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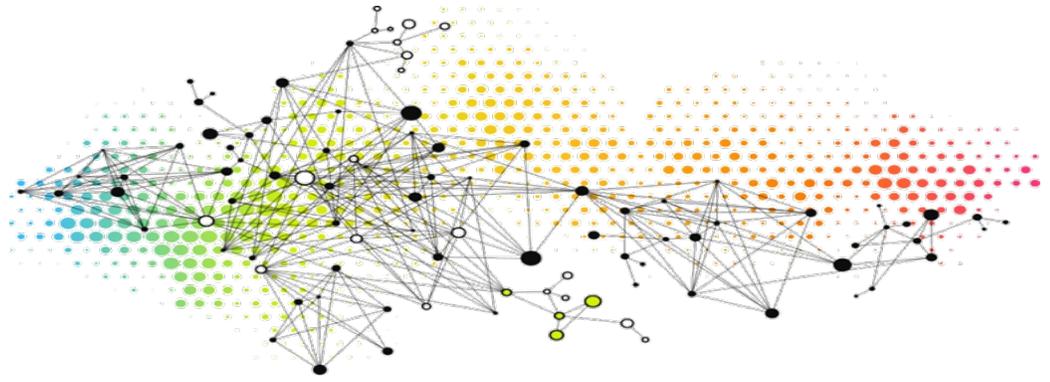
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## REPORT ON THE NATIONAL ACCOUNTS STATISTICS CAPACITY DEVELOPMENT MISSION (AUGUST 27–SEPTEMBER 7, 2018)

Prepared by **Martha Tovar Soria and Eneira Osorio**

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**REGIONAL TECHNICAL ASSISTANCE CENTER FOR CENTRAL AMERICA, PANAMA  
AND THE DOMINICAN REPUBLIC**

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## Glossary

AAIS	Annual Accounts by Institutional Sector
AESE	External Sector Statistics Unit
AESI	Institutional Sector Statistics Unit
BES	Business Economic Survey
CAPTAC-DR	Regional Technical Assistance Center for Central America, Panama and the Dominican Republic
CBCR	Central Bank of Costa Rica
DEM	Macroeconomic Statistics Department
DR	Definitive regime (for non-free-trade zone)
FEM	Strengthening Macroeconomic Statistics Project unit
FZ	Free Zone
GFCF	Gross fixed capital formation
GPV	Gross Production Value
IEA	Integrated Economic Accounts
IIP	International Investment Position
IP	Inward processing
MFS	Monetary and Financial Statistics
NFPS	Non-Financial Private Sector
PIM	Perpetual inventory method
Procomer	Foreign Trade Promotion Board
REVEC	Register of Economic Variables
RNFPS	Rest of the Non-Financial Private Sector
SCAE	Environmental and Ecological Accounting System
2008 SNA	<i>System of National Accounts 2008</i>
SR	Special regime
SUGEF	Office for the Supervision of Financial Institutions
SUGESE	Office for Insurance Supervision
SUGEVAL	Office for the Supervision of Securities
TA	Technical Assistance

## SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

- 1. A technical assistance (TA) mission, conducted by CAPTAC-DR, took place during August 27 to September 7, in San Jose, Costa Rica, to assist the Central Bank of Costa Rica (CBCR) in compiling the non-financial and financial balance sheets.** This TA mission was requested in the context of the rebasing project of the national accounts series to 2017, as follow-up of a previous mission conducted in March 2018.
- 2. This mission covered two purposes: 1) provide guidance to the CBCR in developing statistical methods to estimate the capital stock for the non-financial private sector (NFPS), and 2) provide TA in compiling balance sheets, as part of the annual accounts by institutional sector (AAIS) of Costa Rica.** For the first purpose, the mission assisted the CBCR staff in obtaining capital stocks (end of 2012) for a subset of the non-financial private sector (NFPS) that was lacking data on assets, through two alternative methods: i) deriving figures of capital stocks by type of assets based on grossing-up factors from the 2012 annual economic survey, and ii) calculating capital stock based on the gross fixed capital formation series along with assumptions on the assets service life spans. The results obtained from both methods were similar and resulted in an estimate of capital stock for the NFPS of about 42.7 percent of the total economy.
- 3. Regarding the second purpose, this TA was requested by the CBCR to support the dissemination of the AAIS, including the balance sheets, along with the new base year 2017.** The mission reviewed the internal estimates of balance sheets available for some institutional sectors and assisted the CBCR staff in compiling balance sheets for non-financial assets by institutional sectors and for the total economy. These estimates are based on the results achieved within the first purpose of the mission. For the balances of financial assets, the mission provided guidance to supplement the available data with the financial statistics and the international investment position, harmonized with the national accounts, as needed.
- 4. The compilation of balance sheets as part of the national accounts emerged in the context of the Data Gaps Initiative intended to identify financial risks and vulnerabilities** by increasing the available information on financial flows and stocks. The implementation of the compilation methods and of the recommendations proposed during the mission will allow the CBCR to publish balance sheets as part of the new base year series to 2017.

**To support progress in the above-mentioned areas of work, the mission made the following priority recommendations for the compilation of balance sheets of non-financial and financial assets by institutional sectors.**

Table 1. Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
<b>January 2019</b> (Pending)	Assign responsibility for compiling the balance sheets by institutional sector and subsector. The delaying in the implementation of this recommendation hampers the possibility to conclude the balance sheets.	<b>CBCR</b>
<b>June 2019</b> (In progress)	Develop processes for reconciling with financial statistics, balance of payments and government finance statistics.	<b>CBCR</b>
<b>January 2020</b>	Complete all the components of the AAIS; investigate and resolve discrepancies.	<b>CBCR</b>

Further details on the priority of the recommendations and related actions/milestones can be found in the action plan under the Detailed Technical Assessment and Recommendations.

## NON-FINANCIAL ASSETS

### A. Total Economy

**5. The annual accounts by institutional sector compilation is distributed among various units within the Macroeconomic Statistics Department (DEM).** The Strengthening Macroeconomic Statistics Project (FEM) unit is responsible for the integration of current and accumulation accounts by institutional sector that are published annually, known as the Integrated Economic Accounts (IEA), which are part of the series with 2012 as the base year.

**6. The financial and government sectors are compiled by the institutional sector unit, which is also responsible for government finance statistics.** This unit utilizes information on the financial sector that is provided by the Office for the Supervision of Financial Institutions (SUGEF), the Office for Insurance Supervision (SUGESE), and the Office for the Supervision of Securities (SUGEVAL). The measurements of the financial and government sectors are integrated within the IEA. The FEM unit compiles the accounts for the non-financial corporations sector, households, and nonprofit institutions serving households. Both units prepare the full sequence of accounts from production to asset balances.

**7. With regard to institutional sectors whose information source is administrative records, there are balances of non-financial and financial assets, with the feature that the closing balance does not coincide with the opening balance for the following year.** There are no balance sheets for the following sectors/subsectors: other financial corporations for which only a minimum amount of information is available from the Business Economic Survey (BES); local governments; some of the public non-profit institutions that are part of the government; and the household sector.

**8. During the mission an estimate was made of the balance for the total economy based on a method for estimating the stock on the basis of limited information.** This was done for the purpose of obtaining a figure that could serve as a reference for estimates of balances of non-financial assets of other non-financial corporations, considering that it is more representative in terms of production, and that there is no basis for inferring what percentage this might be in the balances of non-financial assets.

**9. The reference to the method applied is in the *Measuring Capital Manual of the Organization for Economic Co-operation and Development (OECD)*, which notes that the **Perpetual Inventory Method (PIM)** is the most commonly used approach for the measurement of stocks and flows of fixed assets, and it is based on the simple idea that stocks constitute cumulative flows of investment, corrected for retirement and loss of efficiency.**

**10. It should be noted that these measurements are provisional and for the purposes of referring to the total economy,** the best alternative is the calculation of gross and net capital stocks for the total economy and by asset segments based on the PIM constructed for the longest series possible. The CBCR does not yet use this measurement and the mission was informed that research is in progress and that it could be available in 2019. In the meantime, the asset balance sheet project is under way and TA has been requested for this purpose.

**11. With regard to the measurement of stocks, the *Measuring Capital Manual* reconciles these measurements with the *2008 System of National Accounts (2008 SNA)* balances of non-financial assets,** as stated in the following paragraph: *Section 19.7 ... However, net stocks are also of interest in their own right when it comes to measuring wealth and when balance sheets are set up. A principle for balance sheets in the national accounts is that assets recorded in the opening or closing balance are valued at the prices prevailing on the dates to which the balance sheets relate. Only net or wealth stocks enter balance sheets... The difference between the value of opening and closing balance sheet can now be de-composed into a basic identity that links balance sheets, transactions and holding gains and losses... There is one omission in the formula above: no account was taken of other changes in volumes. Other volume changes in assets imply a discrete shift in the level of the capital stocks and few more general statements can be made about them.*

**12. For the purposes of this mission, the stock that will serve as a reference is the net stock, and the information used is the series of gross fixed capital formation by type of asset (GFCF) and the implicit price indices (IPIs).** The tax depreciation rates available for Costa Rica in the regulations associated with the Income Tax Law for fixed assets and for radio and television services, films, videos, and other related products that are considered to be intellectual property were used for the service life assumptions, and the Regulation on Radio Communications was consulted to identify the time periods for which rights are granted and to assign service life assumptions.

**13. Three variables  $\alpha$ ,  $b$ , and  $\delta$  per type of asset are needed in order to obtain a provisional stock.** Using this information a factor  $C$  is calculated, which represents the rate of new investments for the net stock of an asset. The formula is as follows:

$$C = \frac{\left(1 + \frac{\alpha}{b}\right)(1 + b)}{b + \delta}$$

where:

$\alpha$  is the asset improvement rate;

$b$  is the asset growth rate;

$\delta$  is the depreciation rate.

**14. A theoretical assumption was used for the improvement rate (0.2), the asset growth rate was the average growth in GFCF for each type of asset, and the rates mentioned in the previous paragraph identified by type of GFCF asset were used for the depreciation rate.**

**15. This information was used to estimate a factor C by type of asset, which was applied to the amounts by type of GFCF asset for 2012, taken as the starting point of the series of stocks and a basis for asset prices (implicit price indices). The results achieved are presented in Table 2.**

**Table 2. Stocks and Balances of Assets**

Item	Millions of Colones
Net stocks of assets in 2012, total economy	29 704 144
Balance of assets of sectors with administrative records	18 081 917

**16. The provisional balance of net stocks indicates that the difference between the two amounts corresponds to the balance of the four sectors/subsectors for which no balances are available:** other non-financial corporations; local governments; some of the non-profit institutions that are part of the government; and the household sector.

**17. In the particular case of the household sector, it is very important to calculate the housing stock, as the main fixed asset that households possess.** In the case of local governments, and given that balances are needed for all of the sectors, alternatives for available information should be explored. The mission offered suggestions for the measurement of balances of non-financial assets for other non-financial corporations, based on information available from the BES and the income base, as well as statistical methods described in sections B and C.

