Integration of U.S. Macroeconomic Accounts: A Progress Report

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The Commission of the European Communities et al. (1993), on behalf of the United Nations, and the International Monetary Fund (1993) developed international guidelines for macroeconomic accounts. They recommended the preparation for each major sector of an integrated set of current accounts (production and income), accumulation accounts (capital, financial, and other changes in volume), a revaluation account, and a balance sheet. The existing U.S. accounts, parts of which are prepared by the Bureau of Economic Analysis (BEA) and the Federal Reserve Board (FRB), are not complete and are not consistent because in some cases the two agencies use different estimating methodologies and different definitions. Last year, the two agencies reported on a major collaborative effort to expand the accounts, resolve methodological differences, and improve consistency with the international guidelines. (Teplin, et al., 2004) The feature of their report was a draft set of complete accounts for 1985-2002. In addition, BEA published an article in December 2004 on its efforts to improve consistency between the national income and product accounts (NIPAs) and the international guidelines. (Mead, et al., 2004).

This article reviews the results of this joint agency effort to provide complete and integrated U.S. accounts. It discusses the new data prepared as a result of this effort and the proposed work plan to eliminate some of the major differences within the U.S. accounts and between the U.S. accounts and the new international guidelines.

FIGURE 1

SNA STRUCTURE OF INTEGRATED ACCOUNTS

OPENING BALANCE SHEET

- (Value of assets, liabilities, and net worth)

CURRENT ACCOUNT

- Production account (GDP, consumption of fixed capital, compensation of employees, taxes on production and incomes less subsidies, net operating surplus)
- Distribution and use of income (income and outlay)

ACCUMULATION ACCOUNT

- Capital account (net fixed investment and net lending/borrowing)
- Financial account (net acquisition of financial assets and net incurrence of liabilities)
- Other changes in volume account
- Revaluation account (changes in net worth from holding gains/losses)

CLOSING BALANCE SHEET

- Changes in stock positions (changes due to capital formation, net lending/borrowing, revaluation of assets and liabilities, other changes in volume)
- Closing position (value of assets, liabilities, and net worth)

Background

International guidelines

The international guidelines for national economic accounting were released in 1993 by the United Nations (System of National Accounts) and the International Monetary Fund (Balance of Payments Accounts). The System of National Accounts (SNA) provides a comprehensive framework for recording all of the stocks and flows in a nation's economy, including international transactions. It also covers financial accounts and balance sheets as well as input-output tables. The balance of payments manual (BPM), which is fully consistent with the SNA, provides similar accounts for international transactions.

The SNA is designed as an integrated system in that it uses consistent definitions, classifications, and accounting conventions for all sectors of the economy. As shown in Figure 1, for each sector, the SNA summarizes the transactions of groups of institutions into a sequence of accounts that flow from one to another—e.g., production generates income, which is used to finance consumption and saving. Saving is used for capital formation or for acquiring financial assets and liabilities. The accumulation of non-financial and financial assets and liabilities and the revaluation of assets and liabilities explain the differences between opening and closing balance sheets. All together, the integrated accounts track the sources of change in a sector's net worth. The five major SNA sectors are non-financial corporations, financial corporations, general government, non-profit institutions serving households, and households. The BPM provides a full set of integrated accounts for the rest-of-the world sector that are fully consistent with the SNA.

The United States and most other countries are in various stages of providing a fully integrated set of macroeconomic accounts. For example, among the developed countries, Australia, Canada, and the United Kingdom prepare integrated accounts, although they do not cover all of the SNA sectors; and there are some differences in the definitions of sectors.[1] In Europe, the European Central Bank is coordinating development of quarterly financial accounts for the Euro area for the non-financial sector, insurance companies, and pension funds and is working to expand the integrated system to other sectors.

Looking ahead, the United Nations Statistical Commission is reviewing the SNA and related guidelines, such as those in the BPM, for a revision to be released in 2008. Among the proposals currently under consideration are the following: treat spending on defense weapons systems as investment in fixed assets, include employee stock options as compensation, recognize a net return to government-owned fixed assets, include government-guaranteed loans in the balance sheet, and treat expenditures on research and development as capital formation.[2]

