



13TH IMF STATISTICAL FORUM

MEASURING **CROSS-BORDER ECONOMIC** and **FINANCIAL LINKAGES** in a Dynamic World

Mapping Global Financial Interconnectedness: New Statistics on Cross-Border Flows and Positions

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Abstract

This article explores recent advancements in the measurement of cross-border financial flows and positions, as introduced in the latest edition of the IMF's *Integrated Balance of Payments and International Investment Position Manual (BPM7)*. It highlights how *BPM7* enhances the presentation of foreign direct investment, portfolio investment, and other financial instruments, while emphasizing the policy value of integrating balance of payments flows with international investment position (IIP) through the integrated IIP framework. These innovations offer a more coherent and comprehensive view of global financial linkages, supporting improved analysis of systemic risks and more informed financial stability policymaking.

Introduction & Evolution of International Financial Statistics

1.1 Understanding Global Financial Interconnectedness

1. Financial interconnectedness has fundamentally shaped global capital flows, investment dynamics, and systemic risk assessment. The ease of cross-border transactions, driven by advances in technology, deregulation, and financial innovation, has allowed economies to integrate more deeply. While this integration promotes economic efficiency and risk diversification, it also increases exposure to financial contagion during periods of market volatility.
2. Major financial crises—including the 1997 Asian financial crisis and the 2008 global financial crisis—illustrate how shocks in one region can trigger widespread disruptions. These events underscored the need for enhanced cross-border financial statistics to monitor risks effectively. Policymakers, central banks, and international institutions rely on precise financial data to assess vulnerabilities and design proactive regulatory frameworks that mitigate systemic risks.

1.2 The Need for Enhanced Cross-Border Financial Statistics

3. Traditional statistical frameworks, such as the balance of payments (BOP) and international investment position (IIP) datasets, have served as foundational tools for measuring international financial activity. However, as financial transactions grow more complex—with increasing reliance on global production arrangements, multinational corporate structures, digital assets, and financial derivatives—existing methodologies have struggled to fully capture cross-border movements.
4. Recognizing these challenges, the *Integrated Balance of Payments and International Investment Position Manual, seventh edition (BPM7)* introduces significant refinements that improve transparency and analytical depth in cross-border statistics. [1] These methodological enhancements strengthen policymakers' ability to:
 - Integrate BOP and IIP data more cohesively, creating a unified approach to monitoring international financial interconnectedness.
 - Clarify the treatment of global production arrangements, such as factoryless goods production.
 - Differentiate between financial and nonfinancial sectors, providing clearer insights into the roles of financial corporations, nonfinancial corporations, and households.
 - Measure financial instruments with greater accuracy, refining classifications for portfolio investment, derivatives, and introducing for the first time an internationally-agreed definition of special purpose entities (SPEs).
 - Account for emerging digital assets, ensuring proper treatment of crypto assets within cross-border statistics.
5. These refinements align with broader macroeconomic statistical reforms, including updates in the *System of National Accounts 2025 (2025 SNA)* [2], promoting consistency across global financial reporting standards.

1.3 Evolution of Cross-border Financial Statistics: The Balance of Payments Manual

6. The methodology for measuring international financial transactions has evolved significantly in response to globalization, financial innovation, and the increasing complexity of cross-border activities. Early BOP frameworks focused primarily on trade balances and basic financial movements. However, as global markets expanded and financial instruments became more sophisticated, the need for more granular and comprehensive tracking of capital flows and financial positions became evident. [3]