**18. An asset account needs to be compiled for each produced and non-produced non-financial asset, which was explained during the previous mission.** The balance sheet format is used, which has an opening balance, a capital account, accounts of other changes in volume, a revaluation account, and a closing balance, which must be the opening balance of the next period.

**19. During the mission a balance sheet calculation was performed for the pool of assets (asset accounts) based on information available in the FEM unit.** The available opening balance and estimates of other non-financial corporations developed using statistical methods

during the mission were used as a base. Following the simplified method described in paragraph 13, estimates were made for local governments and households based on their capital account for 2012. Accounts of other changes in volume already available to the FEM unit and developed on the basis of information from the administrative record or from the BES were used; the IPIs by type of asset of the same GFCF were used for the revaluation account. This recommendation is based on *2008 SNA*, which states that the nominal gain is measured based on the price of the particular asset. Since the CBCR currently does not calculate nominal, neutral, and real gains, and only does so for a total and based on business accounting criteria, the valuation should be performed using the specific price of the asset.

**20. The asset balances of the change in inventories were not addressed during the mission,** however the respective measurement needs to be performed starting in 2012, in line with the balances developed to complete the set of produced assets.

***Recommended Actions:***

- Change the valuation criteria for the revaluation account which is currently being prepared, with the aim of applying the IPI of the relevant asset, and ensure that the same price is applied in the balance sheet of the institutional sectors/subsectors.
- Analyze the valuations that are presented in the information contained in the financial statements or annexes to the BES, with the aim of determining whether the information is based on market prices for the reference year.

## **B. Other Non-Financial Private Corporations, Simplified Perpetual Inventory Method**

**21. The previous mission of March 2018 made recommendations regarding the use of databases for other corporations and large companies,** as well as the income database, in order to bring together all of the information available for the measurements of other companies. The FEM unit addressed these recommendations prior to the mission.

**22. The purpose of this mission was to define possible methods that would enable the FEM unit to obtain balances of non-financial assets for other non-financial corporations for which not all information is available through the BES.** Based on the information available, the mission assisted in the development of two methodological proposals, the first to follow up on the recommendations by the previous mission and using all of the information available from the BES for non-financial private corporations in all of their forms: large, special regimes, and others. The work performed on the basis of statistical methods is described in section C. The second is based on a proposal developed for the total economy with the simplified PIM that was described in section A.

**23. The purpose of developing both of the proposals was to have elements that would make it possible to determine whether the amount obtained through statistical means had**

**the necessary consistency**, considering the data from the other segments of non-financial corporations, and the resulting gap by type of asset.

**24. The results obtained by the two methods are consistent with the total for the segment representing other non-financial corporations.** There are differences in the gaps between non-residential structures and machinery and equipment given the composition of the variables used to determine them, which is the large companies segment of the BES. The underlying assumption of the proposal developed using statistical methods is that the composition of the fixed assets used to generate the production of large companies is similar to that of other non-financial corporations, while the underlying assumption of the proposal developed using a capitalization factor is that the structure of capital formation in 2012 is similar to that of the general stocks of other companies for which no stocks are available.

**25. The estimate developed using statistical methods is presented below in section C.** The data obtained for both of the proposals are as follows (Table 3).

**Table 3. Balances of Total Fixed Assets for Other Non-Financial Private Corporations for 2012, in Millions of Colones**

	Estimate
Estimate with simplified PIM	12,692,281
Estimate with expansions by statistical area	11,830,431
Estimate with expansions by statistical area and asset type	12,836,461

**Recommended Actions:**

- Review the consistency of the variables obtained in Annex 5 of the BES and specify to the reporting entity the valuations with which assets are requested.
- Study the accounting standards that need to be applied by companies by regime and size in order to identify the differences between the accounting valuation and the economic valuation. Consider the fact that Annex 5 of the BES expresses “Balances at historical value,” which differ from the market values that are required for asset measurements in national accounts.

### **C. Other Non-Financial Private Corporations, Statistical Method**

**26. For the measurement of the non-financial private sector (NFPS), the CBCR has various sources of information that are comprised of administrative records and surveys.** In particular, the business register (REVEC), the income database of the Ministry of Finance, and the BES are available for the estimation of gross capital formation in this institutional sector. The income database includes variables such as assets and liabilities, revenue, costs, credits, expenditures and deductions, for all of the companies that declare income.

**27. The REVEC is a register of all economic entities at the national level, and it contains approximately 176,478 non-financial corporations in its coverage.** It is updated annually with information from the income database and other sources of information and it is the sampling framework that serves as the basis for the design and selection of the sample of companies for the BES.

**28. The BES is a survey whose purpose is to collect data from non-financial private companies in order to develop national accounts statistics.** It is based on a sample designed according to the probabilistic method. The BES collects information in two segments: large companies and a group of other non-financial companies. Both segments include companies with the Inward Processing (IP) and Free Zone (FZ) special regimes. In terms of production output, large companies account for 14 percent, while the rest contribute 48 percent. Given that the availability of information is more limited for the latter segment, the CBCR is seeking to define measurement methods that will allow for more robust measurements of the non-financial corporate sector.

**29. Within the BES, the corporations that are most important in terms of revenues are classified as large.** They are included in the survey every year and they are asked questions in what is called the expanded form. The form contains profit and loss statements, balance sheets, and seven annexes that provide details about income and expenditures, as well as non-financial and financial assets. Information related to GFCF is contained in Annex 5 of the BES (Annex 1 herein). It is not necessary to perform estimates for the group of large companies because the population data are available. The FZ and IP companies are subject to special monitoring due to their importance and form of operation, and there is a census for which financial statements provided by the Foreign Trade Promotion Board (Procomer) are obtained.

**30. From the subpopulation comprised of other non-financial private corporations with more than five employees, a sample with a self-represented stratum is selected** which contains the largest companies by economic activity in terms of income and some with very particular characteristics within the activity, as well as a random sample that represents all of those companies that are included in the rest of the NFPS.

**31. It is important to mention that the same economic activities are not investigated in the BES every year.** Each year a group of activities is selected that will be included in the sample, according to criteria set by experts. The activities that are not measured in a given year are estimated on the basis of the behavior of other indicators and taking into consideration the data for the activity the previous year, if it was covered in the BES.

**32. A shorter form is used for the 1,427 companies that make up the sample, including those in the self-represented stratum (814) and in the random stratum (613);** this form does not include the balance sheets. This group of companies is, however, asked to provide Annex 5, which, as mentioned above, is where detailed information about balances of non-financial fixed assets by type of asset and by economic activity is included (Annex 1 herein).

**33. The mission focused on the evaluation of various estimation methods using the balance of non-financial fixed assets declared by companies in the random sample**, with the aim of determining the total balance of said variable by type of asset and by economic activity, but in this case there are 19,751 companies comprising the rest of the non-financial private sector (Table 4), which are represented by this sample and for which this information is not available.

**Table 4. Importance of Each Subpopulation in the Total Population (REVEC)**

Subsectors of the Population	Number of Companies	Income (millions)	Share
<i>BES 2012 population</i>	21,289	23,657,754	100.00%
<i>Large (includes the Special Regime (SR) and Definitive Regime (DR))</i>	111	8,187,471	34.61%
<i>Sample of other companies (includes SR and DR)</i>	1,427	12,593,059	53.23%
<i>Self</i>	814	11,481,094	48.53%
<i>Random</i>	613	1,111,964	4.70%
<i>Outside of sample (RNFPs)</i>	19,751	2,877,225	12.16%

**34. It was decided to perform the estimates using the data for 2012 since it is the base year for the current series and it is where the BES starts.** A larger number of economic activities was also investigated for this year (69 of 132), than in the rest of the period up to 2016. The information for 2017 is still being processed.

**35. The two first scenarios considered were direct estimation methods.** The first consisted in applying to the sample data the expansion factor defined for each company in the design of the original sample; in the second case, an expansion factor defined as the size of the population of companies in each activity (N) compared to the sample size in said economic activity (n) was applied.

**36. A third option was to use the information from the income database to obtain population data on the balance of fixed assets** of companies that declare income and that are not included in the BES sample.

**37. Table 5 below is a synthesis of the results obtained from the three first scenarios evaluated:**

**Table 5. Initial Balance of Fixed Assets in 2012 (Millions of Colones)**

Random Sample	Expanded by Company	Expanded by Statistical Area	Income Base
277,945	7,603,697,714	6,567,274	1,580,669

**38. In the fourth scenario an indirect estimation method was used that consisted in applying the conceptual framework of the ratio estimators to the BES sample information.**

**39. The indirect estimation methods use the known information of an auxiliary variable "Y," which in our case is production, correlated with the study variable related to the GFCF,** in order to obtain estimates that are more precise than calculations based on the sample alone. In this case, the ratios were estimated using the data declared by the companies that comprise

the rest of the non-financial private sector and that are included in the BES random sample.

**40. The linear correlation between these variables was estimated for all of the economic activities with information reported by companies in the BES and it is calculated to be 0.84** (the detailed calculation is presented in Annex 2).

$$\text{Let us call the following quotient the ratio: } \hat{R} = \frac{x}{y} = \frac{\text{Balance of fixed assets}}{\text{Production}}$$

**41. Sample ratios were estimated for all of the economic activities that were investigated in the BES sample in 2012 by applying the formula described in the previous paragraph (Annex 4).** Based on the sample ratios by activity we can also estimate the totals using the following formula:

$$\hat{X} = \hat{R}Y$$

where:

$\hat{X}$  is the total balance of fixed assets estimated for the total population;

$Y$  is the total production for the population measured by Gross Production Value (GPV).

**42. By applying this method, an estimate of the balance in fixed assets for the population of those activities included in the 2012 sample will be obtained (Annex 5).**

**43. In addition, based on the sample ratio  $\hat{R} = (\text{Balance of fixed assets})/\text{Production}$  obtained with the sample information for 2012,** the ratios were calculated for each of the activities that were not investigated in 2012, by imputing the values based on the contribution of each economic activity to the total GPV (Annex 3).

**44. Table 6 below provides the aggregated data for all of the activities,** with the monetary amounts expressed in millions of colones:

**Table 6. Estimate of the Initial Balance of Fixed Assets by Economic Activity for the Rest of the Non-Financial Private Sector Under the Definitive Regime**

Statistical areas included in the 2012 sample	Income	Initial balance of fixed assets for the sample	R	GPV for DR RPNFS population	Initial balance of fixed assets, expanded	
Yes	69	1,201,023	277,945	0.2036	12,423,855	4,840,914
No	63	-	-	0.4657	5,639,300	6,989,517
<b>Total</b>	<b>132</b>	<b>1,201,023</b>	<b>277,945</b>	<b>0.2729</b>	<b>18,063,155</b>	<b>11,830,431</b>

**45. In addition, using the same methodology based on ratio estimators, the balance by each type of non-financial fixed asset was calculated.** A detailed estimate was made for each of the following types of produced assets:

- Other buildings and structures
- Machinery and equipment
- Cultivated biological resources

- Costs of ownership transfer on non-produced assets
- Intellectual property products
- Inventories
  - Materials and supplies
  - Work in progress
  - Other work in progress
  - Finished goods
  - Military inventories, foreclosed assets, and assets held under financial leases
  - Goods for resale
- Valuables
- Acquisitions less disposals of non-produced assets
- Land and property.