Changing the U.S. accounts

Integrating the U.S. accounts to facilitate various types of analysis has a long history. For many years, economists have called for increased consistency between the different U.S. accounts and for a complete set of related balance sheets. In the early 1980s, Richard and Nancy Ruggles (1982) prepared a set of accounts that related the income and product flows to balance sheets.[3] Commenting on their effort, James Tobin noted "their experiment … illustrate[d] the well-known problem. It is difficult to reconcile data from the different sources, and disturbingly large, unexplained discrepancies remain …. Conceptual integration needs to be matched by a concerted effort to diagnose and remedy these inconsistencies." Subsequently, Robert Eisner (1986) and Michael Boskin, et al. (1989), among others, wrote on the need for integration. Although these critics recognized that the existing U.S. accounts covered many elements of such a set of integrated accounts, the missing pieces were critical for many types of analysis. Moreover, because these accounts are presented in different publications and use different terminology for the same concept, combining them was difficult, even for the sophisticated user. The critics thought that integration of the accounts would provide a common terminology and a uniform presentation that highlighted connections between the activities described in separate accounts.

Publication of the revised international guidelines in 1993 resulted in calls for the United States to improve the consistency between the U.S. accounts and these guidelines in order to facilitate international comparisons. For example, in 1994, the National Academy of Sciences convened a panel to discuss integration of the NIPAs and flow of funds accounts (FFAs) for the government sector. The panel recommended that BEA "continue to move toward adoption of the major features of the international System of National Accounts (SNA) accounting framework for the government sector …" and that the FRB "working closely with BEA, should develop and regularly publish balance sheets for the government sector" (Slater and David, 1998). Shortly thereafter, BEA conducted a strategic review of its national, international, and regional accounts and, with substantial input from users, developed a five-year strategic plan. This plan not only included work with the FRB to better integrate the two agencies' accounts but also included work for BEA to make its accounts more consistent with the 1993 international guidelines (Bureau of Economic Analysis, 1995). Users participating in the review thought that closer coordination between the agencies would ensure that certain critical elements—such as sector boundaries, alternative data sources, and treatment of transactions—would be handled in a way that minimized distortions to important analytical concepts. Also, integration would align U.S. statistics more closely with those

[1]For a report on the integration by these countries, see Wilson (2004).

[2]Detailed information on the process and proposals is available on the United Nations web site at *www.unstats.un.org/unsd/nationalaccounts/snarev1.htm.* To provide comments to BEA, contact Brent Moulton at *brent.moulton@bea.gov.*

[3]Discussion by other experts follows their article in the same issue of the *Survey of Current Business.*

of other nations and allow policymakers and researchers to analyze more fully and accurately the interrelationships of the nation's financial and non-financial activities.

Beginning with the comprehensive NIPA revision of 1996, BEA has been implementing changes to both the NIPAs and international transactions accounts (ITAs) to increase consistency with the international guidelines. For example, BEA adopted chain-type indexes for measuring changes in real GDP and prices in 1996, established a capital account in the ITAs and redefined fixed investment in the NIPAs to include software as investment in 1999, and recognized implicit services provided by commercial banks to borrowers in the NIPAs and ITAs in 2003.[4] BEA also changed table designs and redefined certain transactions to make them much more consistent with the SNA.[5] The FRB has incorporated similar changes into the FFAs. In the most recent development, BEA and FRB staff presented the paper by Teplin, et al. (2004) last April to report on progress on a major effort to improve the integration of the U.S. accounts and their consistency with international guidelines. A summary of this paper is presented below in "Report of Joint Agency Effort."

Existing U.S. accounts

The existing U.S. macroeconomic accounts are prepared by BEA, who prepares the NIPAs and the ITAs, and by the FRB, who prepares the FFAs.[6] The NIPAs provide production and income accounts for the United States and data on the accumulation and value of tangible assets. For the production account and the measurement of GDP, there are three domestic sectors—business, general government, and households and institutions. For the income and savings accounts, there are three different sectors—personal, government, and corporate. In the production account, government enterprises, private unincorporated businesses, and tenant-occupied housing are treated as part of the business sector. In the income and saving account, private unincorporated businesses and tenant-occupied housing are classified in the personal sector; and government enterprises are classified in the government sector. The ITAs provide U.S. transactions and balances with the rest of the world and include current, capital, and financial accounts as well as the net international investment positions of the United States.

The FFAs provide capital accounts (showing saving and capital expenditures), a financial account (showing net acquisition of financial assets and net incurrence of liabilities), and balance sheets for selected sectors—households and nonprofit institutions serving households, nonfinancial corporate business, and nonfinancial noncorporate business. For the other sectors, balance sheet data are limited to financial assets and liabilities. For the financial sector, the FFAs include detail on flows of specific financial instruments, such as mortgages, corporate bonds, and deposits, and stocks of financial assets and liabilities. For the rest of the world sector, the FFAs provide details on financial assets and liabilities.