7. Key milestones in this evolution include:

- **BPM5 (1993) [4]:** This edition marked a foundational shift by introducing a framework for recording both cross-border transactions (BOP) and the IIP. For the first time, countries could systematically track not only flows but also stocks of external financial assets and liabilities. *BPM5* also separated the capital account from the newly defined financial account. The latter captured transactions involving financial assets and liabilities and introduced a clearer classification of financial transactions—distinguishing direct investment, portfolio investment, other investment, and reserve assets—enabling more precise analysis of capital flows. The *Manual* aligned with the *System of National Accounts, 1993 (1993 SNA)* [5], ensuring consistency across macroeconomic datasets. These changes laid the groundwork for analyzing bilateral exposures, financial vulnerabilities, and the role of different sectors in cross-border finance.
- **BPM6 (2009) [6]:** Developed in parallel with the *2008 SNA*, *BPM6* responded to the rapid expansion of global value chains, the rise of multinational enterprises (MNEs), and the proliferation of complex financial instruments. It placed greater emphasis on balance sheet statistics and the IIP, recognizing that positions—not just flows—are critical for assessing external sustainability and financial contagion. *BPM6* introduced improved treatment of goods for processing and merchanting, reflecting the fragmentation of production across borders. It also enhanced the classification of financial instruments, including derivatives and securitized products, and provided guidance on SPEs, which are often used in cross-border financial structuring. These enhancements significantly improved the ability to trace financial linkages and exposures across jurisdictions.
- **BPM7 (2025) [1]:** The most recent edition represents a major step forward in integrating transactions, valuation changes, and positions into a unified framework. The new title—*Integrated Balance of Payments and International Investment Position Manual*—reflects this holistic approach. *BPM7* introduces a full stock-flow reconciliation (the integrated IIP) as part of its standard components, allowing analysts to distinguish between changes due to transactions, exchange rate movements, price changes, and other changes in the volume of financial assets and liabilities. It also includes currency breakdowns of some BOP and IIP components, which are essential for assessing currency mismatches and external vulnerabilities. For the first time, *BPM7* provides a standardized definition of net international reserves (NIR), a key indicator of resilience. The *Manual* also incorporates crypto assets, fintech-related instruments, and factoryless goods production into the statistical framework and provides guidance on digital intermediation platforms, non-fungible tokens, and other digital innovations. An annex on sustainable finance and climate-related risks offers initial guidance on tracking ESG-linked flows and

green financial instruments, recognizing their growing role in global capital markets.

8. Together, these developments have transformed external sector statistics (ESS) from a narrow focus on trade and basic financial flows into a comprehensive system for mapping global financial interconnectedness. The integration of BOP and IIP data, the inclusion of valuation effects, and the expansion of sectoral and instrument-level detail enable policymakers, researchers, and market participants to better assess cross-border exposures, monitor systemic risk, and support macro-financial stability. These enhancements align with broader global efforts—including the G-20 Data Gaps Initiative (DGI)—improving the granularity and transparency of international financial statistics.

1.4 Article Structure and Policy Relevance

9. *BPM7*'s refinements offer international institutions and financial policymakers enhanced tools for monitoring cross-border financial activity and designing regulatory frameworks that strengthen financial stability. [1] Improved transparency in international financial flows enables more effective risk mitigation and macroeconomic management.

10. The remainder of this article explores key developments in financial statistics, focusing on:

- Chapter 2. **Global Financial Linkages and Systemic Risk Assessment**, analyzing how updated statistics improve macro-financial surveillance. [1]
- Chapter 3. **Policy Benefits of an Integrated BOP-IIP Framework**, highlighting implications for financial regulation. [1]
- Chapter 4. **Conclusions, Challenges and Future Directions**, addressing remaining gaps and potential advancements in financial data governance. [1]

11. Through this analysis, the article provides insight into how improved financial statistics enhance global risk monitoring, policy coordination, and economic resilience.

Global Financial Linkages and Systemic Risk Assessment

2.1 Financial Contagion and Cross-Border Spillovers

12. Understanding financial contagion and cross-border spillovers is essential for assessing systemic risk in an increasingly interconnected global economy. Historical episodes of financial crises have repeatedly demonstrated how vulnerabilities in one part of the world can rapidly propagate across borders, amplifying systemic risks and destabilizing entire regions. These crises emphasize the importance of robust frameworks for monitoring financial linkages and identifying transmission channels that can exacerbate shocks.

13. The Asian Financial Crisis of 1997 serves as a pivotal example. Initially triggered by a currency devaluation in Thailand, the crisis quickly spread to neighboring countries, including Indonesia, South Korea, and Malaysia. The rapid transmission of financial stress was facilitated by common exposures, correlated investor behavior, and weaknesses in domestic financial systems. The resulting economic contractions and banking sector collapses underscored the need for stronger financial regulation, greater transparency, and improved crisis management mechanisms.

14. A decade later, the Global Financial Crisis of 2008 revealed the extent of interdependence among advanced economies. The collapse of Lehman Brothers in the United States triggered a global liquidity freeze, as financial institutions across the world faced severe funding pressures. The crisis exposed the fragility of complex financial instruments, the opacity of counterparty exposures, and the inadequacy of existing risk assessment tools. It also highlighted the importance of macroprudential oversight and international coordination in mitigating systemic threats.

