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ECONOMIC POLICY AND THE NATIONAL
ACCOUNTS OF LATIN AMERICA

by

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*Kenneth J. Rothwell**

I

Background

Economic development places a heavy emphasis on the national statistics of a country as indicators of what needs to be changed, as bases for short and long-term budgeting, and as measures of achievement. Developing countries, however, have urgent measurement priorities within the set of national indicators of economic and social change and a limited array of policy instruments with which to effect changes in the statistical outcomes, [14, Ch. II]. They need to know the extent of their achievements over time and how these compare internationally. Moreover, with limited skilled manpower, these countries have to make important decisions as to what is to be measured now, and what later on. In the absence of precise measurements of the past, projections about future trends with and without the application of policy are tenuous. The statistical accounts of sophisticated industrialized economies are not necessarily relevant to those of developing economies, although the techniques of measurement might, at some point, be labour-saving to a high degree. Inferences drawn from these sophisticated accounts, nevertheless, must be carefully tested before they can be assumed to apply to developing countries.

This paper is directed toward an examination of developmental problems in the formation and use of national accounts of Latin America. After reviewing the historical growth of national accounting in Latin America and noting the major economic problems which they highlight, attention is given to significant gaps in the accounts and major problems of gaining new insights into real and financial aspects of the national accounts. Finally, an assessment is provided of certain specific items of the national accounts for various countries of this diverse region.

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II

The Development of National Accounts in Latin America

Accounting of national aggregates for countries in Latin America¹ was first made in the early 1930s by private researchers. The next phase of growth took place in the early 1940s under the stimulus of national concern for economic development, impending associations with international bodies which required relative measures of national economic strengths, and insights provided through Keynesian-type analysis. By the mid 1960s, accounts had been published for all the countries of the region. Today, most Latin American countries have reasonably full systems of accounts for the global real aggregates and can be made roughly comparable, but with the new stresses set out in the new System of National Accounts (SNA) there are now new target levels of achievement to be sought. Table 1 below summarises the institutional aspects of national accounting in Latin America.

The earliest estimates of Chile's national income were made by R. Simón and were published in 1931². Official estimates subsequently made up to 1944 were based on tax statistics. After that date, the estimates were supplemented by a number of basic economic studies, and systematically developed by the Corporación de Fomento de la Producción. The conceptual framework was aligned with United Nations' recommendations in 1959 and more recently with the 1964 recommendations.

Peru's national income estimates were first made in 1938 by the Ministry of External Affairs. The estimates for 1942 were prepared for the purpose of assessing the country's contribution to UNWRA. Since 1946, the Central Bank has been the national agency responsible for preparing and presenting these statistics.

1 For purposes of this review, Latin America will be taken to include countries of the Caribbean.

2 The country data contained in this section is drawn mainly from United Nations, 197 and ECLA, 157.

Table 1

NATIONAL ACCOUNTING PRACTICES IN LATIN AMERICA

	First Accounts ^{a)} Published	Current ^{b)} Source	Conformity ^{c)}	Constant ^{d)} Price-Base Year
Argentina	1942	B	✓	1960
Barbados	1953*	S	✓ after 1960	-
Bolivia	1958/1950	P	✓	1958
Brazil	1947*	P	✓	1953
Br. Honduras	1966/1962	P	✓	-
Chile	1931*	P	✓ after 1960	1965
Colombia	1947/1945	B	✓	1958
Costa Rica	1956/1950	B	✓	-
Cuba	1962 Ø	P	X	1965
Dominican Rep.	1950	B	✓	1962
Ecuador	1952/1950	B	✓ after 1960	1960
El Salvador	1952/1951	B	✓ #	-
Guatemala	1947	B	✓	1958
Guyana	1942*	S	✓	-
Haiti	1953/1951-52	S	✓ #	-
Honduras	1950	B	✓	1948
Jamaica	1942*	S	✓	1960
Mexico	1943	B	✓	-
Neths. Antilles	1958	S	✓ #	1958
Nicaragua	1950	B	✓	1958
Panama	1953/1944	S	✓ # after 1960	1960
Paraguay	1946*	B	✓	1967
Peru	1938	B	✓ #	1963
Puerto Rico	1940*	P	X	1954
Surinam	1952	S	X #	-
Trinidad and Tobago	1956/51	S	✓ #	-
Uruguay	1965/1955	B	✓	1961
Venezuela	1956/1950	B	✓	1957