Although the U.S. accounts are not prepared following international guidelines, the United States has been providing international organizations with macroeconomic account estimates prepared as closely as possible to international guidelines. These special tabulations enable these organizations to publish data for the United States alongside comparable data from other countries. BEA has been doing this for many years, although a lack of source data prevents it from eliminating all differences with the SNA. The FRB recently began providing international organizations with quarterly FFAs prepared using definitions and terminology more consistent with international guidelines.

Differences between U.S. accounts and international guidelines

Although changes have been made to the U.S. accounts to make them more consistent with international guidelines, many major difference remain. For example, the NIPAs and FFAs treat weapons systems as investment and not consumption as in the SNA; and the FFAs treat household purchases of durable goods as investment and not consumption (Fraumeni and Okubo, 2001). There also are differences in coverage primarily due to the lack of source data. For example, the SNA treats illegal activities (such as prostitution or the cultivation or manufacture of illegal drugs) the same as legal activities, but the U.S. accounts do not cover them. The SNA also treats expenditures for livestock and entertainment—literary or artistic originals (such as original films, sound recordings, and manuscripts)—as investment, not consumption as in the existing U.S. accounts.

Important differences related to the definition of the sectors also remain. Although the SNA, the NIPAs and FFAs all define their sectors in terms of groups of institutions, they differ in the characteristics used

[4]For a summary of these changes, see Mead, et al. (2004)

[5]Changes in the NIPAs are described by Moulton and Seskin (2003) and by Mayerhauser, et al. (2003).

[6]Detailed information on the accounts prepared by these agencies is available at *www.bea.gov* for BEA and *www.frb.gov* for FRB.

to determine these groups. For example, in the SNA, all institutions that produce goods and services for sale at a price that covers the cost of production and maintain a complete set of books are classified into the nonfinancial or financial corporation sectors without regard to their ownership, legal form of organization, or purpose. In the U.S. accounts, greater emphasis is placed on ownership, legal form, and purpose; consequently, corporations organized for profit, all government agencies, nonprofit institutions serving households, and unincorporated private businesses are almost always classified in the same FFA or NIPA sector. (Because the NIPAs have different sectors for the production account and the income and outlay account, there are differences in the NIPA accounts in the treatment of government agencies and certain unincorporated businesses.)

Finally, another major difference between the SNA and the U.S. accounts relates to statistical discrepancies that arise in the U.S. accounts but not in the SNA. In the U.S. accounts, there are several well-know discrepancies–such as the discrepancy between GDP as measured (a) as the sum of expenditures and (b) as the sum of incomes in the NIPAs and personal saving in the NIPAs and FFAs. The SNA avoids such discrepancies by recommending that countries use balancing items and allocate (force) any discrepancies within the accounts (Commission of the European Communities, et al., 1993, paragraphs 3.64 and 3.65, p. 78). Although the elimination of statistical discrepancies in U.S. accounts may improve consistency with international guidelines, some discussants at the conference where the paper was presented expressed concerns about such elimination because they used the discrepancies to assess the reliability of these measures. (Slifman, 2004).

Report of Joint Agency Effort

Goals of effort

The authors of the April joint agency paper stated the goals of the effort as follows:

> "Diagnosing and remedying inconsistencies has been our goal. Indeed, preparing this paper, including the attached tables, is perhaps the most significant joint effort on the accounts since the Tobin comment was made. The agencies have looked closely at sector boundaries and the nature of discrepancies that arise from using different data sources, judgmental adjustments, and estimating techniques. We have uncovered many issues and have solved a few; others remain for future work" (Teplin, et al., 2004, p 3).

The authors identified many key inconsistencies between the existing BEA and FRB accounts, as well as between these accounts and international guidelines, and presented a full set of integrated U.S. accounts for 1985-2002, which are referred to as "Draft SNA-USA."[7]

Inconsistencies

Teplin, et al. discuss two types of inconsistencies in the existing U.S. accounts: (a) inconsistencies due to methodological differences, including the use of different source data and the use of different estimating procedures with the same source data; and (b) inconsistencies in the definitions of the sectors, including within the NIPAs and between the NIPAs and FFAs. They discuss the differences in the source data used to classify captive finance corporations and differences in the methodologies for using data on state and local governments. They note differences in the NIPAs and FFAs classification of nonprofit institutions serving households and housing as well as the use of two different sets of sectors for the NIPA production and income and outlay accounts. The paper also discusses other aspects of the U.S. accounts: the FFAs' other changes in the volume and the revaluation accounts lack detail on types of assets and liabilities, and the revaluations accounts do not show separate detail on holding gains or losses. In addition, there are no balance sheets for several key sectors; and the NIPAs provide production accounts by industry, but not by sector. Moreover, there are two measures of GDP.

