THE DEVELOPMENT OF
NATIONAL ACCOUNTS IN ARGENTINA*

J. V. SOURROUILLE

Instituto de Desarrollo Economico y Social (Ides), Buenos Aires, Argentina

The history of national accounting in Argentina is presented in brief. The use of the production method as a basis for GDP estimates is explained and sources and methods of deriving the estimates for different sectors are commented on in some detail. Next the reliability of the estimates is examined for sectoral product, national income by factor shares and the components of final expenditure in terms of the comparison of two different estimates for the period 1950–63. The degree of accuracy is judged to be generally sufficient, but the importance of economic censuses in the process of estimation is stressed. The importance of detailed studies on several different aspects of the economic structure (input–output, personal and family income by size and regional accounts) is also stressed as a basis for improving the reliability of estimates.

1. HISTORY

The first systematic estimates of the national accounts of Argentina were prepared during World War II. Beginning in 1955 annual series on the gross product and utilization of available goods and services began to be published regularly in the *Annual Reports* and monthly *Statistical Bulletin* of the Banco Central de la República Argentina, which is the official agency primarily responsible for national accounts work. Beginning in 1966 the Bank also prepared estimates on a quarterly basis, which appear in the *Economic Reports* of the Ministerio de Economía.

The first official national accounts series were published in 1946 and covered the period 1935–45.[1] These estimates were based on the industrial census of 1935 and the agricultural census of 1937; at this time no population census had been carried out since 1914, and no recent information was available on the services sectors. The basic concepts utilized in these estimates are fundamentally the same as those used in later years, and this was also the first application of the production method in the construction of the national accounts.

Subsequent revisions have reflected chiefly the appearance of new data, particularly census information which provides the benchmarks between which annual figures are interpolated and subsidiarily the adjustment of concepts and definitions to international recommendations. Thus, the first revision of the national accounts was based on the census of 1947, which included not only the traditional demographic information but also data on agriculture, industry, trade, finance, transport and communications, and other services and an enumeration of existing buildings, both residential and commercial. The interpolation of annual figures was also greatly assisted by the development of new statistical series on production, employment, wages and salaries paid by industrial establishments,

[1] See Banco Central, *La renta nacional de la República Argentina*, Buenos Aires, 1946.

the volume of foreign trade, retail sales, and a new cost of living index. The revised series for 1935–54 was published in 1955 together with detailed explanations of concepts and methodology.[2]

These revised series were thereafter continued on an annual basis, although the reliability of the estimates diminished progressively over time because of the delay in developing new basic data. When a CONADE–ECLA[3] research program was initiated in the early 1960s to study income distribution, it was therefore found necessary first to update the national accounts estimates on the basis of the economic census of 1953, which covered the industrial, commercial and services sectors. The work of the CONADE–ECLA team led the Banco Central to accelerate its own revision efforts, with the result that in 1964 two new parallel series covering the years 1950 to 1963 were finished almost simultaneously.[4] Subsequent tabulation of the results of the 1963 census on industry, trade and services enabled the Banco Central to make a new revision of the national accounts estimates which can be considered definitive for the period up to 1963, these series began to be published in 1971.[5]

The UN Economic Commission for Latin America also published in 1956 national accounts estimates going back to the year 1900 which include national product by sector of origin, gross investment and the composition of imports.[6] In this study estimates were made of the functional distribution of income, the composition of family consumption, and government income and expenditure for the period 1946 to 1955; estimates of capital stock by types and sectors according to the permanent inventory method for the period 1935 to 1955; and an input–output matrix based on the industrial census of 1950. This research, carried out in close cooperation with the statistical team of the Central Bank, is the basic source of national accounts estimates in current prices before 1950, constant price estimates prior to 1935, and of most capital stock figures in Argentina. Finally, mention should be made of the estimates of gross product by regions, provinces and departments, and of a regional input–output matrix, prepared by the Di Tella Institute on the basis of the 1953 census.[7]

2. General Method of Estimation

Although international standards exist for estimating national accounts, as is well known it is practically impossible to follow these guidelines in detail. The

[2] See Secretaría de Asuntos Económicos. *Producto e Ingreso de la República Argentina en el período 1935–1954*, Buenos Aires, 1955.

[3] Consejo Nacional de Desarrollo (CONADE) and United Nations Economic Commission for Latin America (ECLA).

[4] Consejo Nacional de Desarrollo (CONADE), *Distribucion del ingreso y cuentas nacionalés en Argentina*, Buenos Aires, 1965 and UN., *Economic Development and Income Distribution in Argentina*, New York 1968; Banco Central, Supplement to Boletín Estadístico, No. 2, February 1964, and Supplement to *Boletín Estadístico*, No. 6, June 1966.

[5] Banco Central, *Origen del producto y distribución del ingreso, 1950–69*, Supplement to *Boletín Estadístico*, No. 1, January 1971, and Ib., *Estimaciones del gasto nacional e inversión bruta interna 1950–70*, *Boletín Estadístico*, March 1971.

[6] UN. *El desarrollo económico de la Argentina*, Apéndice IV, "Algunos estudios especiales y estadísticas macroeconómicas preparadas para el informe".

[7] Institut Di Tella, *Relevamiento de la estructura regional de la economía argentina*, Buenos Aires, 1961.

practical art of national accounts making requires the imaginative use of information from a variety of sources and utilization of diverse techniques. Of the three classical basic methods of approach for estimating national product—the factor income method (total income received by residents of the country), the expenditure method (final outlays by residents adjusted for the balance on current account in the balance of payments), and the production method (the value of domestic output adjusted to exclude the value of current inputs)—the last has been most relied on in Argentina. Long statistical series on the economic activity of principal sectors and economic censuses are in general production-oriented, whereas information on income is incomplete and lacks coherence. Use of this method requires that information be obtained on the value of intermediate consumption, but it has the additional advantage of facilitating estimates of the functional distribution of sectoral income. Estimates of final expenditure on gross investment, inventories, government consumption and the current account of the balance of payments are made directly, whereas private consumption is taken as the residual.

The current value of gross investment is estimated by the commodity flow approach from statistics on construction and the flow of capital goods from domestic production and imports, which are classified by end use and adjusted to include the value of commercial markups, transportation, installation and taxes. Inventories include agricultural products, cattle stocks and a limited number of industrial raw materials. The value of government consumption and of the current account in the balance of payments are derived from accounting data which will be described in greater detail below.