Notes:

- a) Year of first publication of estimates of national income or output. The figure after "/" refers to income year if different from publication year. Estimates made by private researchers are indicated by "*".
- b) B: Central Bank; P: Planning Bureau; S: Statistical office of government.
- c) Estimates which are available and which are based on S.N.A. The sign, "✓" indicates that the estimates are comparable for all years for which estimates have been published and are also conceptually comparable to estimates of other countries. The sign (#) indicates some significant exceptions.
- d) Constant Price data prepared for Expenditure on G.N.P. with market prices of year shown.
- Ø New series. An earlier series beginning in 1950 were provided by the Banco Nacional de Cuba. In addition, several private estimates were made before 1950.

The first development of the accounts of other Latin American countries took place during and after World War II. The phases of development are given by the following bench mark years:

Table 2

Development of National Account Estimates

Year	Number of Latin American countries with Systems of National Accounts
1940	2
1950	14
1960	25
1970	28

By the end of the 1960s, all but two of these systems of accounts were prepared in conformity with SNA so far as most of the major aggregates were concerned. Many of the earlier estimates were revised in accordance with the new concepts recommended by the international agency, the aim being to have eventually a consistent series beginning with the year 1960. Input-output tables have not been constructed for countries in Latin America generally, although the Bank of Mexico has made compilations of statistics in this form for 1950 and 1960.

The institutional arrangements for assigning national accounting responsibilities vary from country to country and, at different stages, many of the government agencies within the same nation have had a hand in shaping the accounts. Appendix A lists the national sources of the national accounts. Presently, the pattern of responsibility can be summarized as follows:

Table 3

Institutions responsible for preparing national accounts

	No. of countries
Central Bank	14
Planning Bureau	6
General Statistical Office	<u>8</u>
Total	28

Estimates of national accounts are vital ingredients in the development of national development plans and the national accounts are inevitably improved as a result of planning and its feedback mechanisms. Bolivia, Chile and Colombia were the first to formulate national plans and to establish the necessary planning machinery. With the Punta del Este Conference of 1961, the Latin American governments acknowledged that planning should be the fundamental instrument for mobilizing resources and the development of national economic statistics would be an important step. Improvement of planning since then, nevertheless, has been hampered by problems of the availability, timeliness, and quality of basic information. The statistical function has not been adequately promoted within the planning function. [ECLA, 137]. National statistical offices generally occupy a subordinate role in public administration, employees being ill-paid and unqualified in many cases. Few offices have adequate resources to make effective collections and elaborations of data and legislation is not always available to make the supply of certain data compulsory. [4, p. 697]. Coordination between national and regional offices and between suppliers and users of data is frequently poor.

III

The Achievement of the new S.N.A. Suggested Priorities

The aim of revising the United Nation's S.N.A. in 1968, was to provide further international guidance to national statistical authorities over some considerable time ahead, and to provide a firmer basis for international comparisons. [9; 11]. In the future, of course, different countries will produce different parts of the new accounts and convert existing accounts to the new system at differing rates depending on their needs. Developing countries are especially affected by these differing paces in closing the gap between agreed-upon statistical goals and achievements. It was recognized that developing countries because they faced differing avenues and obstacles to social and economic development, would need to emphasise special segments of the national account rather than others. In general, the developing countries would require accounts which helped explain and describe:

- 1 the dual nature of the economy
 - a) two modes of production - modern and traditional;
 - b) a rural and an urban area;
 - c) a monetized and a subsistence sector;
- 2 the dominant role of external trade;
- 3 the special role of the public sector;
- 4 the limited range of productive activities.