**46. First, sample ratios were estimated for the 69 activities that were included in the sample for 2012** and these data were used to obtain the expanded total for the balances by type of activity corresponding to the rest of activities (Annex 5). The estimates obtained for all of the types of assets except changes in inventories and valuables are presented below (Table 7):

**Table 7. Estimates by Type of Asset Based on Ratio Estimators**

Type of Asset	R	Expanded Balance Millions of Colones
Other buildings and structures	0.092499	2,692,692
Machinery and equipment	0.298827	8,258,895
Cultivated biological resources	0.000070	2,112
Costs of ownership transfer on non-produced assets	0.000027	660
Intellectual property products	0.004126	132,166
Land	0.038081	563,762
<b>Total</b>		<b>11,650,287</b>

**47. The produced fixed assets corresponding to inventories and other valuables were estimated according to the same indirect method based on the ratio estimator,** but using information reported by large companies by economic activity, since the information reported in the random sample for types of assets has limitations. There are economic activities that are not represented in the estimate owing to the fact that there are activities in which there is no company classified in the group of large companies.

**48. In the case of the change in inventories and valuables, the population ratios were calculated for fixed assets based on the GPV by type of activity** (manufacturing, trade, and services) for large companies and this quotient was multiplied by the GPV of the activity for the rest of the non-financial private sector.

49. The results obtained are shown in Table 8 below:

**Table 8. Estimates by Type of Asset Based on Ratio Estimators, Inventories and Valuables**

Type of Asset	Ratios	Expanded Balance Millions of Colones
Inventories	0.123075	1,185,821
Valuables	0.000014	353
Total		<b>1,186,174</b>

50. Table 9 below provides a summary of the population total for the balance of fixed assets corresponding to all of the companies in the rest of the non-financial private sector estimated using the ratio estimator by economic activity and type of asset.

**Table 9. Population Totals for the Balance of Fixed Assets for the Rest of the Non-Financial Private Sector**

Type of Asset	R	Expanded Balance Millions of Colones
Other buildings and structures	0.092499	2,692,692
Machinery and equipment	0.298827	8,258,895
Cultivated biological resources	0.000070	2,112
Costs of ownership transfer on non-produced assets	0.000027	660
Intellectual property products	0.004126	132,166
Land	0.038081	563,762
Inventories	0.123075	1,185,821
Valuables	0.000014	353
<b>POPULATION TOTAL - ESTIMATED GROSS CAPITAL FORMATION</b>		<b>12,836,461</b>

## D. General Government Sector and Households

51. The household sector and nonprofit public institutions and municipal governments subsectors do not have balances of non-financial and financial assets. In the case of households, there is no housing stock, however, the CBCR is developing a housing price index that will serve for these estimates in the medium term, together with additional information on the physical housing stock.

52. As for the general government, the municipal governments subsectors and 80 percent of nonprofit public institutions also lack balances of non-financial and financial assets. The Institutional Sector Statistics Unit (AESI) is the unit responsible for the compilation of data for the government and financial sector. This same unit is also responsible for Government Finance Statistics.

53. In order to obtain a balance of fixed assets for all of the institutional sectors, it is necessary to compile the balance sheets of these government subsectors. For this purpose,

the AESI can provide the best elements to support the process, with regard to financial assets based on financial sector information that has already been prepared, and the issuance of available debt. In the case of non-financial assets, during the mission a balance of produced non-financial assets was developed in preliminary form, and this estimate can be revised and improved with information and references that may be available to the AESI.

**54. The measurement of government sector balance sheets can be complicated if the government finance statistics records are on a cash basis, and consequently their valuation needs to be verified.** As for local governments, the number of entities and the accounting information available also determine the type of measurements that can be made.

***Recommended Action:***

- Perform an inventory of the information available in the AESI and a valuation of assets in order to develop estimates of balances of non-financial and financial assets of local governments and non-profit public institutions for 2012.

## **E. Non-Produced Assets**

**55. The 2008 SNA recognizes three types of non-produced non-financial assets:** natural resources; contracts, leases, and licenses; and purchased goodwill and marketing assets. As part of the non-financial assets, balance sheets also need to be prepared for them; it is necessary, however, to identify which of these assets can be identified as economic assets for Costa Rica, and the available information sources that will allow for their measurement.

**56. The 2008 SNA identifies two characteristics that must be present in order for natural assets to meet the definition of an economic asset.** In the first place, only those naturally occurring resources over which ownership rights have been established and are effectively enforced can qualify as economic assets and be recorded in balance sheets (2008 SNA, paragraph 10.167). In the second place, they must be capable of bringing economic benefits to their owners, given the technology, scientific knowledge, economic infrastructure, available resources, and set of relative prices prevailing on the dates to which the balance sheet relates or expected to do so in the near future (2008 SNA, paragraph 10.168).

**57. For natural assets, the work that the statistics offices has performed is within the framework of the Environmental and Ecological Accounting System (SCAE)** and would be the starting point for what can be achieved in terms of the extent of measurements of stocks of non-financial assets in national accounts. In this connection, there is an environmental accounts unit within the DEM with which a meeting was held. The CBCR compiles environmental accounts for water, forests, and energy based on the SCAE. This team explained to the mission and to the head of the FEM various aspects concerning the environmental assets for which research has been carried out, which depending on their ownership and use could cross over from the environmental to the economic arena.

**58. The environmental accounts team is the unit that could help in defining which assets of those covered by these accounts would be subject to measurement as part of natural resources.** The water account, which was developed from 2012 to 2015, contains measurements of hydrological resources in physical units. As part of the use of hydrological resources in monetary units, this account presents a table that shows the utilization of the resource in the production process, which has already been measured in the production account. In physical units, it presents a balance sheet that shows water bodies for economic use to which an economic valuation can be assigned, with the help of the environmental accounts unit. The valuations that can be performed would be part of Natural Asset (AN) 214 Hydrological resources.

**59. The CBCR presents measurements of carbon, timber, and land in the Forest Account.** In the case of carbon, it would have an impact only on the environment. In the physical assets account for timber resources, one needs to identify if the stocks of cultivated timber resources (natural forest, planted forest, palm forest, or mangroves) are owned by some institutional unit and if they bring economic benefits; this is due to the fact that afforestation and removal activities are observed, and if they are intended for economic use they could be the object of measurement of a natural asset AN 2159 Other, on the basis of which a price should be assigned for the valuation of those in stocks of timber resources. The forest cover change matrix (hectares) is where a shift to economic use can be identified. The use of timber resources that has already been measured as an input to economic activities is presented in supply and use tables expressed in monetary units.

**60. With regard to the land cover account, the CBCR presents the total territory of Costa Rica by type of land: urban, crops, pasture, forest, mangrove, moors, partially forested, bare soil, and water.** From the total cover and by type of land, the part corresponding to an economic asset that is the property of an institutional unit and that produces an economic benefit needs to be identified. Land use flows can be measured based on the expansion and regression by economic activities that are available in the same account. The relevant asset is AN 211 Land and property. As in the case of hydrological and timber resources, the definition of asset prices is the most critical part of the measurements, and support from the environmental accounts department is essential in the development of these measurements owing to its knowledge and the availability of information. The energy and emissions account basically concerns environmental measures.

***Recommended Actions:***

- Include the environmental accounts department, together with the FEM team, in the economic measurement of stocks of natural resources for the purposes of the 2017 rebasing project.
- Ask the environmental accounts team to update the measurements to 2016, in order to obtain stocks of economically measurable assets

## FINANCIAL ASSETS

### A. Sectoral Balance Sheets: from the Office for the Supervision of Financial Institutions

**61. There was an opportunity to review the sources of information available for financial assets provided by the Office for the Supervision of Financial Institutions (SUGEF) during the mission that took place last March.** During this mission the AESI explained that there is an agreement with the SUGEF to make financial information on all of the institutions under supervision available on a monthly basis, institution by institution and operation by operation. This information is broken down by sector, based on the classification of economic entities used in the REVEC, and based on the *2008 SNA* classification of financial assets. The SUGEF submits the information in aggregated form by institutional subsector defined for purposes of the 2012 base year by the CBCR.

**62. The information that is received covers state-owned banks (4), private banks (12), cooperatives (32), financial institutions (4), mutual financial institutions (2), and two more financial institutions, for a total of 56 regulated financial institutions that comprise Costa Rica's financial system.** Based on the agreement, the grouping is that defined for the base year 2012, so if there is any revision for the purposes of the base year 2017, the corresponding reclassification should be requested.

**63. It should be noted that the valuation criteria applied are the accounting criteria of the source information (restated),** and it is recommended that they be verified against those applicable to national accounts, which in turn are consistent with those of financial statistics in which financial instruments are to be valued at market prices as of the date on which the balance sheets are presented.

**64. The AESI prepares balance sheets of financial sector institutions, and the relevant counterparties, with this information,** always following the institutional subsector already classified. It should be noted that the reconciliations with other sectors are made on the basis of the financial flows. The CBCR prepared a cash flow exercise for the year 2010.

**65. With the flow reconciliation approach, the balances of the sources themselves are modified, and as years accumulate they differ from the original source.** The CBCR publishes the IEA up to the financial account, and since there is interest in extending the central framework to the balance sheets, it is necessary to revise the current method, replacing it with a balance and flow approach.

**66. This recommendation was made during the previous mission, which suggested the use of asset accounts and focusing on obtaining flows from the financial account and the other changes in assets and revaluation accounts based on the methods recommended in 2008 SNA.** Table 10 presents an asset account. These accounts for non-financial produced assets were developed during the mission with FEM staff, based on the unit's working files and applying the valuations suggested in *2008 SNA*.

Table 10. Asset Account, Balance Sheet Format

Code	Type of asset	IV.3 Closing balance/ Opening balance Year n	IV.2 Changes in balance sheets				IV.2 Changes in balance sheets	IV.3 Closing balance/ Opening balance Year n+1
			III.1 Capital account	III.2 Financial account	III.3.1 Other changes in the volume of assets account	III.3.2 Revaluation account		
			P511 Acquisitions less disposals of fixed assets	Net acquisition of assets/Net issuance of liabilities	K Changes in assets	Nominal holding gains/losses		
AF	Financial assets							
AF1	Monetary gold and SDRs							
AF2	Currency and deposits							
AF3	Debt securities							
AF4	Loans							
AF5	.....							
AN	Non-financial assets							
AN111	Dwellings							
AN1121	Non-residential buildings							
AN1122	Other structures							
AN1123	Land and land improvements							
AS1131	.....							

**67. The same data for all of the 2008 SNA assets are provided in the asset accounts,** but instead of the breakdown by sectors, the columns show the entries for each type of asset coming from the capital and financial account, the other changes in the volume of assets account and the revaluation account (2008 SNA, paragraph 13.14).

