providing their services to residents, unless permission is granted by the Minister of Finance.

However, residency in macroeconomic statistics is not determined by whether or not an entity is prohibited from selling services to residents. Rather, residency is determined by the institution's center of predominant economic interest. According to BPM6, offshore banks and insurance companies that operate in Barbados are resident entities because, on the basis of country of incorporation and regulation, their center of predominant economic interest is in Barbados. The treatment of offshore banks and insurance companies in Barbados' external sector statistics is currently under review.

4. Conclusion and Recommendations

This paper explains how Barbados' balance of payments statistics were revised to meet the standards of BPM6, while at the same time highlighting the core concepts and conventions of BPM6. These revised statistics are useful for time series analysis and cross-country comparisons.

The current account underwent a number of changes. In the goods and services account many amendments were made to names of components, and in some cases items were introduced, reclassified or removed from the account. For example, under BPM6, *goods for processing* are excluded from trade in goods but the processing fees are recognised as trade in services.

What was previously known as the *income account* is presently referred to as the *primary income account*, which now captures *taxes and subsidies on products and production*. Previously, *taxes and subsidies on products and production* was recorded under *current transfers*, which is currently termed the *secondary income account*.

The critical changes that occurred in the capital account were the omission of *migrant transfers* from capital transfers, and the shift of transactions involving the purchase and sale of patents and copyrights from *acquisition/disposal of nonproduced, nonfinancial assets* to trade in services.

The changes that affected the financial account related mostly to sign conventions, as well as the *direct investment* and *other investment* categories. An increase in the *net acquisition of financial assets* is now recorded with a positive sign, as opposed to a negative sign. The calculation of the financial account balance has also changed. In BPM6, the financial account balance of an

economy that is a net borrower is shown as a negative balance rather than positive. Nonetheless, this change has not been incorporated into the balance of payments statistics that are published on Central Bank of Barbados' website because it is thought to be more intuitive to have the sign of the financial account balance different to that of the sum of the balances on current and capital accounts.

Direct investment is reported on a gross asset/liability basis rather than directional basis. Fellow enterprises are now included in the direct investment framework. Although the Bank adopted the convention to exclude debt transactions and positions between select affiliated financial corporations from the calculation of direct investment to ensure international comparability of Barbados' external sector statistics, the authors are unconvinced by the rationale that underpins the convention.

Three new categories were introduced under *other investment*: *other equity*; *insurance, pension, and standardised guarantee schemes* and *allocation of SDRs*.

Recommendations are made to the IMF for the treatment of virtual currencies, vouchers and loyalty rewards in external sectors statistics. Two groups of virtual currencies are noted: those that do not give rise to a claim on their issuer, and those which do represent a claim on their issuer. It is established that the first group does not meet the BPM6 definition of a currency or any other financial asset. Furthermore, such virtual currencies (e.g. cryptocurrencies) possess characteristics more similar to that of a commodity than a financial asset. Thus, the recommendation is made to establish a new sub-category under the trade in goods section of the current account to record cross-border transactions using virtual currencies which have no claim on their issuers. Individual economies and the IMF should also seek to capture the stock of these currencies, ideally on a quarterly basis or at an even higher frequency.

On the other hand, virtual currencies which give rise to a claim on an unaffiliated nonresident are best classified as either *trade credits and advances* or *other accounts receivable/payable* depending on whether or not the claim is directly related to the provision of goods and services. That being said, an argument is also made for the definition of *trade credits and advances* to be extended to include vouchers, gift cards and rewards from loyalty programmes (such as airline miles) that represent a claim on unaffiliated nonresident providers of goods and services.

Overall, BPM6 is quite thorough and did a very good in addressing the developments in international transactions and investment positions subsequent to the release of BPM5. As such, the External Sector Unit of the Central Bank of Barbados is pleased to have a consistent time series of BOP statistics that are in line with current international best practice.