Teplin, et al. also discusses the inconsistencies, or differences, between the existing U.S. accounts and the international guidelines. These differences, which are mentioned above in "Background," primarily relate to the definitions of sectors and the lack of a full sequence of accounts for all sectors. The SNA, the NIPAs, and the FFAs define their sectors in terms of groups of institutions; but they differ in the characteristics used to determine these groups. These differences primarily relate to institutions, other than corporations organized for profit, which produce goods and services for sale at a price that covers the cost of production and maintain a complete set of books. In the SNA, these types of institutions, are called "quasi-corporations" and are classified into either the non-financial or financial corporation sectors without regard to their ownership, legal form of organization, or purpose. In the U.S. accounts, greater emphasis is placed

[7]The Draft SNA-USA tables 1 through 9 included in the paper show data for 1995 through 2002. A complete set of tables for 1985-1994 and data for all years is on BEA's website at *www.bea.gov.*

on ownership, legal form, and purpose in determining the classification by sector.

Government agencies that are classified as "quasi-corporations," which are called "government enterprises" in the U.S. accounts, are classified for the FFAs and the NIPA income and outlay account into the general government sector, and for the NIPA production account into the business sector. All nonprofit institutions serving households, including those classified in the SNA as "quasi-corporations," are grouped together to form a separate nonprofit institutions serving households sector in the U.S. accounts. Unincorporated businesses that are classified in the SNA as "quasi-corporations" are classified for the FFAs in the nonfinancial noncorporate sector, in the personal sector for the NIPA income and outlay account, and in the business sector for the NIPA production account. However, the SNA classifies these businesses as "quasi-corporations" only if they maintain complete records; consequently those unincorporated businesses without complete records are classified in the household sector. No such distinction is made in the U.S. accounts; all unincorporated businesses are classified in the same sector. The Teplin, et al. paper and Mead, et al. (2004) note that the United States lacks source data to implement these SNA guidelines. The article also notes that the SNA sector definitions may not provide important measures, such as personal income, that are important for U.S. users.

The other significant difference relates to rental housing owned by individuals and not businesses. In the SNA, this housing is classified into the household sector. In the FFAs, they are classified into the non-financial noncorporate sector. In the NIPAs, they are classified into the personal sector for the income and outlay account and into the business sector for the production account. The differences for government enterprises and unincorporated businesses primarily reflect the limited source data available to implement the SNA.

FIGURE 2

MAJOR DIFFERENCES BETWEEN THE SNA AND DRAFT SNA-USA SECTORS

NON-FINANCIAL CORPORATIONS

SNA-USA includes individually owned rental housing; excludes goverment agencies and nonprofit institutions serving households that cover costs with revenue; "large" non financial unincorporated businesses are included in separate sector

FINANCIAL CORPORATIONS

SNA-USA includes "small" unincorporated businesses and excludes government agencies and nonprofit institutions serving households that cover costs with revenue

GENERAL GOVERNMENT

SNA-USA includes government agencies that cover costs with revenue enterprise

HOUSEHOLDS

SNA-USA shows combined household and nonprofit institutions serving households sector; excludes individually owned rental housing; "small" unincorporated businesses are included in separate sector

NONPROFIT INSTITUTIONS SERVING HOUSEHOLDS

SNA-USA not shown separately

REST OF THE WORLD

No major differences

Draft SNA-USA

The Draft SNA-USA accounts prepared for the joint agency paper provide close to a full set of SNA accounts for 1985-2002. As noted above, Teplin, et al. were not able to prepare sector accounts that were fully consistent with the SNA. The major differences are noted in Figure 2.