15. The European Sovereign Debt Crisis of 2010 further illustrated the risks of contagion within integrated monetary unions. Greece's fiscal imbalances and rising debt levels sparked investor concerns that quickly spread to other Eurozone countries, including Portugal, Ireland, Italy, and Spain. The crisis tested the resilience of the European financial architecture and prompted the development of new stabilization mechanisms, such as the European Stability Mechanism (ESM).

16. These episodes underscore the importance of timely, comprehensive data in identifying cross-border financial vulnerabilities. Since the 1970s, the global ratio of external assets to GDP has risen steadily, reflecting deeper financial integration and growing exposure to external shocks (see Figure 1). As countries have become more interconnected through trade, investment, and capital flows, the potential for localized disruptions to trigger systemic crises has increased. This evolution highlights the need for coordinated policy responses and early warning systems that account for dynamic spillovers and the amplifying effects of financial contagion.

2.2 How Improved Data Enhances Financial Interconnectedness Visibility

17. To address the data gaps exposed by past crises, *BPM7* includes a fully integrated framework for ESS in its standard presentation (see Table 1). [1]

18. Table 1 is structured to show, for each subcomponent within the functional categories, the opening stock of assets and liabilities, followed by three types of flows: (i) transactions (captured in the financial account), (ii) revaluations (due to price and exchange rate changes), and (iii) other changes in volume (such as write-offs or reclassifications). The sum of these components yields the closing position. This structure mirrors the accumulation accounts in the *2025 SNA*, reinforcing consistency across macroeconomic datasets. [2] Details about the policy benefits of the integrated IIP are provided in Chapter 3. [1]

2.3 Strengthening Macro-Financial Surveillance

19. Building on the integrated IIP, *BPM7* further enhances macro-financial surveillance through more precise tracking of capital movements, financial instruments, and institutional linkages. [1] This improved visibility allows authorities to identify and analyze patterns of financial interconnectedness that may pose systemic risks.

20. One of the key enhancements in *BPM7* is the increased granularity in institutional sector breakdowns. Unlike previous editions, *BPM7* introduces separate reporting for (i) nonfinancial corporations and (ii) households and nonprofit institutions serving households (NPISHs), allowing for more targeted analysis of sector-specific vulnerabilities. [1] For example, a surge in external borrowing by nonfinancial corporations can now be isolated from household liabilities, enabling more tailored macroprudential responses. Additionally, *BPM7* encourages a more detailed breakdown of other financial corporations (OFCs) into six sub-sectors (money market funds, non-MMF investments funds, insurance corporations, pension funds, other financial intermediaries, captive financial institutions and money lenders, and financial auxiliaries), which

is critical for monitoring nonbank financial intermediation. [1] Given the growing role of OFCs in global finance, this disaggregation helps identify channels of risk transmission that may not be visible through traditional banking statistics.

21. *BPM7* provides for the first time an internationally-agreed definition of SPEs, which emphasizes the need for transparency in reporting SPE data to address concerns about their role in potentially obscuring the true nature of financial flows and positions. [1] Host jurisdictions are encouraged to report supplementary data for SPEs, particularly when these entities are significant (see Table 2). These additional data can help disentangle the activities of SPEs from those of other economic agents, providing a more accurate picture of their host economies as well as of global cross-border financial flows/positions.

22. Table 2 provides a comparison of the recommended institutional sector/sub-sector breakdowns for reporting in *BPM6* and *BPM7*. [6] [1].

23. On the financial instrument side, *BPM7* introduces several new breakdowns that significantly strengthen macro-financial surveillance. [1] In the area of direct investment, data are now disaggregated by the sector of the direct investor or direct investment enterprise, allowing analysts to distinguish, for instance, between investments by or in financial or nonfinancial corporations. Additional breakdowns include greenfield investment versus extension of capacity, which helps assess the nature of capital formation; and the identification of the ultimate investing and host economies, which improves transparency in cross-border ownership structures. The separation of pass-through funds—where capital is routed through intermediary economies—also enhances the accuracy of global investment mapping.