Appendix

Table A1: Changes in Goods and Services Account

<u>BPM5</u>	<u>BPM6</u>	<u>Comments</u>
<u>1. Current Account</u>	<u>1. Current Account</u>	
<u>A. Goods and Services</u>	<u>A. Goods and Services</u>	
<u>Goods</u>	<u>Goods</u>	
General Merchandise	General Merchandise	
Goods Procured in Ports by Carriers	Net Exports of Goods Under Merchanting	
Nonmonetary Gold	Nonmonetary Gold	
Goods for Processing		
Repairs on Goods	<u>Services</u>	
	Manufacturing Services on Physical Inputs Owned by Others	Under BPM6, the value of <i>Goods for Processing</i> is no longer recorded as trading goods because there is no change in ownership. However, the processing fee is now recorded here.
<u>Services</u>	Maintenance and Repairs n.i.e.	
	Transport	
Transportation	Of which: Postal and Courier Services	
Travel	Travel	
Construction	Construction	
Insurance Services	Insurance and Pension Services	
Financial Services	Financial Services	
Royalties and License Fees	Charges for Use of Intellectual Property n.i.e.	
Communication Services		
Computer and Information Services	Telecommunication, Computer & Information Services	
Other Business Services	Other Business Services	
Research & Development		The purchase and sale of patents and copyrights were included in <i>Gross Acquisition/Disposal of Nonproduced Nonfinancial Assets</i> in the capital account under BPM5 but since they are now classified as produced assets, they are recorded in R&D.
Merchanting and Other Trade-related Services	Trade-related Services	
Personal, Cultural, and Recreational Services	Personal, Cultural, and Recreational Services	
Government Services n.i.e.	Government Goods and Services n.i.e.	

Table A2: Changes in Primary Income Account

<u>BPM5</u>	<u>BPM6</u>	<u>Comments</u>
1. Current Account	1. Current Account	
B. Income	B. Primary Income	
Compensation of Employees	Compensation of Employees	
<u>Investment Income</u>	<u>Investment Income</u>	
Direct Investment	Direct Investment	
Income on Equity	Income on Equity and Investment Fund Shares	
Dividends and Distributed Branch Profits	Dividends and Withdrawals From Income of Quasi Corporations	
Reinvested Earnings and Undistributed Branch Profits	Reinvested Earnings	
Income on Debt	Interest before FISIM	
	Interest	
<u>Portfolio Investment</u>	<u>Portfolio Investment</u>	
Income on Equity	Income on Equity Other than Investment Fund Shares	
	Dividends in Equity Other than Investment Fund Shares	
	Investment Income Attributable to Investment Fund Shareholders	
	Dividends on Investment Fund Shares	
	Reinvested Earnings on Investment Fund Shares	
Income on Debt	Interest	
Money Market Instrument	Short Term	
Bonds and Notes	Long Term	
Other Investment	Other Investment	
Equity Income	Withdrawals from Income of Quasi Corporations	
Other Interest	Interest	
	Reserve Assets	
	Other Primary Income	
	Taxes and Subsidies on Products and Production	Such taxes and subsidies have been moved to the primary income account from the current transfers.

Table A3: Changes in Secondary Income Account

<u>BPM5</u>	<u>BPM6</u>
2. <u>Current Account</u>	1. <u>Current Account</u>
C. <u>Current Transfers</u>	C. <u>Secondary Income</u>
<u>General Government</u>	<u>General Government</u>
Current taxes on Income, Wealth, etc.	Current Taxes on Income, Wealth, etc.
Other Taxes on Production	
Other Subsidies on Production	
Social Contributions	Social Contributions
Social Benefits	Social Benefits
Other Current Transfers of General Government	Current International Corporation
	Miscellaneous Current Transfers of General Government
<u>Other sectors</u>	<u>Deposit Taking Institutions and Other Sectors</u>
Workers' Remittances	Personal Transfers (current transfers between resident and nonresident households)
	Of which: Workers' Remittances
Other Transfers	Other Current Transfers
Current Taxes on Income, Wealth, etc.	Current Taxes on Income, Wealth, etc.
Social Contributions	Social Contributions
Social Benefits	Social Benefits
Other Taxes on Production	Net Nonlife Insurance Premiums
Other Subsidies on Production	Nonlife Insurance Claims
Other Current Transfers of Other Sectors	Current International Corporation
	Miscellaneous Current Transfers