The suggested list of priorities for the development of accounts and statements in the developing countries gave first priority to the following:

the consolidated accounts of the nation;
 the flows of deconsolidated production accounts;
 data on external transactions;
 activities of government;
 financial transactions of the monetary system.

The consolidated accounts of the nation provide important material on the dimensions and workings of the economy. To expedite their production, these accounts in some cases use concepts of operating surplus and saving which are gross of consumption of fixed capital.

A review of the development in Latin America of the standards suggested in the first priority with respect to the consolidated accounts is provided in Table 4 below. The S.N.A. consolidated accounts for the nation are:

- Account 1. Gross Domestic Product and its Expenditure
- " 3. National Disposable Income and its Appropriation
- " 5. Capital Finance
- " 6. All accounts - External Transactions

The test was made for accounts presented in the 1969 UN Yearbook of National Accounts Statistics [12]. As might be expected, all Latin American countries have estimates of GDP which meet the S.N.A. standards, but not all give comparable details and for some countries there are significant lags. In the case of Cuba, the estimates of the national product are based on the concept of Net Material Product which is defined as "the total net value of goods and 'productive' services, including turnover taxes, produced by the economy in the course of a year". [12, p. 155]. Economic activities not contributing directly to material production, such as public administration and defence, personal and professional services and similar activities are not included. The treatment of several items in the Cuban accounts in these ways do not make the consolidated estimates comparable to those of other countries reported under the S.N.A. The Cuban estimates show expenditures for individual and collective consumption, gross fixed capital formation, increase in stocks, and net exports of goods and productive services to give total expenditures on gross material product.

Of the 28 Latin American countries, 20 have estimates of national disposable income which are comparable, overall, to the S.N.A. The full accounting here calls for, on the one side, the aggregation of disposable income for employees, business, property owners and entrepreneurs adjusted for indirect taxes and subsidies and, on the other side, government and private final consumption expenditure and savings.

In the S.N.A., much attention is given to the account showing the financing of capital formation largely because of the significance of capital accumulation in the development process; 20 of the Latin

Table 4

Achievement in Suggested Priorities for National Accounting in
S.N.A. — Consolidated Accounts for the Nation

Account No. Country	1. G.D.P. and Expenditure	3. National Disposable Income	5. Capital Finance	6. External Trans- actions
Argentina	✓	-	-	-
Barbados	✓	✓	✓	✓
Bolivia	✓	✓	✓	✓
Brazil	✓	-	✓	-
British Hon- duras	✓	-	✓	-
Chile	✓	✓	✓	✓
Colombia	✓	✓	✓	-
Costa Rica	✓	✓	✓	✓
Cuba	-	-	-	-
Dominican Rep.	✓	-	-	-
Ecuador	✓	✓	✓	✓
El Salvador	✓	-	-	✓
Guatemala	✓	✓	✓	✓
Guyana	✓	✓	✓	-
Haiti	✓	-	-	-
Honduras	✓	✓	✓	✓
Jamaica	✓	✓	✓	✓
Mexico	✓	-	-	-
Neth. Antilles	✓	✓	✓	✓
Nicaragua	✓	✓	✓	✓
Panama	✓	✓	✓	✓
Paraguay	✓	✓	✓	✓
Peru	✓	✓	✓	-
Puerto Rica	✓	✓	-	✓
Surinam	✓	-	-	-
Trinidad and Tobago	✓	✓	✓	✓
Uruguay	✓	✓	✓	✓
Venezuela	✓	✓	✓	✓
Number with Account	27	19	20	16
Per cent of Total:	96 %	68 %	71 %	57 %

American countries had comparable data for this account. Reliable statistics in this area depend partly on the checks provided by estimates of national wealth. [67]. Series of data on transactions in financial assets and liabilities are assigned a lower order of priority in the suggestions to developing countries under the new S.N.A.