24. For financial derivatives, *BPM7* introduces classifications by market risk category (e.g., foreign exchange, interest rate, equity, commodity), by instrument type (e.g., options, forwards, futures, swaps), and by trading venue and clearing status (e.g., exchange-traded vs. over the counter, cleared vs. noncleared). [1] These distinctions are vital for assessing counterparty risk and market liquidity under stress scenarios.

25. Considering the growing significance of digital assets in cross-border flows and stocks, and the need for tracking and addressing the vulnerabilities associated with them, *BPM7* provides comprehensive guidance on the typology and classification of crypto assets and other emerging financial technologies. Fungible crypto assets are classified into three broad categories following the *2025 SNA/BPM7*: (i) crypto assets designed to act as a general medium of exchange (further divided into those with and those without, a corresponding liability); (ii) crypto assets that only act as a medium of exchange within a platform or network (divided into those with and those without a corresponding liability); and (iii) security crypto assets. [1] [2]

26. Fungible crypto assets without a corresponding liability designed to act as a medium of exchange (e.g., Bitcoin) are treated as nonproduced nonfinancial assets and recorded separately in the capital account; those with a corresponding liability are treated as financial assets. Figure 2 provides a snapshot of the typology and classification of fungible crypto assets.

27. Each of these enhancements contributes to a more robust macro-financial surveillance by providing policymakers with tools to detect emerging vulnerabilities, assess sectoral exposures, and design more effective policy interventions.

2.4 Integrated Data Frameworks for Systemic Risk Analysis

28. The growing complexity of global financial linkages calls for integrated data frameworks that can support forward-looking systemic risk analysis. *BPM7* supports this need by aligning ESS with the analytical requirements of the balance sheet approach (BSA). The BSA evaluates an economy's resilience by examining the structure and interlinkages of sectoral balance sheets. [1] [7]

29. The BSA helps identify vulnerabilities related to currency, maturity, and instrument mismatches. [7] *BPM7* enhances this analysis by providing harmonized, detailed data that can be directly incorporated into sectoral balance sheets. [1] For example, the expanded institutional sector breakdowns allow for a more precise assessment of which sectors are most exposed to external shocks—such as excessive foreign-currency borrowing by corporates or maturity mismatches in the nonbank financial sector.

30. In addition, *BPM7*'s integrated IIP framework supports the construction of time-consistent balance sheets by reconciling positions with transactions, revaluations, and other volume changes. [1] This enables analysts to distinguish between structural vulnerabilities and temporary valuation effects—an essential distinction for effective policy design. Additional details are provided in the next section.

31. *BPM7* also encourages supplementary data that can enhance systemic risk monitoring, such as currency composition of assets and liabilities, and sectoral exposures to specific counterpart economies. [1] These details are essential for stress testing and scenario analysis, particularly in the context of abrupt disruptions in capital inflows (sudden stops), capital flow reversals, or global financial tightening.

32. By embedding these capabilities into the statistical standard, *BPM7* equips policymakers with the tools to build integrated surveillance frameworks that are both granular and globally consistent—essential steps toward more effective early warning systems and crisis prevention.

Policy Benefits of an Integrated IIP Framework

3.1 Overview of the Benefits of an Integrated Framework

33. In an era of heightened global financial interconnectedness, the ability of policymakers to monitor and respond to external sector developments is more critical than ever. When the frameworks of the BOP and the IIP are integrated, they present a dynamic and comprehensive view of external sector developments—capturing both the flow and stock dimensions, including valuation changes in cross-border assets and liabilities. They offer a powerful statistical lens to assess a country's external vulnerabilities, resilience, and policy space, and help enhance macroeconomic surveillance, support financial stability, and inform policy decisions. The integrated IIP framework not only supports authorities' surveillance and policymaking but also helps financial institutions, enterprises, and investors plan and improve their economic and investment activities.

3.2 Enhancing Macroeconomic Surveillance and Policymaking

3.2.1 Detecting External Imbalances and Vulnerabilities

34. Integrated IIP data allows policymakers to identify current account deficits or surpluses and analyze their financing patterns. For instance, a current account deficit financed by short-

term capital inflows may indicate vulnerability, while one financed by foreign direct investment (FDI) may be more sustainable.

35. Additionally, the IIP shows the accumulation of external assets and liabilities that may not be immediately visible in the BOP. A country with a large negative IIP might experience sudden stops in capital flows, higher rollover risks, or debt servicing burdens, particularly if liabilities are denominated in foreign currency.