Table A4: Changes in capital account

<u>BPM5</u>	<u>BPM6</u>	<u>Comments</u>
<u>1. Capital and Financial Account</u>	<u>2. Capital Account</u>	
<u>A. Capital Account</u>		
<u>Capital Transfers</u>	<u>Capital Transfers</u>	
Gross Acquisition/Disposal of Nonproduced Nonfinancial Assets	Acquisition/Disposal of Nonproduced Nonfinancial Assets	Patents and copyrights are now considered research and development services, rather than nonproduced assets in the capital account.
General Government	General Government	
Debt forgiveness	Debt Forgiveness	
Other	Other Capital Transfers	
Other Sectors	Deposit-Taking Corporations and Other Sectors	
Migrant Transfers		In BPM6, <i>migrant transfers</i> are no longer considered a transaction and hence are excluded from the capital account.
Debt Forgiveness	Debt Forgiveness	
Other	Other Capital Transfers	

Table A5: Changes in Financial Account, Direct Investment

<u>BPM5</u>	<u>BPM6</u>
<u>2.Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>1. Direct Investment</u>	<u>1. Direct Investment</u>
<u>Abroad</u>	<u>Net Acquisition of Financial Assets</u>
	<u>Equity and Investment Fund Shares</u>
Equity capital	Equity Other than Reinvestment of Earnings
Claims on Affiliated Enterprises	→ Direct Investor in Direct Investment Enterprise
	→ Direct Investment Enterprises in Direct Investor (reverse investment)
Other Capital	→ Between Fellow Enterprises
Claims on Affiliated Enterprises	Reinvestment of Earnings
<u>In Reporting Economy</u>	<u>Debt instruments</u>
Equity Capital	→ Direct Investor Claims on Direct Investor Enterprise
Claims on Direct Investor	→ Direct Investment Enterprises Claims on Direct Investor
	→ Between Fellow Enterprises
Other Capital	→ Of which: Debt Securities
Claims on Direct Investor	
Debt Securities Issued by Direct Investors	
Other Claims on Direct Investors	

Table A5: Changes in Financial Account, Direct Investment (Cont'd)

<u>BPM5</u>	<u>BPM6</u>
<u>2.Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>1. Direct Investment</u>	<u>1. Direct Investment</u>
<u>In Reporting Economy</u>	<u>Net Incurrence of Liabilities</u>
	<u>Equity and Investment Fund Shares</u>
Equity Capital	Equity Other than Reinvestment of Earnings
Liabilities to Affiliated Enterprises	Direct Investment Enterprises in Direct Investor
	Direct Investor in Direct Investment Enterprise (reverse investment)
Other Capital	Between Fellow Enterprises
Liabilities to Affiliated Enterprises	Reinvestment of Earnings
<u>Abroad</u>	<u>Debt Instruments</u>
Equity Capital	Direct Investment Enterprise Liabilities to Direct Investor
Liabilities to Direct Investor	Direct Investor Liabilities to Direct Investment Enterprise
	Between Fellow Enterprises
Other Capital	Of which: Debt Securities
Liabilities to Direct Investor	
Debt Securities Issued by Direct Investors	
Other Liabilities of Direct Investors	
Reinvested Earnings	

Table A6: Changes in Financial Account, Portfolio Investment

<u>BPM5</u>	<u>BPM6</u>
<u>2. Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>2. Portfolio Investment</u>	<u>2. Portfolio Investment</u>
<u>Assets</u>	<u>Net Acquisition of Financial Assets</u>
Equity Securities	Equity and Investment Fund Shares
Monetary Authorities	Monetary Authorities
Banks	Deposit Taking Corporations, Except the Central Bank
General Government	General Government
Other Sectors	Other Sectors
	Other Financial Corporations
	Nonfinancial Corporations, Households and NPISHs
<u>Liabilities</u>	<u>Net Incurrence of Liabilities</u>
Equity Securities	Equity and Investment Fund Shares
Banks	Deposit Taking Corporations, Except the Central Bank
Other Sectors	Other Sectors
	Other Financial Corporations
	Nonfinancial Corporations, Households and NPISHs