Three types of basic data are therefore used in estimating the national accounts: periodical statistical series measuring foreign trade and the production of agriculture, mining, manufacturing and construction; accounting data for the expenditures of government, state enterprises and corporations controlled by the government; and occasional and partial data for trade, road transportation and personal services. On the other side the accuracy and coverage of the data of the regular statistical system, particularly in the industrial and trade sectors, are very different in the censal than in the other years. It is clear from the above that the most reliable data are for censal years and for those sectors for which current production statistics or accounting data are available. Intercensal interpolations for these sectors are especially subject to increasing error over time because they include most of those activities which have been growing and changing most rapidly in Argentina. Each subsequent census has in fact revealed that interpolations of gross product for these sectors have had a systematic downward bias. The most dramatic example of such bias is the series on industrial gross product published prior to the revision of 1964. This series was interpolated using the old index of industrial production constructed from the census of 1943, in which the industries that developed rapidly after World War II were very inadequately represented. When the results of the 1953 census became available, it was therefore found that the value of industrial production was 53 percent higher than national accounts estimates. This downward bias appears to have been greatly reduced in later interpolations of manufacturing gross product, for example, the difference between the estimate for 1963 and that contained in the census for this

355

year being about 7 percent. Differences between national accounts estimates and 1963 census data were, however, greater for the trade and services sectors, because estimates for these sectors are partially based on extrapolations of the labor force, which during the 1950s did not adequately reflect the changes that took place in the relation between output and employment.

Differences between intercensal and revised estimates of total gross domestic product for the period 1946–63 are summarized in Table 1. It can be seen that the reliability of intercensal estimates tends to deteriorate over time, although the CONADE–ECLA series held up remarkably well in comparison with the later revision of the Central Bank. The gradual improvement of national accounts estimates over time has been aided by complementary research on input–output and on functional, family and personal income distribution, and by the special characteristics of the Argentine economy. The large concentration of both population and economic activity near the national capital—34 percent of the population and 50 percent of gross domestic product in 1960—has facilitated data collection, and the almost complete absence of subsistence production and of important regional differentials in labor productivity in non-agricultural activities has simplified problems of estimation.

3. The Estimates of GDP by Kind of Economic Activity

Since the production method is the basic one used in the regular estimates, it seems convenient to explain the principal characteristics of the sectoral statistics.

(a) Agricultural Statistics

Production statistics for agriculture and cattle raising include the value of market sales of production and also the value of on-farm construction and improvements, goods produced for farmer's own consumption, the cost of seeds and seed production, the value of sowing, harvesting, packaging, sheering, fumigation, veterinary and similar services provided by contractors and the rental of agricultural machinery. Because of mixed farming methods prevailing in Argentina, the value of grass used for forage is not included in agricultural production, nor is the imputed value of grain used for animal grazing. Figures on the volume of production are compiled from officially published statistics and are valued in prices received by farmers. These prices are not registered in any regular statistical publication but are based on wholesale prices adjusted for the estimated cost of transportation and commercial markups. The published data on the volume of production are obtained from annual surveys among farmers and from monthly reports prepared by regional agents of the Secretaría de Agricultura. This information for principal crops is then compared on an annual basis with statistics on total domestic consumption, exports, inventory fluctuations and estimated seed use. Since the crop years does not coincide with the calendar year—most crops are sown between May and October and are harvested between November and April—output is allocated to the calendar year in which the bulk of production is marketed.

With regard to the reliability of agricultural statistics, those for the production of grains and industrial crops are considered the best because output of these

356

TABLE 1
COMPARISON OF GROSS PRODUCT ESTIMATES FOR CENSUS YEARS

Census Year	GDP Estimates (billions of pesos in current prices)					Census Data Used in Estimates					Ratios Between Estimates				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	2/1	3/2	4/3	5/4	5/3
1946	22.4[b]	26.2	—	26.2	—	—	X	X	X	X	1.17	—	—	—	—
1950[a]	53.7[b]	62.3	67.4	69.5	68.5	—	X	X	X	X	1.16	1.08	1.03	0.98	1.02
1953	—	111.9	129.4	130.1	131.2	—	—	X	X	X	—	1.15	1.01	1.01	1.01
1960	—	790.0	961.0	977.8	1,006.0	—	—	—	X	X	—	1.22	1.02	1.03	1.05
1963	—	—	1,734.1	1,775.0	1,854.9	—	—	—	—	X	—	—	1.02	1.05	1.07

Sources:
(1) Central Bank, *La renta nacional*, 1946, and subsequent periodical publications.
(2) Central Bank, *Producto e ingreso*, 1954, and subsequent periodical publications.
(3) Central Bank, *Origen del producto y composición del gasto nacional*, 1966.
(4) CONADE–ECLA, *Distribución del ingreso y Cuentas Nacionales de la Argentina*, 1965.
(5) Central Bank, *Origen del producto y distribución del ingreso*, 1971.
[a]Because of its limited coverage, the 1950 census was only used for estimating industrial GDP in conjunction with independent estimates of the product of activities not included.
[b]As was noted in section 1, the scope and coverage of these estimates are slightly different.

crops is generally very concentrated regionally, on-farm consumption is minimal, and trade is well organized. Production estimates of fruit, vegetables and flowers, on the other hand, are probably among the least reliable, although no independent checks exist to confirm this impression. The reliability of price data is considered fairly good, although adjustments for transportation costs and commercial markups are not based on any precise annual statistical information. The basic prices of grain are those quoted for delivery at the port of Buenos Aires and registered in the Bolsa de Cereales; basic prices used for industrial crops are those fixed or controlled by the government or special marketing agencies. In contrast, only a small proportion of vegetables and fruit is traded in well-organized wholesale markets, so that price information on these products must be considered subject to a wider margin of error.

Production estimates for beef, mutton and pork, which together represent approximately 70 percent of the total value of cattle raising, is defined as the value of sales for slaughter adjusted for changes in stocks and the export of live animals. Because of the importance of meat in the Argentine economy, there are numerous sources of statistical information for this sub-sector. The principal sources for the slaughter of cattle are the Junta Nacional de Carnes, which controls production in large packing plants (about 80 percent of total slaughter in 1960), and the Secretaría de Agricultura, which provides information on the smaller slaughterhouses in the interior of the country. The latter course is less reliable and therefore probably constitutes the main source of error in meat production estimates. Similarly, figures on the slaughter of sheep and hogs suffer from incomplete coverage, particularly because of the importance of on-farm consumption. The principal problems with the adjustment for changes in stocks are the sometimes considerable discrepancies of official cattle stock estimates. Production estimates of wool, milk and similar products are also incomplete and are not subject to periodical statistical control.