36. The integrated IIP framework aids authorities in evaluating vulnerabilities in the economy. Events such as global financial crises, geopolitical tensions, or significant changes in commodity prices can affect a country's external sector. By using the detailed data provided by the integrated IIP framework, authorities can simulate various scenarios and create contingency plans to strengthen economic resilience.

37. The integrated framework can also support structural reforms aimed at reducing external vulnerabilities (e.g., less reliance on volatile short-term financing), improving external competitiveness (e.g., balancing exchange rate), and attracting FDI, which are essential for economic growth and job creation.

3.2.2 Assessing Exchange Rate Misalignments

38. Integrated IIP data allows for real-time tracking of various types of capital flows, including portfolio investment, FDI, and other forms of investment such as deposits. This capability is crucial for managing macroprudential risks that can emerge from sudden surges or reversals in capital flows. These fluctuations can lead to significant exchange rate volatility, asset price bubbles, and, consequently, financial instability. By consistently monitoring these flows, policymakers can implement timely measures to mitigate these risks, ensuring a more stable economic environment.

39. The comprehensive framework includes detailed data on changes in cross-border asset and liability positions due to fluctuations in foreign exchange rates for each financial instrument. By analyzing these data through stress testing and scenario analysis, policymakers can gain essential insights into a country's vulnerabilities to changes in exchange rates. This detailed analysis supports the formulation of robust economic policies designed to mitigate the adverse effects of foreign exchange rate movements.

40. Moreover, the integrated framework enables in-depth analysis of exchange rate dynamics by linking trade and income flows, capital movements, and valuation effects. This holistic approach is essential for assessing whether exchange rate movements are correcting external imbalances or, conversely, exacerbating existing vulnerabilities. For instance, a currency depreciation may improve the current account balance while simultaneously worsening the IIP due to valuation losses from foreign-currency debt. Such scenarios have mixed implications for economic stability and warrant careful evaluation.

3.2.3 Evaluating Financial Sector Vulnerabilities

41. Integrated IIP data is invaluable for evaluating the health and resilience of the financial sector. By examining the balance sheets of banks and other financial institutions, policymakers can identify exposures to cross-border assets and liabilities, which may affect financial stability in times of global financial stress. The IIP data complements BOP transactions by revealing changes in positions from valuation adjustments, thus providing a fuller picture of potential vulnerabilities. For instance, a banking sector heavily exposed to foreign currency liabilities may face higher risks if there are sudden exchange rate fluctuations. The framework assists in stress-testing these exposures and evaluating the potential knock-on effects on the broader economy.

42. Furthermore, the integrated framework helps in assessing sectoral imbalances and their implications for financial stability. By tracking sector-specific investments and liabilities, policymakers can spot trends that might indicate growing exposures or underinvestment in a particular financial sector. This sectoral analysis is critical for formulating targeted interventions that ensure balanced growth and mitigate systemic risks within the financial sector. Policymakers can also use the BOP-IIP data to monitor the effects of financial innovation and globalization, such as the rise in cross-border financial derivatives and other complex instruments. Understanding these dynamics is essential for adapting regulatory frameworks and safeguarding against new forms of financial instability.

43. The comprehensive nature of the integrated IIP data provides policymakers with the tools necessary to evaluate the interconnectedness of the global financial system and the domestic economy. By leveraging this data, they can develop strategies that bolster financial sector resilience, promote balanced economic growth, and ensure long-term stability. Continuous monitoring and analysis of financial sector vulnerabilities enable timely interventions, preventing potential crises and fostering a robust financial environment conducive to sustainable development.

3.2.4 Monitoring Reserve Adequacy

44. The monetary authorities, such as central banks, rely on the integrated IIP framework to evaluate the adequacy of international reserves. This comprehensive framework provides valuable information on external imbalances, including both the composition and maturity of external assets and liabilities. Such insights are essential for assessing liquidity needs and ensuring that a country maintains sufficient reserves to meet its obligations in times of economic stress.

45. The integrated framework also enables authorities to simulate various stress scenarios, such as sudden stops of capital inflows, difficulties in rolling over existing debts, or capital flight. By estimating the potential drawdown of reserves under these adverse conditions, policymakers can devise strategies to bolster reserve levels and enhance financial stability.