Table A6: Changes in Financial Account, Portfolio Investment (Cont'd)

<u>BPM5</u>	<u>BPM6</u>
<u>2. Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>2. Portfolio Investment</u>	<u>2. Portfolio Investment</u>
<u>Assets/Liabilities</u>	<u>Net Acquisition of Financial Assets/ Net Incurrence of Liabilities</u>
Debt Securities	Debt Securities
Money Market Instruments	
Monetary Authorities	Monetary Authorities
Banks	Short Term
General Government	Long Term
Other Sectors	Deposit Taking Corporations, Except the Central Bank
	Short Term
Bonds and Notes	Long Term
Monetary Authorities	General Government
Banks	Short Term
General Government	Long Term
Other Sectors	Other Sectors
	Short Term
	Long Term
	Other Financial Corporations
	Short Term
	Long Term
	Nonfinancial Corporations, Households and NPISHs
	Short Term
	Long Term

Table A7: Changes in Financial Account, Financial Derivatives

<u>BPM5</u>	<u>BPM6</u>
<u>2. Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>3. Financial Derivatives</u>	<u>3. Financial Derivatives</u>
<u>Assets</u>	<u>Net Acquisition of Financial Assets</u>
Monetary Authorities	Monetary Authorities
Banks	Deposit Taking Corporations, Except the Central Bank
General Government	General Government
Other Sectors	Other Sectors
	Other Financial Corporations
	Nonfinancial Corporations, Households and NPISHs
<u>Liabilities</u>	<u>Net Incurrence of Liabilities</u>
Monetary Authorities	Monetary Authorities
Banks	Deposit Taking Corporations, Except the Central Bank
General Government	General Government
Other Sectors	Other Sectors
	Other Financial Corporations
	Nonfinancial Corporations, Households and NPISHs

Table A8: Changes in Financial Account, Other Investment

<u>BPM5</u>	<u>BPM6</u>
<u>2. Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>4. Other Investment</u>	<u>4. Other Investment</u>
	<u>Other Equity</u>
<u>Currency and Deposits</u>	<u>Currency and Deposits</u>
<u>Assets/Liabilities</u>	<u>Net Acquisition of Financial Assets/ Net Incurrence of Liabilities</u>
Monetary Authorities	Monetary Authorities
Banks	Short Term
General Government	Long Term
Other Sectors	Deposit Taking Corporations, Except the Central Bank
	Short Term
	Long Term
	General Government
	Short Term
	Long Term
	Other Sectors
	Short Term
	Long Term

Table A8: Changes in Financial Account, Other Investment (Cont'd)

<u>BPM5</u>	<u>BPM6</u>
<u>2. Capital and Financial Account</u>	<u>3. Financial Account</u>
<u>B. Financial Account</u>	
<u>4. Other Investment</u>	<u>4. Other Investment</u>
a. <u>Currency and Deposits</u>	a. <u>Currency and Deposits</u>
b. <u>Loans</u>	b. <u>Loans</u>
<u>Assets/Liabilities</u>	<u>Net Acquisition of Financial Assets/ Net Incurrence of Liabilities</u>
Monetary Authorities	Monetary Authorities
Short Term	Short Term
Long Term	Long Term
Banks	Deposit Taking Corporations, Except the Central Bank
Short Term	Short Term
Long Term	Long Term
General Government	General Government
Short Term	Short Term
Long Term	Long Term
Other Sectors	Other Sectors
Short Term	Short Term
Long Term	Long Term

Table A8: Changes in Financial Account, Other Investment (Cont'd)