For estimating gross agricultural product, information is required on the value of intermediate inputs, for which no annual information is available. In the series therefore indirect indicators are used, such as the production of articles used mainly by the agricultural sector (e.g. fertilizers and animal husbandry products) and of goods and services for which agricultural sales are registered as such (e.g. fuels, lubricants and insurance). This information is supplemented by estimates of the use of seeds and expenditures on the maintenance of equipment derived from *ad hoc* studies. It is therefore obvious that national accounts estimates must be used with great caution in analyzing changes in sectoral productivity and the utilization of new agricultural inputs.

The constant price estimates are made using quantity indexes, weighted by prices in the base year. The quantities are the same used in the current production figures and there are no independent estimates of intermediate consumption.

(b) *Industrial Statistics*

The industrial sector plays a key role in national accounts statistics, not only because it is the source of more than 30 percent of total GDP but also because figures for the trade, services and transport sectors and for gross investment and

358

private consumption are also largely based on estimates of manufacturing output. The general method used in estimating industrial product series is by interpolating prices and quantities between census years. The industrial censuses which influence the data evaluated in this period are for 1946, 1948, 1950, 1953, 1957 and 1963. Only the censuses of 1946, 1953 and 1963, however, include all industrial establishments; the other censuses cover firms employing more than a certain number of workers according to the immediately preceding census.

Intercensal interpolations between 1946 and 1960 were originally derived from annual statistical series on the volume of production and employment (number of employees, hours worked and salaries paid) in different industrial activities.[8] This information was designed on the basis of the 1943 census and was later adjusted in accordance with 1946 census results, but thereafter no further revisions were made. By 1960 the annual series became so unrepresentative that their publication was terminated. The National Accounts offices (both Banco Central and CONADE) therefore found it necessary to construct their own production indices on the basis of scattered information referring principally to the volume of production of individual enterprises and the output of specific articles. Price information is obtained from three main sources: the wholesale price index of the Central Bank for the period 1939 to 1956;[9] the wholesale price index published by the Statistical Office which started in 1956 and is still published today;[10] and miscellaneous sources for products not included in the above price indices.

Statistics from complete censuses appear to be reasonably reliable: no major inconsistencies have appeared between census data on production and input–output studies of the utilization of industrial products, and only minor differences exist between employment data contained in the industrial and population censuses. Certain adjustments are made to the census figures for estimating small scale artisan production not included in censuses, for valuation of the output of vertically integrated firms such as petroleum companies, and for the tax treatment of certain producers. Census data on intermediate inputs of raw materials, fuels, lubricants and electric energy are also adjusted to include estimates of administrative costs obtained from enterprise balance sheets. In intercensal interpolations it is assumed that physical intermediate consumption as a proportion of output remains constant at a rather disaggregated level, although year-to-year changes in relative prices between inputs and outputs are taken into account. Constant price series are constructed using the quantity indexes already mentioned, weighted by the structure of value added of the last industrial census adjusted by the output and input price indexes between the base and censal year.

Mention has already been made of the improvement in reliability of intercensal interpolations made in recent estimates of industrial GDP. For example, the estimated annual rate of growth of industrial product in constant prices between 1953 and 1963 was 3.6 percent compared with the 3.9 percent actually

[8]Dirección Nacional de Estadística y Censos, *Informe sobre la serie de números índices de volumen físico de la producción industrial,* Buenos Aires, 1948.

[9]Banco Central, *Indices de precios mayoristas en la Capital Federal, Boletín Estadístico,* September 1962.

[10]Dirección Nacional de Estadística y Censos, *Indice de precios al por mayor,* Buenos Aires, October 1960.

registered between the censuses of these years. This downward bias may turn out to be even smaller for estimates after 1963, because interpolations have been based not on an industrial production index but on the output of a group of firms that includes most of the new technology enterprises that have been growing most rapidly in recent years.

A few comments should also be made here on gross product estimates for the mining and construction sectors. With regard to the former, a special problem exists because half of sectoral value added is generated by extraction of petroleum and natural gas by enterprises in which the production, refining and distribution stages are vertically integrated. As a result there is no market price for crude oil and natural gas with which to estimate value added according to the production method. Different methods are used for estimating the value of construction in the private and public sectors. In the first case the volume of production is based on the issue of construction permits; the main drawbacks of this source of information are that the coverage of permits is incomplete, not all construction authorized is actually carried out, and the period of construction differs for different kinds of buildings. These estimates of construction volume are converted into value figures by using the cost of construction index, which is based upon data gathered at the beginning of the 1950s. Since no further research has been carried out on private construction activity in recent years, the statistical series must be considered one of the weaker ones in the national accounts. The basic data for public sector construction are obtained from accounting data provided by various official organizations and state enterprises. In both cases estimates of intermediate inputs are not kept up to date, so it can safely be assumed that the series do not adequately reflect changes in methods of construction that may have occurred during the period under analysis.

(c) Statistics on the Service Sectors

No regular statistical series are available on private services, and this sector is the one most poorly covered in the economic censuses. The main sources of information are the following: accounting data for services provided by public enterprises and financial institutions controlled by the government; figures on the flow of goods handled by trade and road transport activities; estimates of existing housing to calculate rental income; economic census data for certain commercial activities and personal services; and population censuses, as a general over-all check on the other estimates and as the only source of data for professional and domestic services.

Estimates from accounting data of government-controlled activities are probably the most reliable. Figures for the trade sector, on the other hand, are based on occasional studies of commercial markups at the wholesale and retail levels which have been assumed practically constant for long periods of years. Information on tariffs, traffic volume and the number of commercial vehicles in circulation, adjusted by estimates of average mileage per year per vehicle, serve as the basis for estimates of private freight transportation services. Rental income from housing is estimated from the number of dwellings calculated according to the perpetual inventory method and adjusted for new additions to the housing

stock, regardless of whether they are rented or not. Finally, income from personal services is derived mainly from population censuses and complementary information on rates of remuneration.

Constant price series for trade and transport services are based on the commodity flows of primary and manufacturing production and imports. For public utilities the volume of production is utilized, but for all other services income in constant prices is estimated from statistics on employment. The use of employment as an indicator of real service income probably led to an over-estimate of the increase in gross product during the period of rapidly rising public sector employment after World War II. For the same reason, estimates of real service income may have been under-estimated during later years when public employment stabilized and labor productivity probably improved; the rapid increase in relative implicit prices for public and personal services after 1960 is another indication that productivity increases may have occurred in recent years which have not been captured in estimates of real national product.