Despite these differences and limitations, Draft SNA-USA provides far more information than the existing U.S. accounts and will hopefully lead to a process of continuing improvement. In preparing the new accounts, BEA and FRB have accomplished the following:

- Expanded the availability of balance sheets to cover the government and rest of world sectors
- Provided a continuous time series for 1985-2002
- Minimized differences in the existing U.S. accounts by reclassifying personal trusts and corporate farms and by improving timing adjustments related to federal government transactions
- Eliminated internal inconsistencies such as the difference

between GDP measured from expenditures and incomes
- Presented the new accounts using a standard format and terminology more consistent with the SNA

At the same time, the new accounts have several limitations, in addition to the lack of complete consistency with the SNA sectors. For example, the statistical discrepancies related to the estimates of net lending or net borrowing remain large, and the new balance sheets for the government sectors do not include the value of land. Nevertheless, Draft SNA-USA has provided users with a set of accounts that more fully reflect international guidelines on presentations, has eliminated some of the inconsistencies in the existing U.S. accounts, and is presented in an integrated framework. The authors, in assessing the degree of consistency in the new estimates, compared the relative size of the differences in the net lending/net borrowing as measured in the new capital and financial accounts in the Draft SNA-USA sector accounts. In the capital account, net lending/net borrowing is measured as net saving and capital transfers less net capital formation, based on the NIPAs and ITAs, adjusted to eliminate several inconsistencies. In the financial account, net lending/net borrowing is measured as net acquisition of financial assets less net incurrence of liabilities, based on the FFAs. The differences, or the "statistical discrepancy," primarily reflect differences in source data, the timing in recorded flows, and other statistical differences between the U.S. capital and financial accounts.

For five of the sectors covered by the new estimates, the estimates in Table 1 show that there are significant differences in the patterns and size of the discrepancies.[8] For example, Teplin, et al. reported that the differences in net lending/net borrowing for the household sector are significant, but the patterns are similar except for the last several years.

[8]The paper shows detailed data for these sectors, as well as for non-financial noncorporate business and rest of the world sectors, for 1995-2002 and charts for net lending or net borrowing for most sectors beginning with 1985. Data for all sectors for all years are available on BEA's website.

TABLE 1

COMPARISON OF NET LENDING/NET BORROWING IN DRAFT SNA-USA: SELECTED SECTORS

(Billions of dollars)

Sector	1985	1990	1995	1999	2000	2001	2002
Household and nonprofit institutions serving households:							
Capital account	162.8	152.1	67.7	-147.7	-153.6	-209.9	-171.0
Financial account	183.9	313.1	118.5	-155.8	-269.2	-9.7	-280.6
Statistical discrepancy	-21.1	-161.0	-50.9	8.1	115.6	-200.2	109.7
Non-financial corporate business:							
Capital account	-11.5	-25.7	-36.7	-124.3	-205.5	-75.3	45.2
Financial account	-167.7	-59.2	35.5	-17.7	-28.2	82.4	14.4
Statistical discrepancy	156.2	33.5	-72.3	-106.6	-177.3	-157.8	30.8
Financial business:							
Capital account	-17.5	2.3	23.2	15.6	14.4	89.3	124.5
Financial account	2.2	-6.1	68.7	52.2	-136.7	-19.1	-10.1
Statistical discrepancy	-15.3	8.4	-45.5	-36.5	151.1	108.4	134.6
Federal government:							
Capital account	-213.3	-208.2	-199.3	101.3	189.3	45.4	-258.7
Financial account	-246.2	-193.9	180.4	105.4	198.0	-2.3	-269.3
Statistical discrepancy	33.0	14.3	-18.8	-4.1	-8.7	47.7	10.6
State and local government:							
Capital account	1.6	-37.7	-33.0	-22.3	-30.3	-61.0	-86.9
Financial account	-9.2	-23.5	0	9.9	-7.1	-39.5	-81.7
Statistical discrepancy	10.8	-14.2	-33.1	-32.1	-23.2	-21.5	-5.2

Source: Teplin, et al. 2004 and BEA website *www.bea.gov.*

The two measures showed about the same net borrowing for 1999, and the financial account measure showed more net borrowing in 2000 and 2002. In 2001, the capital account measure showed much larger net borrowing. The authors noted that the residual calculation of some categories in the current account leave considerable room for speculation on the sources of the difference.[9] This is also true for the residual calculation of most asset categories and some liability categories in the financial and balance sheet accounts