<u>BPM5</u>	<u>BPM6</u>	<u>Comments</u>
2. Capital and Financial Account	3. Financial Account	
B. Financial Account		
<u>4. Other Investment</u>	<u>4. Other Investment</u>	
a. Currency and Deposits	Currency and Deposits	
b. Loans	Loans	
	Insurance, Pension and Standardised Guarantee Schemes	This category was introduced in BPM6. However, prepayment of insurance premiums and changes in outstanding claims were previously included in <i>Other Assets/Liabilities</i> .
	<u>Net Acquisition of Financial Assets/ Net Incurrence of Liabilities</u>	
	Central Bank	
	Monetary Authorities	
	Deposit-Taking Corporations, Except Central Bank	
	Other Sectors	
	Other Financial Corporations	
	Nonfinancial Corporations, Households and NPISHs	
c. Trade credits	Trade Credits and Advances	
<u>Assets/Liabilities</u>	<u>Net Acquisition of Financial Assets/ Net Incurrence of Liabilities</u>	
	Monetary Authorities	
	Short Term	
	Long Term	
General Government	General Government	
Short Term	Short Term	
Long Term	Long Term	
	Deposit Taking Corporations, Except The Central Bank	
	Short Term	
	Long Term	
Other Sectors	Other Sectors	
Short Term	Short Term	
Long Term	Long Term	

Table A8: Changes in Financial Account, Other Investment (Cont'd)

<u>BPM5</u>	<u>BPM6</u>	<u>Comments</u>
2. Capital and Financial Account	3. Financial Account	
B. <u>Financial Account</u>		
4. Other Investment	4. Other Investment	
a. Currency and Deposits	Currency and Deposits	
b. Loans	Loans	
	Insurance, Pension and Standardised Guarantee Schemes	
c. Trade credits	Trade Credits and Advances	
d. Other Assets/Liabilities	Other Accounts Receivable/Payable	
	Net Acquisition of Financial Assets	
Monetary Authorities	Monetary Authorities	
Short Term	Short Term	
Long Term	Long Term	
Other Assets/Liabilities		
Banks	Deposit Taking Corporations, Except The Central Bank	
Short Term	Short Term	
Long Term	Long Term	
Other Assets/Liabilities		
General Government	General Government	
Short Term	Short Term	
Long Term	Long Term	
Other Assets/Liabilities		
Other Sectors	Other Sectors	Prepayment of insurance premiums and changes in outstanding claims are now included in <i>Insurance, Pension and Standardised Guarantee Schemes</i> .
Short Term	Short Term	
Long Term	Long Term	
Other Assets		

Table A9: Changes in Financial Account, Reserve Assets

<u>BPM5</u>	<u>BPM6</u>
2. Capital and Financial Account	3. Financial Account
<u>B. Financial Account</u>	
5. Reserve Assets	5. Reserve Assets
Monetary Gold	Monetary Gold
Special Drawing Rights	Special Drawing Rights
Reserve Position in the IMF	Reserve Position in the IMF
Foreign Exchange	Other Reserve Assets
Currency and Deposits	Currency and Deposits
With Monetary Authorities	Claims on Monetary Authorities
With Banks	Claims on Other Entities
Securities	Securities
	Debt Securities
Money Market Instruments	Long Term
Bonds and Notes	Short Term
Equities	Equity and Investment Fund Shares
Financial Derivatives	Financial Derivatives
Other Claims	Other Claims
Currency and Deposits	
Securities	