(d) *An Evaluation of the Reliability of the Estimates: the Comparative Approach*

In view of the fact that there are two independent sets of estimates for the period 1950–61, a brief comparison of the two will be helpful and can give some idea about the reliability of the detailed estimates.[11] Few differences exist between the two series in methodology or sources of information, but the new Banco Central estimates published in 1971 are based on data from the 1963 economic census which were not available when the CONADE estimates were made. Nevertheless, as can be seen in Table 2 the difference in total gross product for the common base year 1960 is only about 3 percent (actually 3.1 percent in market prices and 2.8 percent at factor cost). The difference in the 1950–60 rate of growth of GDP between the two series is even less significant—about one tenth of 1 percent—whereas the discrepancy between average rates of increase in implicit prices for the same period is only about 1 percent (compared with an average annual increase of 26 to 27 percent).

The discrepancies between the two series are accounted for mainly by the manufacturing, trade and other services sectors. The change in the composition of output between the censuses of 1953 and 1963 especially affected estimates of value added in industry and in those sectors greatly dependent on the flow of manufactured goods (e.g. trade). For the government sector (as well as for construction) differences are explained almost entirely by utilization in the more recent Banco Central series of definitive instead of provisional figures for provincial and municipal expenditures after 1958, whereas somewhat divergent employment estimates were used for estimating income from personal services. The only other differences between the series worth mentioning are in the rate of growth of agricultural product, due mainly to more up-to-date information on the rapid expansion in forage crop production used by the Banco Central, and in value added in mining, which in the CONADE–ECLA estimates includes a proportion of central office administrative expenditures and profits of vertically integrated oil companies.

[11]See also section 2 above.

361

TABLE 2
COMPARISON OF ESTIMATES OF GDP

362

Sectors	BANCO CENTRAL GDP in 1960 (billions of pesos) (1)	Annual Rate of Increase in GDP 1950–60 Volume Index (2)	Implicit Price Index[a] (3)	GDP in 1960 (billions of pesos) (4)	CONADE Annual Rate of Increase in GDP 1950–60 Volume Index (5)	Implicit Price Index[a] (6)	Percent Difference between 1960 Estimates $\frac{(1)-(4)}{(1)} \times 100$
1. Agriculture and fishing	153.7	2.1	30.0	150.9	1.8	30.0	1.8
2. Mining	10.3	11.0	20.0	12.3	11.0	23.0	−19.4
3. Manufacturing	287.8	4.1	27.0	280.6	3.9	26.0	2.5
4. Electricity, gas and water	11.5	6.7	25.0	11.4	6.6	25.0	0.8
5. Construction	37.0	1.1	24.0	37.7	1.3	23.0	−1.9
6. Commerce, restaurants and hotels	174.9	3.0[b]	27.0[b]	160.5	3.0[b]	27.0[b]	8.2
7. Transport and communications	73.0	2.3	27.0	72.6	2.5	—	0.5
8. Financial and real estate	36.6	2.8	21.0	36.6	2.8	—	—
9. Government	67.5	1.9	—	65.9	2.1	25.0	2.4
10. Other services	72.7	2.3	—	68.4	2.9	25.0	5.9
GDP at factor cost	925.0	3.0	27.0	896.7	2.9	26.0	3.1
Indirect taxes minus subsidies	81.4	—	—	81.1	—	—	0.4
GDP at market prices	1,006.4	3.0	27.0	977.8	2.9	26.0	2.8

Sources: Banco Central, *Origen del producto y distribución del ingreso, op. cit.*, and CONADE, *Distribución del ingreso, op. cit.*
[a]Implicit price indices not available for all sectors because of differences in sectoral classification of Banco Central and CONADE estimates.
[b]Volume and implicit price indices for commerce only, which constitutes 92 percent of sector GDP.

4. ESTIMATES OF CONSUMPTION AND INVESTMENT

The composition of national expenditure is estimated by the commodity flow method based upon the production accounts results with private consumption taken as a residual. This latter category therefore picks up the cumulative errors made in estimates of the other components of expenditure. One important source of such errors is the difficulty of determining the end use of certain kinds of articles that can be used either as final goods or intermediate inputs, or for both investment and consumption. Problems of aggregation in production statistics and in price indices and the paucity of information on manufacturing inventories also limit the reliability of flow of goods estimates, although input–output research has been helpful in checking the consistency of estimates.[12] In any event, direct flow of goods calculations of private consumption contained in the CONADE–ECLA study reveal deviations on the average of only 2 percent of GDP between these calculations and residual consumption estimates during the fifties.

With regard to estimates of investment, inclusion of repairs requires special comment because of particular circumstances in Argentina. In the early 1950s it was concluded that because of severe import controls an important share of capital goods not produced in the country was being used far beyond useful life as reflected in depreciation statistics; much of this equipment was apparently being virtually reconstructed in local workshops. It was therefore decided to include those expenditures that extended the useful life of this equipment in estimates of investment, although sources of quantitative data were very poor except for the railways. Repairs represented about 8 percent of total investment up to 1950, but thereafter their relative importance declined. For the remainder of investment in machinery and equipment the flow of imported capital goods has of course played a major role. Aside from the problem of identifying imports by end use, which was made difficult by the change in the classification of import statistics in 1951 and again in 1965, the main difficulty has been the valuation of capital goods imports benefitting from selective import duty exemptions, which were widely used in the late 1950s and 1960s as an industrial promotion device.

As was mentioned before, three basic sources of information have been used to estimate investment in construction. For the public sector accounting data from the government and public enterprises are utilized, which in addition to the difficulties mentioned in the previous section entail differentiating global expenditures that include both construction and the installation of equipment in complex public projects. Agricultural construction and improvements are estimated from agricultural census data and are interpolated on the basis of rough estimates of the flow of goods and materials used principally for agricultural purposes. Urban private construction is estimated from construction licences and miscellaneous sources; their principal limitations as was mentioned before arise from the incomplete coverage of the basic information and the general use of the cost of construction index as an indicator of changes in the value of all different kinds of construction.

Constant price series for investment and consumption are estimated in a way similar to estimates of sectoral production. The current value of imported capital

[12]There are inout–output tables for 1950, 1953 and 1963.

goods is deflated by the unit value of imports by principal categories, so that these series are subject to errors of aggregation especially with respect to short-term fluctuations. The estimates of depreciation in the national accounts are computed from corporate balance sheets, which record according to the straight line method based on original cost of acquisition a valuation which in an inflationary economy results in much smaller real figures than would otherwise be the case.