Several countries have elaborate series on capital formation: by type of capital good, by industrial use, and by type of purchaser. Several of these estimates are in current market prices as well as in constant prices or the market prices of a given year. Argentina has details of the composition of capital formation even though it does not have comparable estimates on the financing components of capital formation. Bolivia is the only country to have estimates of capital formation by type of good, industrial use, and type of purchaser in both sets of prices. More countries have information on capital formation by type of capital good in current prices than in any other form of classification. Table 5 below shows the scope of information on capital financing for 21 Latin American countries.

Table 5

COMPOSITION DETAILS OF CAPITAL FORMATION

Country	Type of Capital Good		Industrial Use		Type of Purchaser	
	Current Price	Constant Price	Current Price	Constant Price	Current Price	Constant Price
Argentina	✓	✓	-	-	-	-
Bolivia	✓	✓	✓	✓	✓	-
Br Honduras	-	-	✓	-	-	-
Chile	✓	✓	-	-	-	-
Colombia	✓	✓	-	-	✓	✓
Costa Rica	✓	-	-	-	✓	-
Dominican Rep.	✓	✓	-	-	-	-
Ecuador	✓	✓	-	-	✓	✓
El Salvador	✓	-	✓	-	✓	-
Guatemala	✓	✓	✓	✓	-	-
Guyana	✓	-	-	-	-	-
Honduras	✓	✓	-	-	✓	✓
Jamaica	✓	-	✓	-	✓	-
Nicaragua	✓	✓	-	-	-	-
Panama	✓	✓	-	-	✓	✓
Paraguay	✓	✓	-	-	✓	-
Peru	✓	✓	-	-	-	-
Puerto Rico	✓	✓	-	-	✓	✓
Trinidad and Tobago	✓	-	✓	-	✓	-
Uruguay	✓	✓	✓	-	✓	✓
Venezuela	✓	✓	✓	✓	-	✓
Number with data	20	15	8	3	13	9

The accounts for the external sector give valuable information on the foreign demand for key products and the foreign willingness to supply loanable funds, on the one side; and the ability of the earnings from these credits to finance imports of consumption and capital goods, on the other side. For open economies and dual societies as most developing countries are, this information is vital for policy purposes. Export earnings for Latin America as whole, which represent 10 % of total G.D.P. for the region, grew at an annual average rate in the 1960s of 4.5 % compared with 6.0 % for all developing countries and 8.8 % for the developed countries, 14, p. 617. These trends point to the value of maintaining accurate and current data on the external accounts for commercial, foreign exchange and balance of payments policies in general.

Although balance of payments accounts or external accounts for all the Latin American countries are available in one form or another, only 15 of the 28 countries have comparable accounts within the standards and concepts of S.N.A. Among these 15 accounts, outstanding gaps and irregularities are:

Table 6

External Accounts - Outstanding Gaps and Irregularities

Barbados	No division between factor income paid to and received from abroad; C.T
Bolivia	No breakdown of net capital transfers received as between corporations and non-corporate private sector.
Chile	C.T;
Costa Rica	C.T; F.I;
Ecuador	C.T;
El Salvador	C.T;
Guatemala	C.T;
Honduras	F.I;
Jamaica	F.I;
Netherlands Antilles	Exports includes wages and direct taxes from oil companies.
Nicaragua	C.T;
Panama	C.T; F.I; Factor and new factor services rendered by residents of Panama to the Canal Zone and the Colon Free Zone are treated uniformly as non-factor services to the Rest of the World.

Puerto Rico	Net Capital Transfers to Private Non-profit institutions are included in General Government.
Trinidad and Tobago	C.T; F.I;
Uruguay	C.T;
Venezuela	Beginning 1965, Factor Income Paid to rest of world is net; C.T:

C.T.: No details of Capital Transactions

F.I.: Merchandise exports and imports include Freight and Insurance.