**68. In the measurements of financial assets it is necessary to perform a reconciliation with the Monetary and Financial Statistics (MFS) balances; these statistics are more timely and they follow the same accounting rules as the 2008 SNA,** with the exception of the quadruple entry. To strengthen these reconciliations, the mission requested a meeting with the head of the MFS unit, who explained that they are working very closely with the AESI, but that to date the classification criteria for assets and institutional sectors have not yet been aligned. The SUGEF provides information to both units (MFS and AESI), but it is not the same information, since in the case of the MFS unit information is provided with the original source classifications and for the AESI the information is processed following the criteria defined for the purposes of the updating from the 2012 base year.

**69. During the mission the AESI was asked to provide the head of the MFS unit with the balances of available financial assets with SUGEF sources and their own groupings.** In addition, the head of the MFS unit was asked to draw up a comparison of figures, which was reviewed jointly by the head of the FEM unit, the AESI, the head of the External Sector Statistics Unit (AESE), and the MFS unit. Table 11 below is provided as an example.

**Table 11. Comparison of National Accounts Data and Financial Statistics**

2016			National Accounts Financial Account stocks	CBCR	Other Deposit-Taking Corporation (ODC)	Other Financial Corporation (OFC)
<b>FINANCIAL ACCOUNT</b>	<b>F3</b>	<b>Debt securities</b>				
	F31	Domestic currency				
	F311	Debt securities of the Central Govt	5,054,791.93		1,462,424.50	
	F312	Debt securities of the CBCR	1,639,529.79		624,779.06	
	F319	Other debt securities				
	F32	Foreign currency				
	F321	Debt securities of the Central Govt	1,213,882.57		1,001,768.99	
	F322	Debt securities of the CBCR	53.63			
	F329	Other debt securities	4,643,629.57			
	<b>F4</b>	<b>Loans</b>				
	F41	Domestic currency				
	F411	Debt securities with repurchase agreement	153,136.39		131,838.16	
	F412	Deferred liquidity operations	34,150.81		186,350.52	
	F419	Other loans	12,323,755.04		13,121,998.27	
	F42	Foreign currency				
F421	Debt securities with repurchase agreement	197,599.91		75,347.70		
F422	Deferred liquidity operations	13,603.41		29,306.22		
F429	Other loans	7,790,661.49		8,341,604.16		

**70. The purpose of this comparison is to identify problems that are encountered in the preparation of asset accounts for the total balances of financial assets, in order to achieve the horizontal consistency that should be achieved by transaction and asset (Annex 6).** It is noted, for example, that the level of Central Government debt holdings by the Other Deposit-Taking Corporations (figures in black) differs significantly from the AESI measurements (figures in blue). It was not possible to reconcile the numbers, since the purpose of this comparison exercise was to show that both statistics (national accounts and MFS), need to be reconciled for the purposes of asset balance sheets: balances, flows, other changes in the volume, and revaluations.

**71. The same reconciliation applies to data on the International Investment Position (IIP), which the AESE prepares,** and in this regard the mission was told that the reconciliation is already in place for the International Reserve, and therefore the categories of the IIP should continue to be reconciled, considering that a conversion from dollars to colones should be made according to the criteria defined by the AESE for the treatment of flows and stocks.

***Recommended Actions:***

- The DEM should define the unit responsible for the preparation of financial asset accounts, in order to introduce the asset account method as the proposed mechanism for the preparation of balance sheets by institutional subsector/sector and the total economy.
- Once the unit responsible has been defined, develop the financial asset accounts and align the integration criteria that will allow for the validation of reference figures from financial statistics, government finance, and the balance of payments.

## DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

Priority	Action/Milestone	Risk Assumptions/ Verifiable Indicators	Target completion date	Actual completion date	Implementation status (August 2019)
<b>Outcome: balances of non-financial assets</b>					
H	<i>Change the valuation criteria for the revaluation account that is currently being prepared, in order to apply the IPI to the relevant asset and to ensure that the same price is applied in the balance of institutional sectors/subsectors.</i>	Reformulated working file with adequate indices	March 2019		In progress
M	<i>Analyze the valuations that are presented in the information on the financial statements or the BES annexes in order to determine if they are at market prices for the reference year.</i>	Explanatory note on accounting valuations for their analysis.	May 2019		Done.
M	<i>Review the consistency of the variables obtained in Annex 5 of the BES and inform the reporting entity of the valuations in which the assets are requested.</i>	Proposal for modification of the BES.	July 2019		In progress.
M	<i>Study the accounting standards that companies should apply depending on their regime or size in order to</i>	Explanatory note on accounting valuations for their analysis.	May 2019		In progress.

Priority	Action/Milestone	Risk Assumptions/ Verifiable Indicators	Target completion date	Actual completion date	Implementation status (August 2019)
	<i>determine the differences between the accounting and economic valuations. Consider that Annex 5 expresses "Balances at historical value," which differ from the values at market prices that are required for asset measurements.</i>				
H	<i>Perform an inventory of information available in the AESI in order to perform estimates of balances of non-financial (and financial) assets of local governments and non-profit public institutions for 2012.</i>	Inventory of sources and their characteristics and periods available.	March 2019		In progress.
M	<i>Include the Environmental Accounts Department, with the FEM project team, in the economic measurement of stocks of natural resources for the purposes of the 2017 rebasing project.</i>	Conditions for administrative definition by the DEM. The lack of definition of the unit responsible for the balance sheet project prevents the integration of the participating units. Delaying its implementation will slow down the comprehensive	June 2019		Not done.

Priority	Action/Milestone	Risk Assumptions/ Verifiable Indicators	Target completion date	Actual completion date	Implementation status (August 2019)
		balance sheet project.			
M	<i>Ask the environmental accounts team to update the measures to 2016, in order to obtain stocks of economically measurable assets.</i>	Conditions for administrative definition by the DEM.	June 2019		Done, the updating of the water accounts to 2016 was published in April 2019.
<b>Outcome: balances of financial assets</b>					
H	<i>The DEM defines the unit responsible for the preparation of financial asset accounts, in order to introduce the asset account method as the proposed mechanism for the preparation of balance sheets by institutional subsector/sector and the total economy.</i>	Conditions for administrative definition by the DEM. The focus of this recommendation involves an administrative definition that requires the approval of higher authorities in the CBCR. Delaying its implementation will slow down the comprehensive balance sheet project.	March 2019		Pending.
H	<i>Once the unit responsible has been defined, develop the financial asset accounts and align the integration criteria that will allow for the validation of reference figures from financial statistics,</i>	Conditions for administrative definition by the DEM.	June 2019		In progress.

Priority	Action/Milestone	Risk Assumptions/ Verifiable Indicators	Target completion date	Actual completion date	Implementation status (August 2019)
	<i>government finance, and the balance of payments.</i>				

## B. Officials Met During the Mission

Name	Institution
Henry Vargas	CBCR
Gabriela Saborio	CBCR
Irene Bonilla	CBCR
Erica Chacón	CBCR
Jaime Odio	CBCR
Jacqueline Zamora	CBCR
Mariam Navarro	CBCR
Rigoberto Torres	CBCR

## Annex I. Estimate of the Linear Correlation Coefficient between the Balance of Fixed Assets and Income with Monthly Data, in Colones

<i>Statistical Area</i>	<i>REVEC Income</i>	<i>Initial Balance of Fixed Assets</i>
AE026	4,833,762,368.00	5,630,382,580.20
AE030	1,441,044,190.00	-
AE034	2,364,352,134.00	1,551,867,952.76
AE036	4,589,011,732.00	441,231,805.26
AE039	3,551,058,472.00	423,016,075.27
AE041	5,656,221,424.00	1,726,613,760.93
AE042	2,128,123,212.00	473,437,768.16
AE043	53,094,807.00	1.00
AE047	6,336,121,484.99	293,171,695.16
AE048	3,828,669,786.00	383,337,332.72
AE050	1,354,081,641.00	127,755,280.03
AE052	197,911,927.00	69,504,567.01
AE053	1,320,814,668.00	195,602,178.96
AE055	95,354,439.00	36,640,451.70
AE056	2,705,701,898.00	5,621,639,968.84
AE057	717,074,078.00	208,564,151.38
AE058	2,301,212,434.00	591,897,123.40
AE060	499,413,121.00	415,933,596.38
AE064	693,339,157.00	47,036,559.05
AE066	4,748,613,591.00	1,383,132,367.98
AE068	8,850,077,334.00	4,368,495,866.37
AE071	6,464,629,061.00	2,553,904,053.70
AE073	3,417,073,422.00	1,564,034,457.27
AE075	41,802,108.00	17,597,681.58
AE077	303,536,717.00	157,151,175.29
AE079	988,038,592.59	193,007,302.44
AE081	340,183,200.00	50,575,326.39
AE082	1,411,683,819.00	400,664,142.44
AE083	1,190,161,760.00	222,363,500.44
AE085	2,790,670,510.00	322,679,711.23
AE089	3,622,048,072.00	1,444,499,980.51
AE090	896,195,565,805.26	71,701,380,134.18
AE091	3,693,939,101.00	1,197,664,375.35
AE093	25,206,521,706.00	28,177,084,856.89
AE094	100,846,717.00	16,959,057.85
AE095	17,099,907,321.00	13,360,441,587.20
AE096	5,879,693,852.00	6,794,212,844.23
AE097	389,887,231.00	46,492,971.26
AE098	8,105,325,130.00	1,027,724,672.01
AE099	1,351,638,089.00	189,909,901.42
AE100	31,726,428,217.00	37,524,852,531.58
AE101	8,583,143,033.00	1,707,035,886.36
AE102	1,366,281,126.71	433,318,044.98
AE103	8,690,604,105.00	7,863,413,682.06
AE104	9,342,063,418.00	2,506,505,788.63

<i>Statistical Area</i>	<i>REVEC Income</i>	<i>Initial Balance of Fixed Assets</i>
AE109	4,023,809,097.00	2,622,430,833.71
AE110	2,224,174,153.00	434,787,135.46
AE111	2,409,993,256.00	639,642,022.60
AE112	5,402,974,242.00	1,177,326,593.05
AE113	3,416,204,817.00	439,339,779.47
AE114	49,537,900.00	45,021,244.00
AE115	5,739,435,651.00	528,266,210.50
AE116	3,029,250,109.00	806,660,620.92
AE117	364,658,801.00	185,894,820.15
AE118	2,796,206,200.00	5,317,344,928.97
AE119	4,965,987,535.00	87,378,767.40
AE120	7,033,473,234.00	722,664,312.35
AE121	6,765,821,593.00	1,058,818,593.44
AE122	4,523,883,096.00	651,442,556.56
AE123	8,902,345,083.00	1,043,304,866.52
AE127	19,851,909,670.17	7,903,646,266.01
AE128	5,645,415,942.00	3,026,067,977.19
AE129	10,747,757,770.00	4,451,799,407.17
AE130	4,418,145,425.00	9,431,730,022.23
AE131	272,256,505.00	102,750,000.00
AE132	320,284,989.00	115,145,592.89
AE133	733,256,971.00	13,373,269.13
AE134	348,269,256.00	339,911,310.24
AE135	471,258,184.00	140,573.87
Grand total	1,201,023,035,490.72	244,607,622,451.68

$$R^2_{x,y} = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{s_x s_y} = 0.84$$