The main differences between the Banco Central and CONADE series for investment in domestic equipment are that Bank estimates utilize more up-to-date information on repairs, which show a sharper decline after 1950 than CONADE figures, and that the 1963 census revealed a larger production of domestic capital equipment than the intercensal interpolation. For 1960 the Banco Central estimate is therefore about 6 percent higher than CONADE's. With regard to imported capital goods, the revised Bank estimates utilize the more disaggregated nomenclature adopted in 1965 which permits a more accurate classification of goods by end use, especially with respect to the division of components and parts for machinery between investment and intermediate use. Bank estimates of capital goods imports are somewhat lower than those of CONADE, but the trend in the two series is quite similar between 1950 and 1960. Finally, the discrepancy between the two series on inventories is chiefly attributable to the inclusion by the Bank of estimates for some new manufactured products after 1958, especially in the automotive and tractor industries.

5. Statistics on the Distribution of Income and Employment

(a) *An Overall View*

As was noted earlier, no statistics are compiled directly on personal income in Argentina. Since data from the social security system and tax records are biased by the high degree of evasion, a good deal of national accounts research has been directed toward filling in these gaps using various indirect sources of information as well as family budget surveys. The general procedure utilized in the published series has been a direct estimation of the functional shares of value added at factor cost between compensation of employees and gross operating surplus in each of the economic sectors utilized in the production estimates. This method implies the calculation of production accounts as presented in the SNA by key kinds of economic activity.

The estimation of compensation of employees has been made, in general, in direct form, therefore the nonwage income is obtained as a residual in the value added. The customary procedure varies in different sectors, but in general is based upon employment and average and total remuneration from the economic and population censuses and information about the collective wage agreement data. Estimates are probably less reliable for agriculture, construction, and domestic service than in the other sectors, because no information on average remuneration for this group of activities is available in the censuses.

The basic data on employment by kind of economic activity is in general quite satisfactory for census years, especially for 1947, 1950, 1953 and 1960. Intercensal estimates, on the other hand, are exceedingly rough except for those

activities for which accounting data are available. For 1948–59 annual approximations of industrial employment are based on the old industrial production index under the assumption that variations in product per employed person in the firms sampled is representative of variations for the sector as a whole. These estimates therefore suffer at least from the same problem of increasing obsolescence as the industrial production index itself. During the sixties the annual figures are based on the particular index of industrial output already mentioned. A similar method is used in estimating employment in the trade sector, another major employer; in this case the sample of firms used to interpolate between 1947 and 1960 was selected in 1946. The estimates after 1960 are actually very rough. It is also worth noting that population censuses usually report a larger labor force than economic censuses, because the former cover domestic artisan activities more completely than the latter. It is for this reason that definitive estimates of employment are geared to the publication of new population instead of economic census results. The publication of the 1970 population census will be therefore the new benchmark for these figures.

Since rates of remuneration are based mainly on average remuneration from economic censuses and collective wage agreement data, errors are introduced in the short term income estimates to the extent that supplementary payments are made to employees and important changes occur in the length of the working week. During the complete period under analysis no great divergence appears to have occurred between the rate of growth of average wages actually paid and collective wage agreements rates: between 1953 and 1963 available data indicate that the annual growth of the former was 27.1 percent of the latter 25.8 percent.

In the agricultural sector estimates of employment of permanent personnel are derived from population and agricultural censuses, whereas transitory employment is estimated from technical studies of hours of work required for different types of rural production and the wages and salaries are obtained from the legally established rates. Since non-permanent workers constitute about 70 percent of total employment in Argentine agriculture the reliability of these estimates is particularly questionable. Also questionable are the estimates of short term variations in employment and wages and salaries in the construction and personal services sectors, in which estimation is further complicated by the frequency of double employment, rapid turnover of workers, poorer collective wage agreement information and the prevalence of self employment.[13]

(b) *Comparison Between the Two Estimates*

The two available estimates of the functional distribution of income show, in contrast with the data on sectoral GDP and consumption and investment, very important discrepancies. The origin of these discrepancies are the smaller quantity and quality of the basic data, and their importance is noted in the wage and salary participation in value added and in occupation and average remuneration.

[13]The above mentioned CONADE–ECLA study of income distribution was organized to overcome these difficulties in the analysis of income distribution in Argentina. It is the main source of data for this kind of problem with respect to detailed aspects, methodology and the principal practical problems.

As can be noted in Table 3, an acute problem appears in the labor force estimates, where the differences, not so important at the global level (approximately 3.0 percent in 1960), are particularly significant at the sectoral level. In the agricultural, manufacturing, trade and personal services sectors, the two estimates are very similar towards 1950, begin to differ around 1955 and show very important differences in 1960–63, the latest years in the comparison.

Interpretation of the discrepancies is not simple, principally because the Banco Central has not yet published the methodological aspects of the estimates. A particularized analysis shows, however, a difference in the utilization of the economics and population censuses as source and framework of the estimates. While the CONADE computations are based upon the population censuses of 1947 and 1960 and interpolate the intermediate years with different methods, utilizing among them the economic censuses, the bank estimates are based upon the economic censuses of 1953 and 1963 and interpolate the intermediate years with different data sources, including the population censuses. On the other side, as was mentioned above, the CONADE estimates do not use the economic censuses of 1963.

In the agricultural sector the discrepancies that can be observed towards 1960 appear in connection with the estimates of non-permanent personnel. As was commented upon before the weakness of the basic data do not permit a definitive statement about the two different figures, but in this sector as in the others, the connection between the functional distribution and the income distribution by levels that are published in the CONADE work makes it reasonable that their results are highly reliable.

The estimates in manufacturing, whose differences begin to grow starting in 1956, show the adjustment of the bank estimates to the 1963 economic census. As will be expected in light of the CONADE methodology for deriving the estimates of labour force, the bank data are smaller in line with the hypothesis of a high labor productivity in the new plants. However these new estimates of the Banco Central could underestimate the total employment, particularly in small activities or handicraft sectors, which are not included in the economic censuses. On the other side the CONADE estimates could overestimate the values for the same year[14] even though in 1960 they are adjusted to the population census that includes artisan activities.

The differences in employment in construction, trade, private services and the government are important and hard to explain. Their magnitude is another evidence of the weakness of the basic information. In the particular case of government the discrepancies originate in great part in the inclusion by the bank of all the members of the armed forces. The CONADE estimates do not include the non-regular members of the army in the labor force.