Table A10: Changes in BOP Due to the Revision Exercise (BDS\$ M), 2008

	BOP 2008				
	BPM5	BPM6	Difference	of which Change due to BPM6	<u>Comments</u>
1. CURRENT ACCOUNT	(973.0)	(863.8)	109.2	4.6	
A. Goods and Services Account	(534.7)	(388.0)	146.7	4.6	
a. Merchandise Trade Balance	(2,685.9)	(2,100.3)	585.6	563.7	
General Trade in Goods (net)	(2,685.9)	(2,637.7)	48.2	48.1	<i>Goods for processing</i> are excluded from <i>general merchandise on a BOP basis</i> ; manufacturing services were reclassified from goods to services; and <i>Repairs on Goods</i> were reclassified from goods to services
Goods Traded Under Merchanting (net)	0	537.4	537.4	515.6	Net exports of goods under merchanting were reclassified from services to goods.
b. Services (net)	2,151.2	1,712.3	(438.9)	(559.1)	
Services Other than Merchanting of Goods (net)	1,635.6	1,712.3	76.7	(43.5)	Manufacturing services (processing fees) and <i>repairs on goods</i> were reclassified from goods to services.
Goods Traded under Merchanting (net)	515.6	0	(515.6)	(515.6)	Net exports of goods under merchanting were reclassified from services to goods.
B. Primary Income Account	(491.9)	(310.2)	181.7	0	
C. Secondary Income Account	53.6	(165.6)	(219.2)	0	
2. CAPITAL ACCOUNT	0	(12.0)	(12.0)	0	
A. Gross Acquisitions/Disposals of Nonproduced Nonfinancial Assets	0	0	0	0	
B. Net Capital Transfers	0	(12.0)	(12.0)	0	

Table A10: Changes in BOP Due to the Revision Exercise (BDS\$ M) (Cont'd), 2008

	BOP 2008				
	BPM5	BPM6	Difference	Of which Change due to BPM6	<u>Comments</u>
3. FINANCIAL ACCOUNT (Excluding Reserve Assets)³	(489.9)	(287.6)	202.3	(14.2)	
A. Direct Investment (net)	(885.5)	(1,083.4)	(197.9)	18.0	
Equity	(739.8)	(620.9)	118.9	0	
Debt Instruments	(145.7)	(462.5)	(316.8)	18.0	Debt flows between selected affiliated financial corporations were shifted from the <i>direct investment</i> to the long-term loans under <i>other investment</i> .
B. Portfolio Investment (net)	82.5	241.8	159.3	0	
Equity	(25.9)	(28.1)	(2.2)	0	
Debt Instruments	108.4	269.9	161.5	0	
C. Financial Derivatives and Employee Stock Options (net)	1.1	(1.1)	(2.2)	0	
D. Other Investment (net)	312.0	(555.2)	243.2	(32.2)	
Equity	2.9	(2.9)	0	0	
Debt Instruments	309.1	(552.3)	243.2	(32.2)	(1) A portion of life insurance premiums is now recorded as an increase in life insurance reserves. In BPM5 insurance reserves were not recognised as financial assets and liabilities. (2) SDR allocations were not recognised in international accounts prior to BPM6. (3) Debt flows between selected affiliated financial corporations were shifted from the direct investment to other investment.
4. Net Acquisitions of Reserve Assets	(188.8)	(217.8)	(29.0)	0	

³ The financial account is calculated as *net acquisition of financial assets* minus *net incurrence of liabilities*.

Table A11: Changes in BOP Due to the Revision Exercise (BDS\$ M), 2010

	BOP 2010				
				<i>Of which</i>	
	BPM5	BPM6	Difference	Change due to BPM6	<u>Comments</u>
1. CURRENT ACCOUNT	(517.2)	(551.2)	(34.0)	(3.8)	
A. Goods and Services Account	(371.2)	(197.8)	174.3	(3.8)	
a. Merchandise Trade Balance	(2,153.3)	(1,522.9)	630.4	609.3	
General Trade in Goods (net)	(2,153.3)	(2,153.6)	(0.4)	(0.4)	<i>Goods for processing</i> are excluded from <i>general merchandise on a BOP basis</i> ; manufacturing services were reclassified from goods to services; and <i>Repairs on Goods</i> were reclassified from goods to services
Goods Traded Under Merchanting (net)	0	630.7	630.7	609.7	Net exports of goods under merchanting were reclassified from services to goods.
b. Services (net)	1,782.1	1,325.1	(456.9)	(613.1)	
Services Other than Merchanting of Goods (net)	1,172.3	1,325.1	152.8	(3.4)	Manufacturing services (processing fees) and <i>repairs on goods</i> were reclassified from goods to services.
Goods Traded under Merchanting (net)	609.7	0	(609.7)	(609.7)	Net exports of goods under merchanting were reclassified from services to goods.
B. Primary Income Account	(223.8)	(280.1)	(56.3)	0	
C. Secondary Income Account	77.8	(73.3)	(151.1)	0	
2. CAPITAL ACCOUNT	0	(7.2)	(7.2)	0	
A. Gross Acquisitions/Disposals of Nonproduced Nonfinancial Assets	0	0	0	0	
B. Net Capital Transfers	0	(7.2)	(7.2)	0	