## Annex II. Estimate of the Population Balance of Fixed Assets by Economic Activity

CCIS Data		2012		
Statistical Area	GPV	Balances estimated with ratios Activities not studied in 2012	Balances estimated with ratios Activities studied in 2012	Initial Balance of Financial Assets in 2012
	RNFP5-DR			
AE001	967.37	1,544,168		1,544,168
AE002	419.18	289,940		289,940
AE003	1422.32	3,338,126		3,338,126
AE004	58188.57	5,587,058,576		5,587,058,576
AE005	9749.86	156,857,331		156,857,331
AE006	35784.78	2,113,024,274		2,113,024,274
AE007	6854.26	77,522,817		77,522,817
AE008	11539.78	219,736,860		219,736,860
AE009	11146.57	205,017,098		205,017,098
AE010	20370.50	684,716,995		684,716,995
AE011	45167.20	3,366,310,491		3,366,310,491
AE012	20869.20	718,653,450		718,653,450
AE013	25241.69	1,051,343,234		1,051,343,234
AE014	385112.13	244,727,183,657		244,727,183,657
AE015	1654.44	4,516,606		4,516,606
AE016	393545.20	255,562,457,258		255,562,457,258
AE017	74343.38	9,119,948,666		9,119,948,666
AE018	28387.27	1,329,704,427		1,329,704,427
AE019	29400.01	1,426,273,290		1,426,273,290
AE020	12089.11	241,155,264		241,155,264
AE021	43106.88	3,066,203,548		3,066,203,548
AE022	157287.37	40,822,114,312		40,822,114,312
AE023	55572.98	5,096,067,989		5,096,067,989
AE024	107957.92	19,231,661,522		19,231,661,522
AE025	10460.80	180,566,824		180,566,824
AE026	123425.54		143,766,482,556	143,766,482,556
AE027	30376.04	1,522,545,408		1,522,545,408
AE028	6282.29	65,124,502		65,124,502
AE029	29493.85	1,435,392,766		1,435,392,766
AE030	95298.71	14,985,866,888		14,985,866,888
AE031	37.42	2,311		2,311
AE032	488.07	393,074		393,074
AE033	227107.31	85,107,929,831		85,107,929,831
AE034	241075.93		158,232,778,764	158,232,778,764
AE035	30246.83	1,509,620,007		1,509,620,007
AE036	91634.23		8,810,598,286	8,810,598,286
AE037	303290.93	151,784,235,212		151,784,235,212
AE038	365013.07	219,849,075,542		219,849,075,542
AE039	95038.44		11,321,353,287	11,321,353,287
AE040	117178.17	22,656,937,952		22,656,937,952
AE041	152705.01		46,614,613,840	46,614,613,840
AE042	99897.88		22,224,009,713	22,224,009,713
AE043	18367.88		346	346
AE044	14150.07	330,388,476		330,388,476
AE045	134737.66	29,956,139,166		29,956,139,166
AE046	27668.44	1,263,214,849		1,263,214,849
AE047	123729.34		5,724,943,800	5,724,943,800
AE048	127038.79		12,719,486,099	12,719,486,099

CCIS Data		GPV	2012		
Statistical Area	RNFP5-DR	Balances estimated with ratios Activities not studied in 2012	Balances estimated with ratios Activities studied in 2012	Initial Balance of Financial Assets in 2012	
AE049	6268.70	64,842,919		64,842,919	
AE050	74878.63		7,064,670,513		7,064,670,513
AE051	20246.98	676,438,769		676,438,769	
AE052	23254.03		8,166,568,117		8,166,568,117
AE053	51134.30		7,572,583,643		7,572,583,643
AE054	13276.85	290,869,263		290,869,263	
AE055	4644.35		1,784,615,022		1,784,615,022
AE056	79690.17		165,572,360,524		165,572,360,524
AE057	333177.67		96,906,191,015		96,906,191,015
AE058	134192.91		34,515,890,443		34,515,890,443
AE059	0.00	-			-
AE060	36726.17		30,587,194,518		30,587,194,518
AE061	8108.00	108,476,351		108,476,351	
AE062	76811.54	9,735,555,159		9,735,555,159	
AE063	41917.51	2,899,337,297		2,899,337,297	
AE064	134065.77		9,095,105,230		9,095,105,230
AE065	10845.67	194,097,745		194,097,745	
AE066	99919.59		29,103,656,468		29,103,656,468
AE067	2068.97	7,063,454		7,063,454	
AE068	174130.10		85,952,537,449		85,952,537,449
AE069	11143.49	204,904,033		204,904,033	
AE070	36070.77	2,146,933,524		2,146,933,524	
AE071	119052.78		47,032,764,803		47,032,764,803
AE072	50031.51	4,130,428,026		4,130,428,026	
AE073	70353.75		32,201,734,493		32,201,734,493
AE074	124.56	25,602		25,602	
AE075	5156.18		2,170,625,615		2,170,625,615
AE076	84786.56	11,862,106,692		11,862,106,692	
AE077	14202.06		7,352,884,354		7,352,884,354
AE078	3198.90	16,885,311		16,885,311	
AE079	62515.58		12,212,035,721		12,212,035,721
AE080	11648.36	223,891,244		223,891,244	
AE081	64791.63		9,632,627,552		9,632,627,552
AE082	157168.75		44,607,638,623		44,607,638,623
AE083	115526.94		21,584,439,770		21,584,439,770
AE084	41121.59	2,790,279,211		2,790,279,211	
AE085	115016.48		13,299,128,435		13,299,128,435
AE086	1850977.03	5,653,402,087,673		5,653,402,087,673	
AE087	157015.55	40,681,142,218		40,681,142,218	
AE088	285629.89	134,621,720,329		134,621,720,329	
AE089	748188.06		298,383,019,116		298,383,019,116
AE090	1994531.29		159,575,266,334		159,575,266,334
AE091	117355.40		38,049,459,071		38,049,459,071
AE092	0.00	-			-
AE093	282056.37		315,296,426,733		315,296,426,733
AE094	45484.10		7,648,910,709		7,648,910,709
AE095	433849.01		338,973,437,722		338,973,437,722
AE096	50113.60		57,908,194,704		57,908,194,704
AE097	114326.90		13,633,165,613		13,633,165,613
AE098	172100.12		21,821,646,265		21,821,646,265
AE099	83030.44		11,666,069,014		11,666,069,014
AE100	469338.66		555,116,504,127		555,116,504,127
AE101	790593.84		157,235,181,522		157,235,181,522

CCIS Data		GPV	2012		
Statistical Area	RNFPs-DR	Balances estimated with ratios Activities not studied in 2012	Balances estimated with ratios Activities studied in 2012	Initial Balance of Financial Assets in 2012	
AE102	59415.52		18,843,719,898	18,843,719,898	
AE103	124322.51		112,489,225,130	112,489,225,130	
AE104	371923.89		99,788,382,225	99,788,382,225	
AE105	0.00	-		-	
AE106	0.00	-		-	
AE107	0.00	-		-	
AE108	0.00	-		-	
AE109	496091.72		323,317,084,969	323,317,084,969	
AE110	72993.37		14,268,926,743	14,268,926,743	
AE111	102899.83		27,310,887,043	27,310,887,043	
AE112	95989.63		20,916,469,873	20,916,469,873	
AE113	243975.93		31,376,436,309	31,376,436,309	
AE114	35773.03		32,511,394,920	32,511,394,920	
AE115	380170.20		34,991,432,210	34,991,432,210	
AE116	51000.64		13,580,988,444	13,580,988,444	
AE117	19878.84		10,133,785,016	10,133,785,016	
AE118	268337.10		510,277,432,518	510,277,432,518	
AE119	109878.28		1,933,357,309	1,933,357,309	
AE120	108056.95		11,102,466,902	11,102,466,902	
AE121	229129.35		35,857,642,349	35,857,642,349	
AE122	104799.45		15,091,199,750	15,091,199,750	
AE123	268237.12		31,435,884,062	31,435,884,062	
AE127	453153.12		180,413,978,239	180,413,978,239	
AE128	364363.11		195,306,697,412	195,306,697,412	
AE129	97303.67		40,303,888,839	40,303,888,839	
AE130	0.00		-	-	
AE131	38084.73		14,373,230,816	14,373,230,816	
AE132	8264.27		2,971,085,757	2,971,085,757	
AE133	60352.13		1,100,712,785	1,100,712,785	
AE134	9883.06		9,645,878,790	9,645,878,790	
AE135	5621.54		1,676,875	1,676,875	
AE114	476.86		433,382,260	433,382,260	
Totals	18063154.60	6,989,517,217,525	4,840,914,047,373	11,830,431,264,898	

### Annex III. Estimate of Ratios by Type of Asset and Statistical Area for the Rest of the Non-Financial Private Sector in 2012

Statistical Area	Estimated Ratios for All the Statistical Areas				
	AN112	AN113	AN115	AN116	AN117
AE001	0.00031162	0.00100782	0.00008899	0.00000009	0.00001392
AE002	0.00013503	0.00043671	0.00000000	0.00000004	0.00000603
AE003	0.00364508	0.01178852	0.00000000	0.00000106	0.00016277
AE004	0.01874460	0.06062182	0.00000000	0.00000546	0.00083704
AE005	0.00314078	0.01015757	0.00000000	0.00000092	0.00014025
AE006	0.01152755	0.03728118	0.00000000	0.00000336	0.00051476
AE007	0.00220800	0.00714089	0.00000000	0.00000064	0.00009860
AE008	0.00371737	0.01202233	0.00000000	0.00000108	0.00016600
AE009	0.00359070	0.01161268	0.00000000	0.00000105	0.00016034
AE010	0.00680458	0.02200666	0.00000739	0.00000198	0.00030386
AE011	0.01454996	0.04705594	0.00000000	0.00000424	0.00064973
AE012	0.00672271	0.02174188	0.00073263	0.00000196	0.00030020
AE013	0.00813124	0.02629721	0.00060557	0.00000237	0.00036310
AE014	0.12405827	0.40121620	0.00000750	0.00003616	0.00553981
AE015	0.00053296	0.00172363	0.00339066	0.00000016	0.00002380
AE016	0.12677486	0.41000191	0.00070600	0.00003695	0.00566112
AE017	0.02394864	0.07745216	0.00000000	0.00000698	0.00106942
AE018	0.00914455	0.02957433	0.00294980	0.00000267	0.00040835
AE019	0.00947079	0.03062942	0.00192799	0.00000276	0.00042292
AE020	0.00390547	0.01263065	0.00260365	0.00000114	0.00017440
AE021	0.01388788	0.04491472	0.00253062	0.00000405	0.00062016
AE022	0.05066784	0.16386459	0.00239524	0.00001477	0.00226257
AE023	0.01790203	0.05789685	0.00050772	0.00000522	0.00079941
AE024	0.03477707	0.11247235	0.00118431	0.00001014	0.00155297
AE025	0.00361405	0.01168817	0.00201963	0.00000105	0.00016138
AE026	0.22086988	0.98608212	0.00022757	0	0
AE027	0.00978520	0.03164627	0.00000000	0.00000285	0.00043696
AE028	0.00257744	0.00833569	0.00000000	0.00000075	0.00011510
AE029	0.00950101	0.03072718	0.00000000	0.00000277	0.00042427
AE030	0.03069909	0.09928378	0.00077984	0.00000895	0.00137086
AE031	0.00001206	0.00003899	0.00000000	0.00000000	0.00000054
AE032	0.00015723	0.00050848	0.00000000	0.00000005	0.00000702
AE033	0.07315931	0.23660416	0.00000000	0.00002132	0.00326692
AE034	0.04956861	0.61028825	0.00000000	0	0
AE035	0.01657019	0.05358956	0.00000000	0.00000483	0.00073994
AE036	0.02920221	0.08926325	0.00000000	0	0
AE037	0.12512090	0.40465284	0.00000000	0.00003647	0.00558726
AE038	0.11758365	0.38027667	0.00000000	0.00003427	0.00525068
AE039	0.03200359	0.08716962	0.00000000	0	0
AE040	0.03774724	0.12207816	0.00000000	0.00001100	0.00168560
AE041	0.15658083	0.23791803	0.00000000	0	0
AE042	0.0489147	0.11880157	0.00000000	0	0.000874
AE043	0.00948943	0.03068973	0.01263548	0.00000277	0.00042375
AE044	0.00455824	0.01474178	0.00000000	0.00000133	0.00020355
AE045	0.04340378	0.14037193	0.00000000	0.00001265	0.00193819