IV

Statistical and Publication Lags

Unless estimates of the national accounts are available for a recent period, any prognosis for the economy will be defective. In these cases, the national accounts serve only as a distant historical record. Economic policy for the nation will then have to be guided by reference, to less complete but more readily available indicators for smaller segments of the economy. While this may satisfy the minimal requirements for some types of economic policy, an integrated analysis showing interrelationship of possible effects of policy decisions will not be feasible or at least will not be accurate. On the other hand, the sacrifice of accuracy for expediency in making accounts available, may be just as damaging to the formulation of economic policy. Tentative official estimates which are continually revised confuse the analyst and generate numerous series of figures which may not be compatible or not helpful to the formulation of sound economic policy. The statistics may be strictly segregated series because they are "provisional", "preliminary", "tentative", "subject to revision" or "revised". There is an additional hazard of credibility and possible allegations of political juggling with the statistics if too many changes in the official figures are made.

In the Latin American countries, a brief test of the 1969 national accounts show only a few serious publication lags in the presentation of two of the major aggregates. In the case of Mexico and British Honduras, the overall aggregates were not available because of gaps in subsidiary figures. Table 7 below summarizes the most notable lags in two of the aggregates as reported in the United Nations national accounts questionnaire. At any given month in a year, lags are likely to be longer than those indicated in the table below because of differing reporting times for institutions supplying data for national accounting purposes. The lags shown are those acknowledged by the agency responding to the United Nations questionnaire. It has not been possible to analyse the statistical, administrative or political causes of the lags, except in two cases where the lag is due to the non-availability of subsidiary data over a long period of time. There may be all types of reasons why reluctance exists in making estimates of subsidiary figures which are essential to the national aggregates on the S.N.A. basis.

Table 7Availability Lags in Statistics

<u>LAG</u>	<u>G.N.P.</u> (Market Prices)	<u>G.D.P.</u> (Factor Cost)
<u>One year</u>	Brazil Mexico Netherland Antilles	Barbados Brazil Guatemala Netherlands Antilles
<u>Two years</u>	Surinam	Surinam Cuba (equivalent to N.I.)
<u>Four years</u>	Barbados	British Honduras
<u>Five years</u>		Peru
<u>Six years</u>	Haiti (G.D.P.)	
<u>Not available</u>	British Honduras ^{a)}	Mexico ^{b)}

a) Estimates of Net Factor Income from abroad not available

b) Estimates of Indirect Taxes Net of Subsidies not available.

V

Special Problems of Accounting in Constant Prices

With the development of the national accounts generally, more and more attention has been given to estimates in constant prices especially with respect to the main product flows and their components. Aggregates in constant prices or in "real terms" serve the needs of both economic analysis and policy to a greater degree than do aggregates in changing market prices. The major differences between measures in current prices and those in constant prices are due to price changes, mostly inflationary price trends. These price movements have been experienced on vastly differing scales in the countries of Latin America and the experience has been of more conscious concern, or, at least, of analysis and explanation there, than in other developing regions [7, Ch. 6]. In the 1960s, for example, the average inflation for the Latin American regions as roughly measured by average consumer price indexes weighted by aggregate income was greater than other regions of the world.

Of the Latin American countries themselves, El Salvador, Guatemala, and Panama had virtually little inflation during the 1960s, while Argentina, Brazil, Chile and Uruguay experienced inflationary rates ranging at times from 20 per cent to 90 per cent per annum.

Rapidly changing price levels have different impacts in developing countries from those in developed countries. The impacts are likely to be more severe because price changes apply unevenly to the component sectors; the structures of production, consumption, investment, and income distribution are likely to be more fluid; and greater importance is attached to price levels of internationally-traded commodities because of the greater dependence on foreign trade. Moreover, limited availability and poor quality of value data make the price statistics of developing countries difficult to compile and use for national accounting purposes. [2, p. 118].