There are larger relative differences in net lending/net borrowing for the non-financial corporate business sector. In most years, both measures were consistent as to whether the sector was a net lender or net borrower. Since 1990, there have been four years where the measures differed in this regard. In 2000, the capital account measure showed significantly more net borrowing. Teplin, et al. noted the boundary between the non-financial and financial business sectors as a likely major cause for the discrepancy, in part reflecting differences in source data for the NIPAs and the FFAs. For the current accounts, the NIPAs rely heavily on tax return data. For the financial account, however, the FFA uses tax return data as well as data from surveys and regulatory information. In the NIPAs, corporations that file consolidated returns that include both non-financial and financial subsidiaries are recorded either in the financial or non-financial business sectors, depending on the predominant business. In the financial accounts, adjustments are made with the supplementary information to split the data from these returns into separate financial and non-financial corporations. The issue is particularly important for non-financial firms with captive finance companies. Evidence of this issue being a major source of the difference is that the net lending/net borrowing estimates of the two sectors combined show more consistency. Draft SNA-USA did not include any adjustment for this boundary issue.

In addition to this boundary problem, Teplin, et al. reported that part of the difference between net lending/net borrowing measures in the non-financial corporate business sector likely reflects the recording of "miscellaneous" financial assets in the financial accounts. At present, the FFAs include changes to goodwill and other intangible assets in flows of miscellaneous financial assets. Such flows are large and positive during periods of heavy merger activity and large and negative during periods of economic weakness. The impact of changes in such assets is not reflected in the Draft SNA-USA current and capital accounts. The adoption of the international guidelines would result in the allocation of a portion of the changes in the value of such assets to the other changes in volume account. Although the reclassification of these assets into revaluations and/or other changes in volume is likely to have a sizable impact on the statistical discrepancy, changes were not made in Draft SNA-USA for these accounting issues.

For government sectors, Draft SNA-USA shows mixed results. For the federal government sector, net lending/net borrowing estimates are close for all years, reflecting a generally high quality of available source data. These estimates also reflect changes incorporated into Draft SNA-USA to improve the use of these data, especially when special timing adjustments, such as for the payment of unemployment insurance benefits, are needed for the current account. However, net lending/net borrowing estimates for the state and local government sector show significant discrepancies. For this sector, the source data used for the U.S. accounts tend to be less timely and of lower quality. The authors concluded that the coordination of estimating procedures using the available state and local government data could reduce the size of these discrepancies.

Next Steps

The joint effort of BEA and FRB staffs has produced a first set of integrated sector accounts for the United States following, to the extent possible, international guidelines along with the recommendations presented in April 2004 by Teplin, et al. The authors reported that additional effort would be needed to produce the estimates on a continuing basis or extend them for the period before 1985. They also reported that an even greater effort would be needed to implement improvements to the U.S. accounts that would eliminate inconsistencies within these accounts, expand them to provide a full set of accounts, or improve their consistency with the international guidelines.

With regard to the elimination of inconsistencies within the U.S. accounts, Teplin, et al. noted the problems related to the different methodologies for the treatment of captive finance corporations and preparation of estimates on state and local governments, the inconsistency of the definition of sectors within the NIPAs, and the reclassification of personal bank trust and miscellaneous financial assets in the FFAs. To expand the coverage of the U.S. accounts, the authors discussed the need to develop further the other changes in volume and revaluation

[9]For a discussion of these differences, see Wilson, et al. (1989).

accounts through a review of the accounting techniques used in source data and whether those techniques align with what is needed for the accounts. To provide complete balance sheets, they noted the need to develop improved source data for real estate values, especially for the government sector, and improved methodologies for separating the market value of land and structures. Finally, improving consistency with international guidelines, especially the consistency of the definitions of the sectors, were linked primarily to the availability of improved source data.

Teplin, et al. reported that closer coordination between the agencies would be needed to ensure that certain critical elements—such as sector boundaries, alternative data sources, and treatment of transactions—would reduce the inconsistencies in the existing accounts. BEA's Strategic Plan outlines a number of research and development activities related to the development of integrated accounts. Work is already underway to examine sector definitions, with particular consideration given to the development of improved source data on government business enterprises. Other research is also being conducted on improving the consistency of source data between the NIPAs and FFAs, for example, to improve consistency of NIPA interest flow estimates with FFA estimates of interest-bearing assets and liabilities. In addition to the joint staff work noted above, the authors noted that efforts at the FRB are directed toward improving integration in the capital accounts, especially disaggregating the combined financial sectors. In conjunction with that work, there will be an effort to develop detailed information for the other changes in volume accounts. The authors proposed future work to eliminate additional types of inconsistencies, to enhance the presentation of the existing accounts and Draft SNA-USA, and to produce national balance sheets on a regular basis. However, progress will depend on appropriate allocation of staff by the two agencies to the joint effort. ■

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