Statistical Area	Estimated Ratios for All the Statistical Areas				
	AN112	AN113	AN115	AN116	AN117
AE046	0.00891299	0.02882544	0.00000000	0.00000260	0.00039801
AE047	0	0.06274671	0.00000000	0	0.01473135
AE048	0.02482518	0.05828772	0.00000000	0	0.00052276
AE049	0.00292388	0.00945612	0.00003223	0.00000085	0.00013057
AE050	0.03592886	0.04586892	0.00000000	0	0.00022542
AE051	0.00652227	0.02109364	0.00000000	0.00000190	0.00029125
AE052	0	0.346665	0.00000000	0	0
AE053	0.02364128	0.11351183	0.00000000	0	0
AE054	0.00478027	0.01545985	0.00000000	0.00000139	0.00021346
AE055	0	0.38425533	0.00000000	0	0
AE056	0.11505848	1.89953349	0.00000000	0	0
AE057	0.10388899	0.19662104	0.00000000	0	0
AE058	0.03762488	0.24340023	0.00000000	0	0
AE059	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
AE060	0.38696272	0.27922044	0.00000000	0	0
AE061	0.00261187	0.00844705	0.00000000	0.00000076	0.00011663
AE062	0.02474372	0.08002353	0.00000000	0.00000721	0.00110493
AE063	0.01350312	0.04367036	0.00000000	0.00000394	0.00060298
AE064	0.011764	0.06095595	0.00000000	0	0
AE065	0.00486155	0.01572270	0.00000000	0.00000142	0.00021709
AE066	0.125579	0.15193714	0.00000000	0	0.00125664
AE067	0.00298573	0.00965614	0.00000000	0.00000087	0.00013333
AE068	0.07206504	0.49093339	0.00000000	0	0
AE069	0.00378811	0.01225110	0.00000000	0.00000110	0.00016916
AE070	0.01161967	0.03757912	0.00000000	0.00000339	0.00051888
AE071	0.10847303	0.27452102	0.00000000	0	0
AE072	0.01989596	0.06434541	0.00000000	0.00000580	0.00088845
AE073	0.03343702	0.47156196	0.00000000	0	0.0059479
AE074	0.00580014	0.01875821	0.00000000	0.00000169	0.00025900
AE075	0	0.41023545	0.00000000	0	0
AE076	0.05492675	0.17763830	0.00000000	0.00001601	0.00245275
AE077	0.17764516	0.26326989	0.00000000	0	0
AE078	0.00103048	0.00333267	0.00000000	0.00000030	0.00004602
AE079	0	0.19842325	0.00000000	0	0
AE080	0.03797610	0.12281831	0.00000000	0.00001107	0.00169582
AE081	0.02800013	0.07518104	0.00000000	0	0
AE082	0.21705704	0.09406709	0.00000000	0	0
AE083	0	0.17015237	0.00000000	0	0.00201942
AE084	0.01324672	0.04284116	0.00000000	0.00000386	0.00059153
AE085	0.02318849	0.08777937	0.00000000	0	0
AE086	0.59626531	1.92837856	0.00000000	0.00017378	0.02662616
AE087	0.05058027	0.16358140	0.00000000	0.00001474	0.00225866
AE088	0.09201151	0.29757396	0.00000000	0.00002682	0.00410876
AE089	0.00379924	0.38439242	0.00000000	0	0
AE090	0.02467638	0.0571978	0.00001917	2.32E-08	0.00152785
AE091	0.10396304	0.17098224	0.00000000	0.00154408	0.00214064
AE092			0.00000000		
AE093	0.05966699	1.05885799	0.00000000	0	8.3612E-05
AE094	0	0.18312894	0.00000000	0	0

Statistical Area	Estimated Ratios for All the Statistical Areas				
	AN112	AN113	AN115	AN116	AN117
AE095	0.17214259	0.6387967	0.00000000	0	0.00109007
AE096	0.32915362	0.74829711	0.00000000	0	0.00299956
AE097	0	0.04927167	0.00000000	0	0.06384226
AE098	0.025348	0.07276556	0.00000000	0	0.00277073
AE099	0.03947306	0.06380476	0.00000000	0	0.00220473
AE100	0.7752371	0.26326959	0.00000000	0	0.00417742
AE101	0.11986718	0.13131651	0.00000000	0	0.01953796
AE102	0.08899916	0.20830961	0.00000000	0	0.00109139
AE103	0.06563722	1.25624994	0.00000000	0	0.04697171
AE104	0.03911664	0.17963964	0.00000000	0	0.00101426
AE105			0.00000000		
AE106			0.00000000		
AE107			0.00000000		
AE108			0.00000000		
AE109	0.02924312	0.39180901	0.00000000	0	0.0080834
AE110	0.09226249	0.13713723	0.00000000	0	0.00070695
AE111	0	0.07676879	0.00000000	0	0.00087419
AE112	0.04608317	0.15702942	0.00000000	0	0.03444658
AE113	0.00408118	0.11996794	0.00000000	0	0.00364817
AE114	0.15195947	0.60842655	0.00000000	0	0
AE115	0	0.11814668	0.00000000	0	0.00334623
AE116	0.04117814	0.21177405	0.00000000	0	0
AE117	0.25809736	0.26311169	0.00000000	0	0
AE118	0.09651111	1.834381	0.00000000	0	0.00452028
AE119	0.00077076	0.015004	0.00000000	0	0.00041862
AE120	0.01766895	0.08205519	0.00000000	0	0.00953642
AE121	0.00153482	0.15944478	0.00000000	0.000314	0.00681191
AE122	0.06893975	0.16735761	0.00000000	0	0
AE123	0.01412786	0.07981059	0.00000000	0	0.00744813
AE127	0.23683092	0.14270452	0.00000000	0	0.0049345
AE128	0.36202315	0.19707677	0.00000000	0	0.00091005
AE129	0.2398672	0.22353423	0.00457272	0	0.00849274
AE131	0.14692027	0.17538608	0.00000000	0	0
AE132	0	0.35731105	0.00000000	0	0
AE133	0	0.01823818	0.00000000	0	0
AE134	0.50610613	0.49891908	0.00000000	0	0.01549045
AE135	0	0.00029829	0.00000000	0	0
AE114	0.15195947	0.60842655	0.00000000	0	0

## Annex IV. Estimate of the Population Balance of Fixed Assets by Type of Asset and Statistical Area for the Rest of the Non- Financial Private Sector 2012 (in colones)

Statistical Area	Other buildings and structures	Machinery and equipment	Cultivated biological resources	Costs of ownership transfer on non-produced assets	Intellectual property products
AE001	301,457	974,940	86,088	88	13,462
AE002	56,603	183,059	0	16	2,528
AE003	41,245,317	133,391,266	0	12,021	1,841,805
AE004	1,090,721,628	3,527,497,157	0	317,884	48,706,044
AE005	30,622,139	99,034,900	0	8,925	1,367,428
AE006	412,510,670	1,334,098,617	0	120,224	18,420,615
AE007	15,134,227	48,945,525	0	4,411	675,817
AE008	42,897,661	138,735,103	0	12,502	1,915,590
AE009	40,024,027	129,441,498	0	11,665	1,787,268
AE010	143,735,533	464,854,341	156,126	41,891	6,418,493
AE011	657,180,806	2,125,385,035	0	191,531	29,346,330
AE012	140,297,591	453,735,712	15,289,496	40,889	6,264,972
AE013	205,246,247	663,785,822	15,285,588	59,818	9,165,247
AE014	47,776,343,940	154,513,226,023	2,886,998	13,924,124	2,133,446,924
AE015	881,745	2,851,646	5,609,663	257	39,374
AE016	49,891,637,184	161,354,284,928	277,842,623	14,540,613	2,227,905,091
AE017	1,780,422,582	5,758,055,433	0	518,893	79,504,557
AE018	259,588,719	839,534,528	83,736,747	75,656	11,591,903
AE019	278,441,170	900,505,142	56,682,910	81,150	12,433,757
AE020	47,348,608	153,129,889	31,565,834	13,799	2,114,346
AE021	598,733,229	1,936,360,028	109,100,061	174,497	26,736,361
AE022	7,969,410,446	25,773,828,968	376,740,882	2,322,636	355,873,070
AE023	994,869,035	3,217,500,783	28,215,364	289,949	44,425,758
AE024	3,754,460,219	12,142,280,311	127,855,336	1,094,214	167,654,972
AE025	40,546,067	131,129,826	22,658,303	11,817	1,810,580
AE026	27,260,984,714	121,707,718,816	28,087,457	0	0
AE027	297,235,689	961,288,400	0	86,628	13,273,024
AE028	20,622,413	66,694,840	0	6,010	920,891
AE029	280,221,500	906,262,899	0	81,669	12,513,258
AE030	2,925,583,991	9,461,616,005	74,317,367	852,644	130,641,603
AE031	451	1,459	0	0	20
AE032	76,737	248,175	0	22	3,427
AE033	16,615,014,592	53,734,532,477	0	4,842,345	741,941,489
AE034	11,949,798,573	147,125,805,783	0	0	0
AE035	852,346,793	2,756,570,340	0	248,411	38,061,444
AE036	6,606,578,098	20,194,518,877	0	0	0
AE037	48,598,311,054	157,171,545,600	0	14,163,681	2,170,151,767
AE038	42,919,568,195	138,805,952,787	0	12,508,646	1,916,568,184
AE039	3,041,571,622	8,284,464,977	0	0	0
AE040	4,423,152,525	14,304,894,628	0	1,289,101	197,515,347
AE041	24,919,326,423	37,863,876,214	0	0	0
AE042	4,886,474,623	11,868,025,656	0	0	87,311,184