In many developing countries, price data is limited to a consumer price index for a few items in the capital city, indicators of wholesale prices for the major primary producing industries and unit values of internationally-traded goods. In general, price index statistics

lack precision in representativity, coverage, reliability and applicability. Price data to cover construction costs, rent charges, unit charges for services and wage rates necessary to decompose important sectors are largely not collected or made available in a comprehensive form. Consequently, any attempt to decompose current price estimates of the national aggregates must adopt expedient and round-about methods, which accentuate errors where inflation has been a major element in the economy.

Even for developed countries many methodological and statistical obstacles are associated with estimating constant price series. Diverse flows of goods, services, transfers and savings, subject to different market and non-market valuations, changing over time, in composition and in quality, must be aggregated to form balanced accounts either in terms of prices or quantities. Two basic methods of estimating constant price data are available [11, Ch. IV].

- 1 the production method which consists in aggregating the contribution valued at constant prices of different industries to GDP;
- 2 the expenditure method which consists in aggregating the constituents of final expenditure valued at constant prices.

The problem of obtaining a unique set of deflated values of both the commodity and the non-commodity transactions such that the accounts balance in real terms is subject to much debate [1, p. 144]. The result has been that the S.N.A. points to possibilities of a range of possible deflators [11]. Consider as an example of the difficulty, the major components of the Expenditure on Gross Domestic Product (P): G - Government final consumption; C - Private final consumption expenditure; K - Gross fixed capital formation; V - Increase in stocks; E - Exports of goods and services; and M - Imports of goods and services. If the available price indexes permit only C'_g , K' , E'_g and M'_g to be uniquely deflated, where subscripts refer to either goods or services, and the prime sign (') to deflated series, the steps towards deflation of the components and balance of the accounts will be:

$$(1) P = G + C'_g + C_s + K' + V + E'_g + E_s - (M'_g + M_s) + R_p$$

were R is a residual needed to balance the equation.

For the external balance, represented by B , and with inward autonomous financial transfers, represented by F , the external accounts will be

$$(2) B = E'_g + E_s - (M'_g + M_s) + F + R_b$$

And for the government budget balance, D , with T representing Tax Revenues;

$$(3) D = G - T.$$

So that domestic savings, S , and foreign transfers are left to finance domestic investment, the government deficit and the foreign balance:

$$(4) S + F = B + K' + V + D + R_s$$

Of these items only K' has been deflated by an available index. If proxy price or quantity deflators are applied to other underlying transactions, say wholesale prices to V , consumer prices or index of government employment to G and C_s , and some combination of import and export prices to E_s , M_s and F , then S , B and D remain as composites and leave the system of constant prices indeterminate with numerous residuals in the equations. Furthermore, P' , which may be obtained as the result of applying some implicit deflators to these remaining balances in the expenditure approach or establishing residual variables as "expenditure gains" [3], must still agree with the P' derived from the summation of values added at constant values through the production approach. The practical and expedient solution, of course, is to use deflators that are reasonably relevant, meet the test of common sense and consistency over time, and result in a balanced set of accounts. Considering the value of accounts in real terms for economic policy, efforts to supply these accounts consistent with some cost-benefit analysis is an appropriate operation for developing countries [5].

In the recommendations of priorities for the new S.N.A., estimates of the main series of data in constant prices are among those statistical aims accorded second priority in the four levels of priority¹. As is shown in Table 1 above, nineteen of the 28 Latin American countries prepare estimates of expenditure in GNP in market prices for a given year. Ten of the chosen base years are in the 1960s and eight are in the 1950s; Honduras has a base year of 1948. Brazil, which has experienced considerable price increases domestically, and widely fluctuating prices externally, converts current expenditures into market prices of 1953 so that there are immense differences between the expenditure series in current market prices and those in 1953 market prices. Nevertheless, the changes in the implicit price deflator derived from these series of GNP expenditures bears a close resemblance to the changes in the consumer price index as shown in Table 8:

Table 8

BRAZIL: COMPARISON OF PRICE CHANGES

	<u>Annual Percentage Changes</u>						
	1961	1962	1963	1964	1965	1966	1967
GNP Implicit Price Deflator	34	55	79	85	54	40	32
Consumer Price Index (São Paulo)	38	52	75	87	62	47	30

Price data of a country can be constructed in several ways to serve several purposes, and in many countries the construction of consumer price indexes, the most widely used reference of price changes, were not originally constructed to deflate the elements of the national accounts. Numerous modifications are needed for this purpose. Recognizing the extraordinary difficulties in expressing the various forms of the income and capital finance accounts in constant prices, the S.N.A. does not call for the deflation of these items. Price indexes which are used as price indicators should reflect only the effects of changes in price and not the effect of changes in product mix. Implicit deflators have changing weights as in Paasche indexes. while the components of the accounts in constant prices have fixed weights as in Lespeyres indexes. Therefore, the implicit price deflators in the national accounts, apart from the elements of individual product or service, are not suitable as price indicators

because they reflect the change in product mix as well as the change in price. The marked differences between price indexes, indicators and deflators must be observed in seeking to obtain the most valuable national accounts in constant prices /17.

V

Conclusions

This review of the stages of growth in the supply of national accounts in Latin America makes it clear that many agencies have had a hand in, and many conceptual and methodological are involved in, the development and presentation of the national accounts. Using the concepts and recommendations of the new S.N.A. as a guide, we find that the basic aggregates for all the countries of Latin America are available and reasonably comparable. However, there is no necessary relationship between the level of income per capita and the completeness of the accounts. Frequently the least affluent have the most complete, and the most affluent have the least complete sets of accounts. Smaller, politically stable, more recent starters in the development race, those that have had considerable support and hence study through international agencies, and those that have had recent colonial ties with advanced countries are more likely to have more complete accounts than other types of countries. Thus Barbados, Jamaica and the Netherlands Antilles have more complete accounts under S.N.A. concepts than do Brazil and Mexico.

For policy purposes, national accounts in real and financial terms are important ingredients in improving insights for analytical and decision-making activities. The policy maker is highly dependent on the economic statistician for this data so that there is need to avoid using only what is available and statistically dead, rather than what is relevant and statistically feasible, drawing quantitative conclusions on qualitative inferences, prescribing for the nation what is true only for the segment, and employing high-powered computers on nonsense figures. The analyst must contend with some optimum balance between expediency, reliability, precision, and comparability in respect to the particular task at hand.

Latin American nations, like most developing countries, have urgent demands to fill in gaps in their national accounts and the S.N.A. recommendations create still greater gaps in the accounts of all countries. At the same time, scarce resources, alternative oppor-

tunities and shortages of skilled manpower will leave significant gaps in the accounts for many years ahead. Rational decisions have to be made as to the minimum essential information needed for the specific objectives of the particular country.

Appendix A

NATIONAL SOURCES OF NATIONAL ACCOUNTS

Argentina:	Banco Central de la República Argentina
Barbados:	Statistical Service
Bolivia	Secretaria Nacional de Planificación y Coordinación
Brazil:	Fundação Getulio Vargas, Instituto Brasileiro de Economia
Chile:	Oficina de Planificación Nacional
Colombia:	Banco de la República
Costa Rica:	Banco Central de Costa Rica
Dominican Rep:	Banco Central de la República Dominicana
Ecuador:	Banco Central del Ecuador
El Salvador:	Banco Central de Reserva de El Salvador
Guatemala:	Banco de Guatemala
Guyana:	The Statistical Bureau (Georgetown)
Honduras:	Banco Central de Honduras
Jamaica:	Department of Statistics
Mexico:	Banco de México S.A.
Nicaragua:	Banco Central de Nicaragua
Panama:	Dirección de Estadística y Censos
Paraguay:	Banco Central del Paraguay
Peru:	Banco Central de Reserva del Peru
Uruguay:	Banco de la República Oriental del Uruguay
Venezuela:	Banco Central de Venezuela

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