Table A11: Changes in BOP Due to the Revision Exercise (BDS\$ M) (Cont'd), 2010

	BOP 2010				
				<i>Of which</i>	
	BPM5	BPM6	Difference	Change due to BPM6	<u>Comments</u>
3. FINANCIAL ACCOUNT (Excluding Reserve Assets)⁴	(832.1)	(434.1)	398.1	(290.9)	
A. Direct Investment (net)	(670.5)	(207.4)	463.1	(67.6)	
Equity	(489.0)	(83.1)	405.9	0	
Debt Instruments	(181.5)	(124.3)	57.2	(67.6)	Debt flows between selected affiliated financial corporations were shifted from the direct investment to the long-term loans under other investment.
B. Portfolio Investment (net)	4.6	(259.3)	(263.9)	0	
Equity	52.8	55.8	3.0	0	
Debt Instruments	(48.2)	(315.1)	(266.9)	0	
C. Financial Derivatives and Employee Stock Options (net)	0.9	6.9	6.1	0	
D. Other Investment (net)	(167.1)	25.6	192.8	(223.3)	
Equity	2.1	2.1	0	0	
Debt Instruments	(169.2)	23.6	149.8	(223.3)	(1) A portion of life insurance premiums is now recorded as an increase in life insurance reserves. In BPM5 insurance reserves were not recognised as financial assets and liabilities. (2) SDR allocations were not recognised in international accounts prior to BPM6. (3) Debt flows between selected affiliated financial corporations were shifted from the direct investment to other investment.
4. Net Acquisitions of Reserve Assets	(53.0)	(93.6)	(146.6)	0	

⁴ The financial account is calculated as *net acquisition of financial assets* minus *net incurrence of liabilities*.

References

- Campbell, T. and Bynoe-Mayers, N. (1997). Implementing the Fifth Edition manual: The Barbados Experience, *Money Affairs*, 10 (2), 113 – 138.
- European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank (2009). System of National Accounts 2008, New York.
- European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank (1993). System of National Accounts 1993, Brussels/Luxembourg, New York, Paris, Washington, D.C.
- He, D., Habermeier, K., Leckow, R., Haksar, V., Almeida, Y., Kashima, M., Kyriakos-Saad, N., Oura, H., Sedik, T., Stetsenko, N. and Verdugo-Yepes, C. (2016). Virtual Currencies and Beyond: Initial Considerations, IMF Staff Discussion Note, SDN/16/03.
- International Monetary Fund (2009). Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). Washington, D.C.: IMF.
- International Monetary Fund (1993). Balance of Payments Manual, Fifth Edition (BPM5). Washington, D.C.: IMF.
- International Monetary Fund (1977). Balance of Payments Manual, Fourth Edition (BPM4). Washington, D.C.: IMF.
- International Monetary Fund (1961). Balance of Payments Manual, Third Edition (BPM3). Washington, D.C.: IMF.
- International Monetary Fund (1950). Balance of Payments Manual, Second Edition (BPM2). Washington, D.C.: IMF.
- International Monetary Fund (1948). Balance of Payments Manual, First Edition (BPM1). Washington, D.C.: IMF.
- International Monetary Fund (2008). BPM5-to-BPM6 Conversion Matrix, Twenty-First Meeting of the IMF Committee on Balance of Payments Statistics Washington D.C.: IMF.
- Organisation for Economic Co-operation and Development (2008): OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition; OECD, Paris.
- Wilson-Nunn, D. and Zenil, H. (2014). On the Complexity and Behaviour of Cryptocurrencies Compared to Other Markets, arXiv:1411.1924 [q-fin.ST].