Statistical Area	Other buildings and structures	Machinery and equipment	Cultivated biological resources	Costs of ownership transfer on non-produced assets	Intellectual property products
AE043	279,538,748	904,054,814	372,214,704	81,470	12,482,769
AE044	64,499,387	208,597,134	0	18,798	2,880,212
AE045	5,848,123,558	18,913,386,052	0	1,704,400	261,147,258
AE046	246,608,432	797,555,051	0	71,873	11,012,270
AE047	0	9,475,521,210	0	0	2,224,613,572
AE048	3,249,298,925	7,629,116,563	0	0	68,422,781
AE049	26,538,818	85,829,054	292,577	7,735	1,185,088
AE050	2,735,734,492	3,492,601,494	0	0	17,164,307
AE051	132,056,320	427,082,659	0	38,487	5,896,959
AE052	0	15,220,768,718	0	0	0
AE053	2,937,669,861	14,105,002,405	0	0	0
AE054	70,935,957	229,413,610	0	20,674	3,167,637
AE055	0	1,784,615,022	0	0	0
AE056	9,210,516,431	152,059,057,406	0	0	0
AE057	34,901,596,475	66,055,007,034	0	0	0
AE058	5,154,028,075	33,342,078,827	0	0	0
AE059	0	0	0	0	0
AE060	14,402,840,856	10,392,648,762	0	0	0
AE061	21,177,065	68,488,636	0	6,172	945,659
AE062	1,900,603,050	6,146,730,462	0	553,919	84,871,202
AE063	566,016,957	1,830,552,505	0	164,962	25,275,420
AE064	1,577,149,190	8,172,106,081	0	0	0
AE065	73,368,587	237,280,966	0	21,383	3,276,265
AE066	14,664,269,947	17,742,195,872	0	0	146,741,813
AE067	27,673,441	89,498,532	0	8,065	1,235,754
AE068	16,591,799,748	113,029,408,705	0	0	0
AE069	44,545,738	144,065,140	0	12,983	1,989,185
AE070	419,130,531	1,355,507,876	0	122,153	18,716,224
AE071	13,460,366,402	34,065,183,491	0	0	0
AE072	1,228,828,156	3,974,146,764	0	358,134	54,873,174
AE073	3,363,302,986	47,432,622,960	0	0	598,276,936
AE074	104,433,197	337,746,861	0	30,436	4,663,452
AE075	0	17,741,136,603	0	0	0
AE076	9,365,462,052	30,288,792,223	0	2,729,507	418,213,588
AE077	3,524,640,170	5,223,512,008	0	0	0
AE078	3,296,399	10,660,866	0	961	147,200
AE079	0	13,943,284,958	0	0	0
AE080	4,476,949,538	14,478,879,268	0	1,304,780	199,917,646
AE081	2,582,805,747	6,934,896,206	0	0	0
AE082	34,539,521,244	14,968,564,416	0	0	0
AE083	0	19,657,182,801	0	0	233,297,757
AE084	544,726,325	1,761,696,580	0	158,757	24,324,689
AE085	2,667,058,475	10,096,074,078	0	0	0
AE086	1,103,673,398,829	3,569,384,412,154	0	321,658,871	49,284,403,608
AE087	7,941,889,468	25,684,823,519	0	2,314,615	354,644,124
AE088	26,281,239,036	84,996,018,792	0	7,659,507	1,173,585,585
AE089	2,842,548,973	287,597,822,111	0	0	0
AE090	49,217,817,730	114,082,809,819	38,227,984	46,274	3,047,350,537

Statistical Area	Other buildings and structures	Machinery and equipment	Cultivated biological resources	Costs of ownership transfer on non-produced assets	Intellectual property products
AE091	12,200,624,415	20,065,689,892	0	181,206,453	251,215,323
AE092	0	0	0	0	0
AE093	16,829,455,485	298,657,640,355	0	0	23,583,213
AE094	0	8,329,455,773	0	0	0
AE095	74,897,273,497	277,933,143,189	0	0	474,278,149
AE096	16,983,762,466	38,610,848,302	0	0	154,772,283
AE097	0	5,719,326,549	0	0	7,410,641,759
AE098	4,736,952,272	13,598,189,930	0	0	517,784,578
AE099	3,277,465,877	5,297,737,774	0	0	183,059,890
AE100	363,848,740,382	123,562,595,014	0	0	1,960,623,144
AE101	94,766,252,551	103,818,023,830	0	0	15,446,586,843
AE102	5,303,982,620	12,414,392,763	0	0	65,042,265
AE103	8,160,183,645	156,180,145,082	0	0	5,839,640,345
AE104	16,626,373,286	76,355,118,599	0	0	431,105,419
AE105	0	0	0	0	0
AE106	0	0	0	0	0
AE107	0	0	0	0	0
AE108	0	0	0	0	0
AE109	15,947,398,656	213,668,535,942	0	0	4,408,190,271
AE110	6,734,549,849	10,010,108,528	0	0	51,602,651
AE111	0	7,899,495,220	0	0	89,953,876
AE112	15,355,609,737	52,324,581,204	0	0	11,478,123,506
AE113	997,358,493	29,317,745,197	0	0	891,540,298
AE114	7,080,803,912	28,350,645,776	0	0	0
AE115	0	45,115,512,243	0	0	1,277,791,110
AE116	4,609,976,568	23,708,534,456	0	0	0
AE117	5,130,676,758	5,230,355,917	0	0	0
AE118	25,911,837,213	492,504,775,275	0	0	1,213,629,294
AE119	84,689,900	1,648,613,802	0	0	45,996,866
AE120	1,909,253,179	8,866,634,257	0	0	1,030,476,847
AE121	351,673,228	36,533,477,931	0	71,947,021	1,560,808,240
AE122	7,595,252,314	18,438,177,163	0	0	0
AE123	9,540,152,173	53,893,876,120	0	0	5,029,512,184
AE127	107,320,670,715	64,666,997,342	0	0	2,236,083,537
AE128	131,907,881,278	71,807,505,698	0	0	331,588,163
AE129	23,339,959,262	21,750,701,508	444,942,209	0	826,374,554
AE131	6,387,295,518	7,624,834,024	0	0	0
AE132	0	2,952,914,650	0	0	0
AE133	0	1,100,712,785	0	0	0
AE134	5,001,875,988	4,930,845,980	0	0	153,093,045
AE135	0	1,676,875	0	0	0
AE114	7,080,803,912	28,350,645,776	0	0	0
	<b>2,692,692,315,305</b>	<b>8,258,895,416,204</b>	<b>2,111,794,318</b>	<b>660,197,013</b>	<b>132,166,184,253</b>

Inventories	Materials and supplies	Work in progress	Work in progress in cultivated biological resources	Other work in progress	Finished goods	Military inventories	Goods for resale
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
19	10	1	0	1	5	0	1
506	276	34	0	34	139	0	24
14	8	1	0	1	4	0	1
191	104	13	0	13	52	0	9
7	4	0	0	0	2	0	0
20	11	1	0	1	5	0	1
19	10	1	0	1	5	0	1
67	36	4	0	4	18	0	3
305	166	20	0	20	84	0	14
65	35	4	0	4	18	0	3
95	52	6	0	6	26	0	4
22,163	12,084	1,488	0	1,488	6,072	0	1,031
0	0	0	0	0	0	0	0
23,144	12,619	1,554	0	1,554	6,340	0	1,077
826	450	55	0	55	226	0	38
120	66	8	0	8	33	0	6
129	70	9	0	9	35	0	6
22	12	1	0	1	6	0	1
278	151	19	0	19	76	0	13
3,697	2,016	248	0	248	1,013	0	172
462	252	31	0	31	126	0	21
1,742	950	117	0	117	477	0	81
19	10	1	0	1	5	0	1
2,276	1,241	153	0	153	624	0	106
138	75	9	0	9	38	0	6
10	5	1	0	1	3	0	0
130	71	9	0	9	36	0	6
1,357	740	91	0	91	372	0	63
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
7,708	4,202	518	0	518	2,111	0	359
8,685	4,735	583	0	583	2,379	0	404
395	216	27	0	27	108	0	18
7,649	4,170	514	0	514	2,095	0	356
22,544	12,292	1,514	0	1,514	6,176	0	1,049
19,910	10,856	1,337	0	1,337	5,454	0	926
1,350	736	91	0	91	370	0	63
2,052	1,119	138	0	138	562	0	95
3,785	2,064	254	0	254	1,037	0	176
1,491	813	100	0	100	409	0	69
130	71	9	0	9	36	0	6
30	16	2	0	2	8	0	1
2,713	1,479	182	0	182	743	0	126
114	62	8	0	8	31	0	5

3,408	1,858	229	0	229	934	0	159
2,560	1,396	172	0	172	701	0	119
12	7	1	0	1	3	0	1
866	472	58	0	58	237	0	40
61	33	4	0	4	17	0	3
288	157	19	0	19	79	0	13
2,307	1,258	155	0	155	632	0	107
33	18	2	0	2	9	0	2
3	2	0	0	0	1	0	0
958	522	64	0	64	262	0	45
16,866	9,196	1,132	0	1,132	4,620	0	785
2,804	1,529	188	0	188	768	0	130
0	0	0	0	0	0	0	0
207	113	14	0	14	57	0	10
10	5	1	0	1	3	0	0
882	481	59	0	59	242	0	41
263	143	18	0	18	72	0	12
2,686	1,464	180	0	180	736	0	125
34	19	2	0	2	9	0	2
2,038	1,111	137	0	137	558	0	95
13	7	1	0	1	4	0	1
7,921	4,319	532	0	532	2,170	0	369
21	11	1	0	1	6	0	1
194	106	13	0	13	53	0	9
2,301	1,255	155	0	155	630	0	107
570	311	38	0	38	156	0	27
1,512	824	102	0	102	414	0	70
48	26	3	0	3	13	0	2
279	152	19	0	19	77	0	13
4,345	2,369	292	0	292	1,190	0	202
59	32	4	0	4	16	0	3
2	1	0	0	0	0	0	0
738	402	50	0	50	202	0	34
2,077	1,132	139	0	139	569	0	97
1,272	693	85	0	85	348	0	59
708	236	12	0	12	420	0	28
373	124	6	0	6	222	0	15
47	16	1	0	1	28	0	2
370	123	6	0	6	220	0	14
95,823	31,903	1,640	0	1,640	56,885	0	3,754
690	230	12	0	12	409	0	27
2,282	760	39	0	39	1,355	0	89
15,656	5,213	268	0	268	9,294	0	613
791,887	8,612	0	0	0	2,346	0	780,929
385	128	7	0	7	229	0	15
0	0	0	0	0	0	0	0
2,225	741	38	0	38	1,321	0	87
58	19	1	0	1	34	0	2
5,294	1,763	91	0	91	3,143	0	207
74	25	1	0	1	44	0	3
377	125	6	0	6	224	0	15