46. This approach helps central banks to not only maintain optimal reserve levels but also to identify vulnerabilities and implement proactive measures to mitigate risks. By leveraging the integrated BOP-IIP framework, monetary authorities can develop robust contingency plans and policies that safeguard the economy against external shocks, thereby promoting sustained economic growth and stability.

3.2.5 Surveillance and Program Design

47. The international financial institutions, including the International Monetary Fund (IMF), extensively utilize BOP and IIP data in both bilateral and multilateral surveillance. This includes Article IV consultations, Debt Sustainability Analyses, External Balance Assessments, Early Warning Exercises, and Financial Sector Assessment Programs (FSAPs). Lending programs rely on the integrated IIP to evaluate external sustainability, debt dynamics, and available policy space. The BOP provides detailed information on debt-creating flows, while the IIP offers insights into the stock of external debt and its maturity structure. Furthermore, the integrated framework captures how non-BOP flows (e.g., valuation changes) affect the IIP, offering essential insights into asset and liability risks faced by countries.

48. For example, when designing a program for a country experiencing a balance of payments crisis, the IMF uses BOP data to estimate financing gaps and IIP data to evaluate debt sustainability and rollover risks. This integration ensures consistency across projections and strengthens the effectiveness and credibility of the resulting policy advice.

3.3 Benefits for Private-Sector Economic Activities

49. The integrated IIP framework provides financial institutions with key data to assess countries' cross-border assets and liabilities, supporting diversification and hedging strategies. For example, if foreign currency-denominated debt rises in a country, asset managers may increase hedging positions to mitigate exchange rate depreciation risk. By leveraging integrated BOP-IIP data—both domestically and for partner countries—institutions can analyze counterparty risk and systemic linkages, gaining a deeper understanding of potential vulnerabilities. This information is vital for managing exposures and stress testing models, helping institutions gauge their resilience to external shocks such as sudden interest rate hikes or sharp currency depreciation during global financial crises. Ultimately, the integrated data enables institutions to refine financial strategies, optimize portfolio management, and strengthen risk frameworks to remain robust amid economic uncertainty.

50. Enterprises, especially multinationals and exporters/importers, benefit significantly from the integrated IIP framework for business planning and risk management. It helps assess investment climates across countries, supporting informed decisions on market entry and expansion. For example, high FDI inflows may signal a favorable business environment and growth potential. The framework also enables firms to anticipate shifts in trade balances, exchange rates, and capital account restrictions that could affect supply chains and trade operations. By analyzing integrated IIP data, businesses can identify potential vulnerabilities in their international exposure and implement mitigation strategies, such as insurance or hedging contracts. Additionally, it supports assessments of country risk and exposure to external shocks—like sudden stops in capital flows or currency depreciation—allowing enterprises to develop contingency plans and maintain operational stability.

51. Investors can use the integrated IIP framework to make informed investment decisions. Persistent current account deficits or deteriorating net IIP positions may signal macroeconomic imbalances or currency risk, guiding investors in their asset allocation decisions. By monitoring portfolio investment trends and reserve accumulation, investors can anticipate market movements and adjust strategies accordingly. For instance, a surge in portfolio inflows may reflect growing investor confidence and rising asset prices, while sudden outflows could indicate waning confidence and trigger sell-offs. The framework also provides essential data on external debt and reserve assets, supporting sovereign risk models and credit ratings. This helps investors assess the creditworthiness of sovereign issuers and make informed decisions about government bond investments. For example, a country with high external debt and low reserves may be at risk of default, requiring higher bond yields to offset that risk. Through comprehensive integrated IIP analysis, investors can enhance portfolio performance, strengthen risk management, and pursue financial objectives in a dynamic global market.

Conclusions, Challenges and Future Directions

4.1 Conclusions

52. The evolution of cross-border financial statistics, culminating in the *BPM7*, marks a significant milestone in the global effort to better understand and manage financial interconnectedness. The integration of BOP and IIP data into a unified framework has transformed the landscape of macroeconomic surveillance and financial stability analysis. By capturing both the flow and stock dimensions of international financial activity, the integrated IIP framework enables policymakers, regulators, and market participants to assess vulnerabilities, monitor systemic risks, and design more effective policy responses.