The differences in average remuneration in 1960 are also important at a sectoral level and it can be observed that in general, they are of opposite sign to that encountered in employment. The largest discrepancies are in agriculture, construction and transport, sectors in which the coverage of the collective wage agreements and their fulfillment are smaller than the other sectors.

[14]The relationship between employment in manufacturing in the Banco Central national accounts and censuses are 1.15 in 1953 and only 1.05 in 1963. The same relationships for CONADE are 1.25 and 1.43.

TABLE 3

COMPARISON OF ESTIMATES OF INCOME AND EMPLOYMENT, 1960

Sectors	CENTRAL BANK			CONADE			Cols $\frac{(2)-(5)}{(2)} \times 100$	Cols $\frac{(3)-(6)}{(3)} \times 100$
	Wages and Salaries (1)	Employment (2)	Average Remun- eration (3)	Wages and Salaries (4)	Employment (5)	Average Remun- eration (6)		
1. Agriculture and fishing	32,999	984.6	33.5	31,521	793.0	39.7	19.4	−18.5
2. Mining	3,332	39.6	84.1	3,680	39.5	93.2	0.3	−10.8
3. Manufacturing	95,818	1,506.1	63.6	118,110	1,783.1	66.2	−18.3	−4.1
4. Electricity, gas and water	6,448	68.0	94.8	6,765	75.2	90.8	−10.3	4.2
5. Construction	23,214	388.1	59.8	21,675	420.0	51.6	−8.2	13.7
6. Commerce, restaurants, hotels and other services	52,108	1,080.6	48.2	56,483	1,210.3	46.7	−12.0	3.1
7. Transport and communications	41,036	474.6	86.5	37,266	499.5	74.6	−5.2	13.8
8. Financial and real estate	10,786	102.3	105.4	10,185	106.5	95.6	4.1	9.3
9. Government	61,000	1,017.5	60.3	58,129	906.9	64.1	10.9	−6.3
Total	326,741	5,661.4	57.7	343,814	5,834.0	58.9	−3.0	−2.0

Sources: Banco Central, *Origen del producto y distribución del ingreso, op. cit.*, and CONADE, *Distribución del ingreso, op. cit.*
Notes: Wages and salaries in million pesos.
    Employment in thousand persons.

TABLE 4

The Consolidated Accounts of the Nation

ACCOUNT 1. Gross domestic product and expenditure (billions of pesos, moneda nacional)

	CONADE–CEPAL			CENTRAL BANK			
	1950	1955	1960	1950	1960	1965	1969
1.1 Compensation of employees	32.1	76.8	371.3	31.5	351.7	1368.0	3093.9
1.2 Operating surplus	29.7	78.6	487.5 ⎫	31.9	573.2	1,995.0	4,053.2
1.3 Consumption of fixed capital	2.9	8.2	37.9 ⎭				
1.4 Indirect taxes	6.7	16.7	100.8 ⎫	5.1	81.4	255.3	895.0
1.5 Less: subsidies	1.9	7.3	19.7 ⎭				
GROSS DOMESTIC PRODUCT	69.5	173.0	977.8	68.5	1,006.3	3,618.3	8,042.2
1.6 Goverment final consumption	7.2	18.3	88.3	7.0	89.6	346.9	719.6
1.7 Private final consumption	48.1	124.5	673.7	48.5	710.7	2,526.7	5,763.6
1.8 Increase in stocks	−0.7	0.7	6.5	−0.9	9.7	81.8	−6.1
1.9 Gross fixed capital formation	14.2	31.2	220.9	13.2	207.9	616.7	1,571.8
1.10 Exports of goods and services	6.4	9.5	102.5	6.4	102.5	277.8	641.0
1.11 Less: Imports of goods and services	5.7	11.4	114.1	5.7	114.1	231.6	647.7
EXPENDITURE ON THE GROSS DOMESTIC PRODUCT	69.5	173.0	977.8	68.5	1,006.3	3,618.3	8,042.2

ACCOUNT 3. National disposable income and its appropriation (billions of pesos, moneda nacional)

	CONADE–CEPAL			CENTRAL BANK			
	1950	1955	1960	1950	1960	1965	1969
3.1 Government final consumption	7.2	18.3	88.3	7.0	89.6	346.9	719.6
3.2 Private final consumption	48.1	124.5	673.7	48.5	710.7	2,526.7	5,763.6
3.3 Saving	11.3	21.7	173.2	13.0[1]	201.3[1]	730.7[1]	1,499.1[1]
APPROPRIATION OF DISPOSABLE INCOME	66.6	164.5	935.2	68.5	1,001.6	3,604.3	7,982.3
3.4 Compensation of employees	32.1	76.8	371.3	31.5	351.7	1,368.0	3,093.9
3.5 Operating surplus	29.7	78.6	487.5	31.9[1]	573.2[1]	1,995.0[1]	4,053.2[1]
3.6 Property and entrepreneurial income from the rest of the world, net	—	−0.3	−4.7	—	−4.7	−14.0	−59.9
3.7 Indirect taxes	6.7	16.7	100.8 ⎫	5.1	81.4	255.3	895.0
3.8 Less: subsidies	1.9	7.3	19.7 ⎭				
3.9 Other current transfer from the rest of the world, net	—	—	—	—	—	—	—
DISPOSABLE INCOME	66.6	164.5	935.2	68.5	1,001.6	3,604.3	7,982.3

[1] Gross.

TABLE 4—*continued*

ACCOUNT 5. Capital finance (billions of pesos, moneda nacional)

	CONADE–CEPAL			CENTRAL BANK			
	1950	1955	1960	1950	1960	1965	1969
5.1 Increase in stocks	−0.7	0.7	6.5	−0.9	9.7	81.8	−6.1
5.2 Gross fixed capital formation	14.2	31.3	220.9	13.2	207.9	616.7	1,571.8
5.3 Net lending to the rest of the world	0.7	−2.1	−16.3	0.7	−16.3	32.2	−66.6
GROSS ACCUMULATION	14.2	29.9	211.1	13.0	201.3	730.7	1,499.1
5.4 Saving	11.3	21.7	173.2 ⎫	13.0	201.3	730.7	1,499.1
5.5 Consumption of fixed assets	2.9	8.2	37.9 ⎭				
5.6 Capital transfers from the rest of the world	—	—	—	—	—	—	—
FINANCE OF GROSS ACCUMULATION	14.2	29.9	211.1	13.0	201.3	730.7	1,499.1