## COSTA RICA

977	325	17	0	17	580	0	38
193	64	3	0	3	114	0	8
6,161	2,051	105	0	105	3,657	0	241
17,481	5,820	299	0	299	10,378	0	685
99	33	2	0	2	59	0	4
432	144	7	0	7	257	0	17
5,053	1,682	86	0	86	3,000	0	198
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
8,318	2,769	142	0	142	4,938	0	326
149	50	3	0	3	88	0	6
296	99	5	0	5	176	0	12
3,105	1,034	53	0	53	1,844	0	122
1,670	556	29	0	29	992	0	65
61	20	1	0	1	36	0	2
4,078	1,358	70	0	70	2,421	0	160
351	117	6	0	6	208	0	14
11	4	0	0	0	7	0	0
2,016	671	35	0	35	1,197	0	79
338	112	6	0	6	200	0	13
327	109	6	0	6	194	0	13
1,468	489	25	0	25	872	0	58
339	113	6	0	6	202	0	13
12,753	4,246	218	0	218	7,571	0	500
5,743	1,912	98	0	98	3,409	0	225
3,713	1,236	64	0	64	2,204	0	145
265	88	5	0	5	157	0	10
0	0	0	0	0	0	0	0
53	18	1	0	1	31	0	2
2	1	0	0	0	1	0	0
102	34	2	0	2	60	0	4
3	1	0	0	0	2	0	0
1	0	0	0	0	1	0	0
<b>1,185,821</b>	<b>180,956</b>	<b>16,449</b>	<b>0</b>	<b>16,449</b>	<b>174,178</b>	<b>0</b>	<b>797,789</b>

Statistical Area	GPV 2012 Millions of colones	Land		Valuables	
		R	Expanded balance of fixed assets	R	Expanded balance of fixed assets
AE026	123425.5405	0.05073778	6262.33798	0	0
AE030	95298.71098	0	0	0	0
AE034	241075.9288	0.00465905	1123.18478	0	0
AE036	91634.23493	0	0	0	0
AE039	95038.43909	0.003365616	319.862912	0	0
AE041	152705.0134	0.004419912	674.942696	0	0
AE042	99897.88334	0.05925211	5919.16034	0	0
AE043	18367.88418	1.88342E-08	0.00034595	0	0
AE047	123729.3368	0	0	0	0

Statistical Area	GPV 2012 Millions of colones	Land		Valuables	
		R	Expanded balance of fixed assets	R	Expanded balance of fixed assets
AE048	127038.7932	0.020506555	2605.12805	0	0
AE050	74878.63233	0.016860339	1262.4791	0	0
AE052	23254.02923	0	0	0	0
AE053	51134.29514	0.01091758	558.262766	0	0
AE055	4644.34679	0	0	0	0
AE056	79690.17095	0.124292837	9904.91746	0	0
AE057	333177.668	0	0	0	0
AE058	134192.9081	0	0	0	0
AE060	36726.16593	0.166766625	6124.69874	0	0
AE064	134065.7718	0	0	0	0
AE066	99919.58966	0.020043034	2002.69176	0	0
AE068	174130.0957	0	0	0	0
AE071	119052.7803	0.031742036	3778.97767	0	0
AE073	70353.7512	0	0	0	0
AE075	5156.175031	0	0	0	0
AE077	14202.05973	0.079100151	1123.38506	0	0
AE079	62515.57549	0	0	0	0
AE081	64791.63455	0.04548968	2947.35074	0	0
AE082	157168.748	0.082427988	12955.1037	0	0
AE083	115526.9402	0	0	0	0
AE085	115016.483	0.009298948	1069.5323	0	0
AE089	748188.0607	0.019878256	14872.6741	0	0
AE090	1994531.288	0.00923579	18421.0715	0	0
AE091	117355.4023	0.067693171	7944.15932	0	0
AE093	282056.3683	0.042264118	11920.8636	0	0
AE094	45484.10297	0	0	0	0
AE095	433849.011	0.0567408	24616.94	0	0
AE096	50113.59876	0.05284179	2648.09226	0	0
AE097	114326.8982	0	0	0	0
AE098	172100.1185	0.012053829	2074.46545	0.00028068	48.3050048
AE099	83030.44292	0	0	0	0
AE100	469338.6578	0.161817891	75947.3916	0.00047614	223.471691
AE101	790593.8379	0.014200148	11226.5494	0	0
AE102	59415.52435	0.021188579	1258.93051	0	0
AE103	124322.5094	0.013277534	1650.69639	0	0
AE104	371923.8948	0.020103295	7476.8957	0	0
AE109	496091.7218	0.36895533	183035.685	0	0
AE110	72993.36955	0.016635388	1214.27302	0	0
AE111	102899.8272	0	0	0	0
AE112	95989.63331	0	0	0	0

Statistical Area	GPV 2012 Millions of colones	Land		Valuables	
		R	Expanded balance of fixed assets	R	Expanded balance of fixed assets
AE113	243975.9336	0.007610785	1856.84835	0	0
AE114	35773.02818	0.16279762	5823.76383	0	0
AE115	380170.2049	0	0	0	0
AE116	51000.64347	0.017316911	883.173603	0	0
AE117	19878.84273	0.024680605	490.621875	0	0
AE118	268337.1005	0.157471941	42255.5639	0	0
AE119	109878.2757	0.001629612	179.058979	0	0
AE120	108056.9532	0.002246787	242.781011	0	0
AE121	229129.3451	0	0	0	0
AE122	104799.4528	0.010000906	1048.08951	0	0
AE123	268237.1154	0.024894064	6677.51198	8.9638E-05	24.0441057
AE127	453153.1244	0.118103231	53518.8479	0.00012601	57.101959
AE128	364363.1113	0.068111822	24817.4352	0	0
AE129	97303.67315	0.0093161	906.490748	0	0
AE130	0	0.358836454	0	0	0
AE131	38084.72591	0.055095102	2098.28187	0	0
AE132	8264.269133	0.002751786	22.7415014	0	0
AE133	60352.13344	0	0	0	0
AE134	9883.057517	0	0	0	0
AE135	5621.535123	0	0	0	0
<b>TOTALS</b>			<b>563,762</b>		<b>353</b>

## Annex V. 2008 SNA Financial Asset Valuation Table

12.74 The **nominal holding gain** on a non-financial asset is the value of the benefit accruing to the owner of that asset as a result of a change in its price over a period of time. **The nominal holding gain on a financial asset is the increase in value of the asset**, other than transactions in the assets (including the accrual of interest over a period of time) and other changes in the volume of assets. The nominal holding gain on a liability is the decrease in value of the liability, other than by transactions or by other volume changes.

12.75 **A neutral holding gain (loss) over a period is the increase (decrease) in the value of an asset that would be required, in the absence of transactions and other changes in the volume of assets, to maintain command over the same amount of goods and services as at the beginning of the period** in the absence of transactions and other changes in the volume of assets (General Price Index).

12.76 **A real holding gain (loss) is the amount by which the value of an asset increases (decreases) over the neutral holding gain for the period**, in the absence of transactions and other changes in the volume of assets.

Code	Asset	Domestic Currency	Foreign Currency	Nominal Gain	Neutral Gain	Real Gain
			12.121 Neutral holding gains are calculated in the same way as for any other type of asset by calculating what the holding gains would have been if the prices of the assets, expressed in the domestic currency, had moved in the same way as the general internal price level.	Price of the asset	Inflation	Difference
<b>AF11</b>	Monetary gold			Yes	No	Yes
<b>AF12</b>	SDRs			Yes	No	Yes
<b>AF21</b>	Banknotes and coins			0	Yes (C/Inflation is +)	Yes (C/Inflation is -)
<b>AF22</b>	Transferable deposits	12.106 Deposits and loans denominated in domestic currency also do not register nominal holding gains and losses for the same reasons as currency. There may be increases in the values of a loan or a deposit during an accounting period but this must be due to transactions including the addition of interest to the previous level of principal.		0	Yes (C/Inflation is +)	Yes (C/Inflation is -)
<b>AD29</b>	Other deposits		Real holding gains, again expressed in the domestic currency, can then be derived residually by subtracting the neutral from	0	Yes (C/Inflation is +)	Yes (C/Inflation is -)
<b>AF3</b>	Debt securities	12.107 Debt securities typically have market values and these market values change over time. However, not all of the changes in value are				

Code	Asset	Domestic Currency	Foreign Currency	Nominal Gain	Neutral Gain	Real Gain
		treated as holding gains and losses.	the nominal gains.			
	Discounted	With discounted bonds, including deep discounted and zero coupon bonds, the difference between their issue price and their face or redemption value when they mature measures interest that the issuer is obliged to pay over the life of the bond.	If, in addition to the asset being denominated in foreign currency, either the creditor or debtor is nonresident, the real holding gains (losses) of the creditor need not be equal to the real holding losses (gains) of the debtor when the general rates of inflation are different in the two countries.			
	Negotiable fixed-interest bonds	Changes in bond prices that are attributable to changes in market rates of interest constitute price and not quantum changes. They therefore generate nominal holding gains or losses for both the issuers and the holders of the bonds. An increase in interest rates generates a nominal holding gain for the issuer of the bond and an equal nominal holding loss for the holder of the bond, and vice versa in the case of a fall in interest rates. Whenever the interest rate changes, the market value of the bond changes; this change in value is recorded as a revaluation.				
<b>AF4</b>	Loans			0	Yes (C/Inflation is +)	Yes (C/Inflation is -)
<b>AF5</b>	Equity	For listed shares and investment fund shares and units, market prices exist and changes in the value other than via reinvested earnings are treated as holding gains and losses exactly as for inventories with no storage component or valuables. For other forms of equity, holding gains are calculated in a manner similar to the way in which the value of the equity is calculated. For example, for a quasi-corporation where the value of other equity is derived as the balance of		Yes	Yes	Yes

Code	Asset	Domestic Currency	Foreign Currency	Nominal Gain	Neutral Gain	Real Gain
		assets less liabilities, holding gains are calculated as the sum of holding gains on assets less the holding gains on liabilities.				
<b>AF52</b>	Investment fund shares/units			Yes	Yes	Yes
<b>AF6</b>	Insurance, pension, and standardized guarantee schemes	12. 115 Exceptionally, if a figure for a claim outstanding has been agreed and it has been agreed to be indexed pending payment, then there may be a nominal holding gain or loss recorded for it.				
<b>AF71</b>	Financial derivatives	12.118 Financial derivatives have quoted prices and thus register nominal holding gains and losses as for listed shares and investment fund shares and units. Employee stock options may also register nominal holding gains and losses.				
<b>AF72</b>	Employee stock options					
<b>AF81</b>	Trade credits and advances			0	Yes (C/Inflation is +)	Yes (C/Inflation is -)
<b>AF89</b>	Other accounts receivable/payable	12.119 Other accounts receivable or payable denominated in domestic currency do not register nominal holding gains and losses. All changes in value between the start and end of the accounting period are due to transactions, possibly including accrued interest. As with currency, there may be real holding gains equal in magnitude to the neutral holding losses under inflation.		0	Yes (C/Inflation is +)	Yes (C/Inflation is -)