53. *BPM7*'s innovations—such as enhanced sectoral and instrument classifications, the inclusion of valuation effects, and the treatment of emerging financial technologies—have expanded the analytical power of ESS. [1] These improvements not only support more granular and timely assessments of capital flows and exposures but also align with broader macroeconomic statistical reforms, including the 2025 *SNA*. [2] Together, these developments provide a more coherent and comprehensive view of global financial linkages, reinforcing the role of official statistics in promoting economic resilience and informed decision-making.

4.2 Remaining Gaps in Cross-Border Financial Statistics

54. Despite these advances, several challenges remain in achieving a fully transparent and globally consistent picture of financial interconnectedness. First, data gaps persist in the coverage of certain financial instruments and institutional sectors. For example, while *BPM7* introduces an internationally agreed definition of SPEs [1], their complex and often opaque structures continue to pose challenges for accurate measurement and cross-country comparability. Similarly, the growing use of financial derivatives and structured products requires further refinement in classification and valuation methodologies.

55. Second, timeliness and frequency of data remain a concern. Although quarterly BOP and IIP statistics are available in some countries, they are lacking in many others. The lag in reporting can limit the usefulness of these statistics for real-time policy responses. Enhancing the speed of data collection and dissemination—potentially through greater use of administrative data, digital reporting tools, real-time big data indicators and machine learning techniques—will be essential to meet the needs of modern surveillance frameworks.

56. Third, while *BPM7* makes important strides in incorporating crypto assets and digital financial instruments [1], the rapid pace of innovation in decentralized finance (DeFi), tokenized assets, and digital intermediation platforms continues to outstrip statistical coverage. These developments challenge traditional concepts of residence, ownership, and valuation, requiring fast methodological adaptation and international coordination.

57. Finally, cross-border asymmetries in data reporting and interpretation remain a persistent issue. Differences in national compilation practices, legal frameworks, and data access can lead to inconsistencies in bilateral statistics, undermining the reliability of global aggregates. Continued efforts to harmonize methodologies, promote data sharing, and strengthen statistical capacity—particularly in emerging and developing economies—are critical to closing these gaps.

4.3 Emerging Trends in Global Finance

58. Looking ahead, several emerging trends are likely to shape the future direction of cross-border financial statistics. One such trend is the increasing integration of environmental, social, and governance (ESG) considerations into financial decision-making. *BPM7*'s annex on sustainable finance and climate-related risks offers a starting point for incorporating ESG-linked flows into ESS. [1] As green bonds, carbon markets, and climate finance instruments gain prominence, statistical frameworks will need to evolve to capture their cross-border dimensions and policy implications.

59. Another key trend is the growing role of artificial intelligence (AI) and big data analytics in financial surveillance. The integrated IIP data with high-frequency market indicators, transaction-level datasets, and AI-driven models hold promise for enhancing the predictive power of systemic risk assessments. These tools can help identify early warning signals, simulate stress scenarios, and support more agile policy responses. However, their effective

deployment will require robust data governance to ensure secure and ethical data management, transparency to make models and processes understandable and open to scrutiny, and safeguards to prevent algorithmic bias.

60. The continued globalization of corporate structures and supply chains also presents new challenges and opportunities. Factoryless goods production, digital services trade, and the rise of intangible assets complicate the attribution of economic activity across borders. *BPM7*'s guidance on these issues is a step forward [1], but further work is needed to ensure that statistics reflect the realities of a digital and knowledge-based economy.

61. Finally, geopolitical developments and shifts in the global financial architecture—such as the reconfiguration of reserve currencies, regional financial arrangements, and capital flow management tools—will influence the demand for and design of cross-border statistics. As countries navigate an increasingly multipolar and uncertain financial landscape, the ability to monitor and interpret global financial linkages will be more important than ever.

Final Remarks

62. In sum, the enhancements introduced in *BPM7* represent a major leap forward in the measurement of global financial interconnectedness and offer significant potential for improving the quality, comparability, and policy relevance of ESS. However, they also pose practical implementation challenges, particularly regarding data availability, system upgrades, and institutional coordination. The journey toward a fully integrated, timely, and policy-relevant statistical system is ongoing. Closing remaining gaps, embracing innovation, and fostering international collaboration will be essential to ensure that cross-border financial statistics continue to serve as a cornerstone of global economic governance in the years to come.