ACCOUNT 6. All accounts—external transactions (billions of pesos, moneda nacional)

	CONADE–CEPAL			CENTRAL BANK			
	1950	1955	1960	1950	1960	1965	1969
Exports of goods and services	6.4	9.5	102.5	6.4	102.5	277.8	641.0
Property and entrepreneurial income from the rest of the world	—	−0.3	−4.7	—	−4.7	−14.0	−59.9
Other current transfers from the rest of the world, net	—	—	—	—	—	—	—
CURRENT RECEIPTS	6.4	9.2	97.8	6.4	97.8	263.8	581.1
Imports of goods and services	5.7	11.4	114.1	5.7	114.1	231.6	647.7
Surplus of the nation on current account	0.7	−2.1	−16.3	0.7	−16.3	32.2	−66.6
DISPOSAL OF CURRENT RECEIPTS	6.4	9.3	97.8	6.4	97.8	263.8	581.1

TABLE 5

CONADE GDP ESTIMATES IN CONSTANT PRICES, 1950–63

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
1. Agriculture	125.3	133.8	113.8	148.0	147.6	153.2	145.8	145.5	151.7	150.5	150.1	147.6	148.2	145.5
2. Fishing	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	1.1
3. Mining and quarrying	4.4	5.1	5.3	5.8	6.1	6.3	6.5	6.9	7.5	8.7	12.3	15.5	17.4	16.7
4. Manufacturing	193.9	195.6	190.5	190.5	207.9	233.1	246.3	265.4	285.1	263.7	280.6	304.4	283.9	268.2
5. Construction	33.0	34.6	31.3	31.0	29.8	30.6	29.6	34.9	36.9	33.8	37.7	40.6	36.8	34.7
6. Commerce	111.2	¹16.8	103.4	103.0	112.1	125.2	128.3	137.8	144.2	130.0	150.1	167.8	161.8	143.5
7. Transportation	49.0	51.7	49.9	50.8	53.3	57.4	57.7	60.9	62.8	59.8	63.7	66.5	63.9	59.7
8. Communications	8.2	8.1	7.8	7.7	8.1	8.3	8.5	8.5	9.0	8.5	9.0	9.8	9.1	8.5
9. Electricity, gas and water	6.2	6.6	6.7	7.1	7.7	8.3	9.0	9.7	10.4	10.4	11.4	13.7	15.2	16.1
10. Financial services	13.3	13.8	14.3	14.6	15.1	15.9	16.4	16.7	17.6	18.1	18.5	19.4	20.5	20.1
11. Housing	14.7	15.0	15.4	15.9	16.3	16.7	17.1	17.5	17.9	18.1	18.1	18.2	18.2	18.3
12. Government	53.6	55.1	54.7	56.0	58.7	59.1	63.0	64.3	65.7	65.5	65.9	66.5	66.5	66.4
13. Other services	58.9	60.8	62.7	65.3	68.0	69.6	72.7	74.2	75.5	76.4	78.6	79.9	80.6	82.2
Total GDP at factor cost	672.1	697.6	656.6	696.4	731.5	784.4	801.7	842.5	884.9	844.3	896.7	950.7	923.0	881.0
Indirect taxes minus subsidies	60.3	63.1	59.2	63.3	66.4	71.2	72.5	76.6	80.2	76.8	81.1	85.8	83.2	79.3
Total GDP at market prices	732.4	760.7	715.8	759.8	797.9	855.6	874.2	919.2	965.1	921.1	977.8	1,036.5	1,006.2	960.2

Source: CONADE–ECLA, *op. cit.*, Table III.15.

TABLE 6

CENTRAL BANK GDP ESTIMATES IN CONSTANT PRICES, 1950 AND 1959–69

(billions of 1960 pesos)

	1950	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1. Agriculture and fishing	124.3	151.2	153.7	152.7	158.8	161.9	173.2	183.5	176.6	184.2	177.0	184.4
2. Mining and quarrying	3.8	7.5	10.3	13.4	15.1	15.1	15.3	15.9	16.8	18.8	21.2	22.2
3. Manufacturing	192.4	261.5	287.8	316.6	299.2	287.0	340.8	387.9	391.5	396.7	424.1	471.1
4. Electricity, gas and water	6.0	10.7	11.5	13.8	15.7	16.6	18.3	21.1	22.7	24.4	26.4	29.0
5. Construction	33.1	31.0	37.0	39.1	35.2	33.0	35.1	35.4	38.1	42.8	50.4	54.1
6. Commerce, restaurants and hotels	134.0	155.0	174.9	194.5	186.9	171.9	187.6	206.8	206.0	208.0	219.4	242.9
7. Transport and communications	58.3	68.8	73.0	77.8	75.0	73.1	81.0	88.5	88.5	89.3	94.1	99.5
8. Financial and real estate	27.9	36.0	36.6	37.8	38.8	39.4	40.0	41.5	42.7	43.9	45.8	48.1
9. Government and other services	108.8	135.4	140.2	145.1	149.5	153.2	158.6	165.0	171.0	175.0	179.5	184.5
Total GDP at factor cost	688.6	856.9	924.9	990.9	974.1	951.2	1,450.0	1,145.6	1,154.0	1,183.2	1,237.8	1,335.9
Indirect taxes minus subsidies	60.1	74.9	81.4	86.9	85.6	83.3	142.2	101.3	101.9	103.9	108.8	117.3
Total GDP at market prices	748.7	931.9	1,006.3	1,077.8	1,059.7	1,034.5	1,142.2	1,246.9	1,255.9	1,287.1	1,346.5	1,453.2

Source: Central Bank, *Origen del producto, op. cit.*, Table 43.

TABLE 7
CONADE ESTIMATES OF REAL GDP BY TYPE OF EXPENDITURE, 1950–63
(billions of pesos at 1960 prices)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Government consumption	68.5	69.4	69.6	68.8	72.5	75.6	80.6	79.4	80.7	80.5	88.5	89.1	87.8	81.8
Private consumption	548.2	568.4	536.6	534.0	579.6	647.0	651.0	679.4	717.3	660.6	673.7	741.8	695.9	655.5
Gross fixed investment	131.9	148.5	132.4	131.5	132.4	146.5	154.1	173.3	175.6	159.6	220.9	250.3	234.8	199.7
Inventory changes	−15.2	6.1	1.2	7.5	9.9	8.5	−12.1	−7.6	−1.6	9.5	6.5	−3.7	−9.9	−6.4
Exports of goods and services	91.3	72.1	53.0	81.0	86.8	78.1	90.1	94.7	96.8	101.9	102.5	94.4	127.8	130.1
Imports of goods and services	92.2	103.7	77.0	63.2	83.3	100.2	89.5	99.9	103.7	91.0	114.1	135.4	130.1	100.4
Gross domestic product	732.4	760.7	715.8	759.8	797.9	855.6	874.2	919.2	965.1	921.1	977.8	1,036.5	1,006.2	960.2
Effect of international terms of trade	11.8	12.3	−2.8	7.2	2.4	5.2	−8.9	−15.4	−10.7	−6.3	—	1.3	−13.9	−4.4
Gross domestic income	744.2	773.1	713.0	766.9	800.3	860.8	865.3	903.8	954.5	914.8	977.8	1,037.8	992.2	955.8
Foreign factor payment	−0.5	−3.7	−0.9	−1.0	−1.1	−1.6	−2.5	−1.8	−3.5	−3.8	−4.7	−7.3	−5.7	−5.1
Gross national income	743.7	769.4	712.1	766.0	799.1	859.1	862.8	902.0	951.0	911.0	973.1	1,030.4	986.6	950.7

Source: CONADE–ECLA, *Distribución del ingreso, op. cit.*, Tables III.1 and III.8.

TABLE 8

CENTRAL BANK ESTIMATES OF REAL GDP BY TYPE OF EXPENDITURE, 1950, AND 1959–70

	1950	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Government consumption	73.0	80.2	89.6	91.4	90.7	87.0	89.3	91.1	96.0	97.4	98.1	99.0	99.5
Private consumption	578.1	694.5	710.7	788.7	751.7	738.4	821.7	894.8	902.0	925.0	964.2	1,034.7	1,063.2
Gross fixed investment	113.3	137.6	207.9	242.2	200.7	187.0	207.6	216.8	223.9	235.0	264.2	305.4	323.1
Inventory changes	−13.1	10.2	9.7	−3.8	−1.3	−7.1	19.1	26.4	1.6	0.9	0.7	0.4	4.5
Exports of goods and services	91.2	101.8	102.5	94.7	128.1	130.6	122.2	134.2	144.0	142.5	136.6	159.7	171.3
Imports of goods and services	93.8	92.5	114.1	135.6	130.2	101.4	117.7	116.4	111.9	113.7	117.3	146.0	143.9
Gross domestic product	748.7	931.9	1,006.3	1,007.8	1,059.7	1,034.5	1,142.2	1,246.9	1,255.9	1,287.1	1,346.5	1,453.2	1,522.9
Effect of international terms of trade	13.6	−4.8	—	1.1	−14.1	−3.7	7.0	5.4	0.9	−4.0	−8.6	−21.2	—
Gross domestic income	762.4	927.1	1,006.3	1,078.9	1,045.6	1,030.8	1,149.2	1,252.3	1,256.8	1,283.1	1,337.9	1,431.9	—
Foreign factor payments	−0.5	−3.8	−4.7	−7.6	−5.9	−5.3	−6.3	−4.9	−9.3	−9.6	−10.7	−12.0	—
Gross national income	761.9	923.3	1,001.6	1,071.4	1,039.7	1,025.5	1,142.9	1,247.4	1,247.5	1,273.4	1,327.2	1,419.9	—

Source: Banco Central, *Boletín Estadístico*, March 1971.

6. Balance of Payments Estimates

The balance of payments accounts are calculated by the Banco Central from customs data provided by the Instituto Nacional de Estadística y Censos and from information supplied by banks and other institutions authorized to operate in the exchange market. Long-term series are available from 1913,[15] and current estimates are published annually in the *Annual Report* of the Bank. Before 1958 balance of payments statistics were published in pesos rather than in dollars, but after Argentina joined the International Monetary Fund in 1956, new series were compiled according to the methodology recommended by the Fund and were carried back to 1951.[16] This methodology has in general continued in use up to the present, although in 1959 and 1966 small changes were introduced that disturb the comparability of the series, particularly on capital account.

Although the Bank has never published detailed explanations of the methodology and sources of information used in estimating external payments statistics, it is known that imports are registered at the moment they leave customs, and not when they cross the frontier or become the property of Argentine residents. Exports, on the other hand, are registered at the moment of embarkation. To solve the problems of multiple exchange rate systems prevailing in many years the difference between the weighted average exchange rate used for converting dollar exports into pesos and the effective rate paid on imports is considered an indirect tax or subsidy according to its sign.

With respect to real services and factor incomes, financial services, unilateral transfers and capital movements, good information is available on operations carried out directly by the public sector, but private transactions are in general estimated from incomplete records on the purchase and sale of foreign exchange. The basic forms used for declaring the purpose of private exchange transactions are not sufficiently specific and are not backed up with strong enough controls to assure their accuracy. Short-term capital movements, except for commercial credits, are presented only as net figures in the balance of payments and are presumably calculated as residuals. In recent years, however, the coverage and quality of the estimates has been substantially improved.

7. Conclusions

The conclusions I should like to draw from this paper with particular reference to the Argentine experience in national accounts are as follows:
(a) The fundamental importance of the production method in the approach utilized for the estimation of sectoral product, income distribution and expenditure on the gross domestic product.
(b) The great differences in the accuracy of data between censal and intercensal years and the diversity of sources utilized.

[15]Manuel Balboa, "La evolución del balance de pagos de la República Argentina, 1913–1950, *Desarrollo Económico*, volumen 12, No. 45, Buenos Aires, Abril–Junio de 1972.
[16]Banco Central, *Balance de pagos de la República Argentina 1951–1958*, Supplement to the *Boletín Estadístico*, No 1, January 1960 and subsequent issues of the *Boletín* and *Memorias anuales*.

(c) The difficulty in obtaining regular data on income and outlay and capital finance accounts excluding the public sector and the financial and corporate enterprises.

(d) The importance of different detailed studies on several aspects of economic structure (production activities and input output, personal and family income distribution, regional accounts) as a basis for evaluating and improving the reliability of estimates.

(e) These features imply that actually in Argentina it would be easier to work with the old version of the SNA than the new, but the importance of the emphasis on the production records can facilitate the implementation of the accounts II (production, consumption expenditure and capital formation) as recommended in the new version.

(f) There is no discussion about the desirability of work along the lines of the new system and about the use of the principles of multiple classifications, the real problem (and surely the old one) is the adequateness of the basic statistical system. At this moment there is some evidence with respect to the use of the new SNA as a basis for guidelines toward the improvement of the statistical system.