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Table 1. Integrated International Investment Position

Integrated international investment position	Beginning -of-period position	Accumulation accounts							End-of-period position
		Financial account	Other changes in financial assets and liabilities account						
		Transaction s in financial assets and liabilities	Revaluations			Other changes in volume			
			Total	Exchange rate changes	Other price changes	Total	<i>Of which: Cancellations and write-offs of debt</i>	<i>Of which: Reclassifications</i>	
Assets									
Direct investment									
Portfolio investment									
Financial derivatives (other than reserves) and ESOs							n.a.		
Other investment									
Reserve assets									
Liabilities									
Direct investment									
Portfolio investment									
Financial derivatives (other than reserves) and ESOs							n.a.		
Other investment									

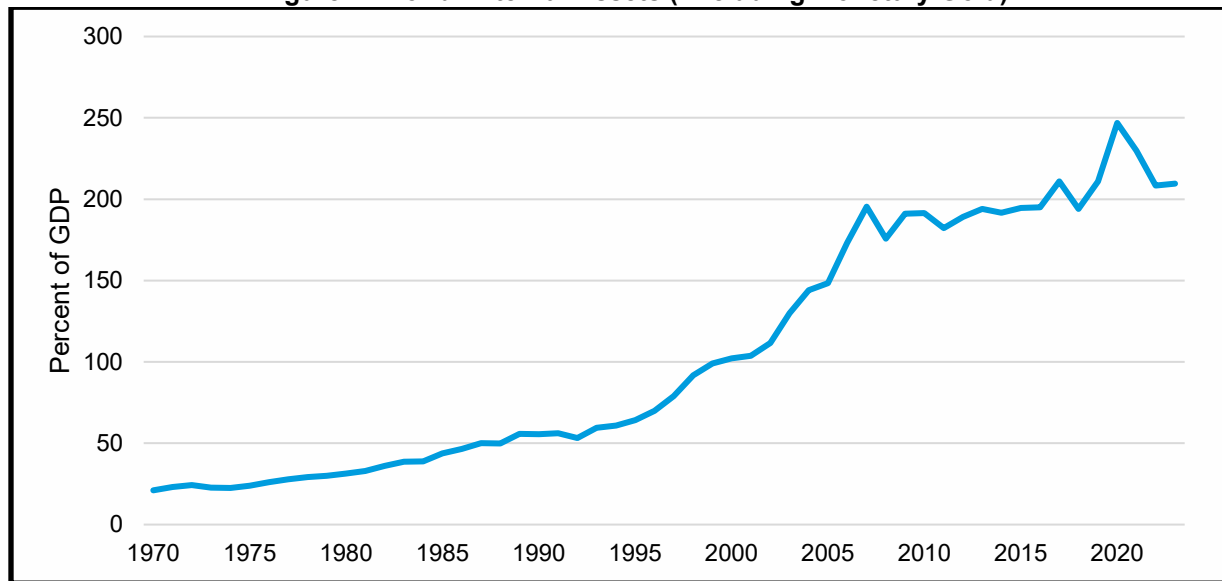
Note: This table is expository. Under each functional category, there is a further breakdown by institutional sector and by maturity when relevant. Additional breakdowns (e.g., by currency of denomination) are also encouraged.

Source: Annex 14, *BPM7*.

Table 2. Reporting Sectors/Sub-sectors in External Accounts	
<i>BPM6</i>	<i>BPM7</i>
Central bank <i>Monetary authorities (where relevant)</i>	Central bank <i>Monetary authorities (where relevant)</i>
Deposit-taking corporations, except the central bank	Deposit-taking corporations, except the central bank <i>of which: SPEs</i>
General government	General government
Other sectors	
Other financial corporations	Other financial corporations <i>Money market funds (MMFs)</i> <i>Non-MMF investment funds</i> <i>Insurance corporations</i> <i>Pension funds</i> <i>Other financial intermediaries</i> <i>Captive financial institutions and money lenders, and financial auxiliaries</i> <i>of which: SPEs</i>
Nonfinancial corporations, households, and NPISHs	Nonfinancial corporations <i>of which: SPEs</i> Households and NPISHs

Source: Appendix 9, *BPM6* and Annex 14, *BPM7*

Figure 1. World External Assets (Excluding Monetary Gold)



Source: Lane and Milesi-Ferretti, The External Wealth of Nations Database.

Figure 2. Typology and Classification of Fungible Crypto Assets

