REAL INCOME LEVELS IN LATIN AMERICA

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The measurement and inter-spatial comparison of Latin American real income levels calls for techniques which depart substantially from the conventional procedure of applying such official or free market exchange rates as happen to prevail in any given period. The reasons are varied, the main ones being that in an area such as Latin America prices are notoriously volatile, their structure differs radically from that encountered in other parts of the world, and the exchange rate system is characterized by frequent and usually irregular revisions, while in certain countries a multiple exchange rate system applies and no single factor is available for conversion purposes. In addition, there exists the problem common to all developing countries that the rates to a large extent reflect the exchange value of a limited number of export commodities vis-à-vis a wide range of imported goods and in no way typify the internal-external price relationship for the bulk of production which by its nature fails to enter into international trading transactions.

The author has endeavoured to circumvent these difficulties by adopting the often-discussed "purchasing power parity" approach whereby national accounts data are converted into a common monetary denominator (in this case, the U.S. dollar) expressed in "real" or quantitative terms which as far as possible eliminate inter-spatial price differences. Results are presented and analyzed, first for the base year 1960, and then for the period 1955–1964 at the level of main expenditure sectors as well as for the total gross domestic product.

To the extent that available statistics permitted, results for Latin American countries are also related to the United States and certain countries in Western Europe, a main objective being to determine the approximate dimension of the incomes "gap" and to ascertain whether this is increasing, decreasing or remaining very much unchanged in size.

Preliminary Note

As Chief of the Special Studies Section, Economic Commission for Latin America (ECLA), the author has directed the work of that organization in the field of comparative prices, purchasing power and national income expressed in common monetary denominators. The views expressed here nevertheless represent his own personal opinion and may not coincide with those of the ECLA Secretariat.

The present analysis was based largely on the paper: *Comparison of Latin American Real Incomes* presented by the author to the Tenth Session of the International Association for Research in Income and Wealth, Ireland, August 1967. The same paper provided the text and data for the study: *The Measurement of Latin American Real Incomes in U.S. Dollars* published by ECLA in its *Economic Bulletin for Latin America, Vol. XII, No. 2*. Apart from minor statistical revision and editorial changes, the content of the three studies are in most respects identical. The present paper nevertheless endeavours to relate Latin American real income estimates more closely to those of extra-regional countries.

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A. Introduction

In recent years, substantial attention has been focussed on the gap which exists between income levels of developing and developed countries. The dimensions involved are nevertheless far from clear; and although public opinion subscribes to the belief that income differences are increasing in magnitude, this assumption is for the most part based on arbitrary observations of living conditions and not on any soundly designed measurements of income in "real" or purchasing power terms. In those cases where an attempt is made to compare well-being on the basis of a common monetary denominator, prevailing exchange rates are generally applied, even though the results are often questionable in the extreme. In 1960, for instance, Venezuela had a private consumption expenditure level of $568 per head at prevailing exchange rates, the Netherlands had a level of $558; and Italy $397. Did that signify that the average Venezuelan citizen was equally as well-off as a citizen of the Netherlands and substantially better off than one in Italy? Again, would levels of $492 and $390 respectively for Chile and Argentina give an adequate comparison of per capita private consumption expenditure in those countries, either *inter se* or vis-à-vis such countries as Japan where the figure at official exchange rates was only $224? And if incomes are expressed in realistic rather than nominal terms, how much truth can be found in the often-quoted statement that "rich countries are getting richer, but the poor, poorer"?

The inadequacy of exchange rates for inter-spatial income comparisons has long been recognized—conventional rates being relevant only in the context of a country's international transactions and not in relation to national accounting aggregates, the greater part of which is connected only in a remote and ill-defined way with the balance of payments and the flow of funds across national frontiers. When a dual or multiple exchange rate system is in force as frequently happens in Latin America, no single rate is then available which can give results comparable to those obtained for other countries; and the conversion of national accounts data into a common currency becomes still more controversial and even less meaningful for economic analysis.

An additional problem stems from the fact that the internal price structures of countries differ widely *inter se*; and the conversion of national accounting figures into a common currency with a single "across-the-board" factor perpetuates structural price differences without in any way compensating for them. The point has considerable importance when data as dissimilar as personal savings, production, trade, investment, consumption, etc., are to be compared since the price relationships which apply to each sector of the accounting system (and to the component items) differ so widely amongst countries. This is especially true when a developing region such as Latin America is compared with Europe or the United States where for the most part foodstuffs, housing, and services are relatively costly while manufactured goods—notably durables—are relatively cheaper. An analysis of growth rates, capital-output ratios, investment coefficients, etc., accordingly differs substantially in its findings, depending on whether the values are expressed in national prices or in prices of some

country such as France, Germany, Canada or the United States. In the same way, agricultural production in Latin America appears much less important relative to manufacturing, construction, etc., when a valuation is made according to the domestic price level rather than on the basis of prices of an industrialized country where a different set of values applies. Even within Latin America, relative price differences can be pronounced, depending on the nature of each country's production, the resources available (including capital and labour), the productivity of factors, the size and character of the market, the incidence and level of taxation, the height of trade barriers and so on. A mineral producing country with scarce labour resources like Venezuela will obviously have a price structure very different from Paraguay or Uruguay where output is predominantly agricultural, labour more plentiful and the capital supply relatively limited. When conversion factors which maintain national price differences are used to estimate income levels, distorting elements of this type are perpetuated in the results and the comparative levels may well be erroneous (particularly at the level of component sectors).

In the present study, an endeavour is made to present a set of national accounts aggregates for Latin American countries in which the structural price differences are removed. In this way an equal importance is attributed in each country to identical, or virtually identical, items so that the resulting values can be compared interspatially on a common quantitative basis. The method adopted is to establish first the differences in price levels or purchasing power, and then to convert the national accounts data into a common monetary denominator—the one selected being the United States dollar. This approach differs to some extent from that used—partially at least—by investigators such as Gilbert and Kravis [1] who endeavoured to apply quantitative indicators directly—prices (or values) being introduced as weights. The latter procedure was not, however, practical under Latin American conditions since adequate quantity data did not exist.[1]

The use of the dollar as a common monetary denominator has, unfortunately, obvious disadvantages when related to income levels. Its purchasing power viewed by a resident of Argentina or Haiti differs widely from the same purchasing power in the eyes of a resident of the United States. When demand schedules are radically different amongst countries, when price structures are extremely dissimilar, and when income levels diverge considerably—as is the case for Latin American countries vis-à-vis the United States or Western Europe —the problems of measurement are formidable and results depend to a marked degree on the relative importance assigned to each item. The question thus arises as to the significance which can be attached to the valuation of one country's income in another country's currency, should income in the first be sufficient only for the bare necessities of life and in the second ample for a comfortable standard of living plus a surplus for the purchase of luxury-type goods

1. Even for countries such as those of Western Europe where statistics are more advanced, quantity data are available only to a limited extent and with varying degrees of comparability. The Gilbert and Kravis approach was therefore a mixed one which relied extensively on price deflation as well as on direct quantitative indicators.

or for personal saving. On the other hand, it can also be contended that amongst the majority of Latin American countries, income levels, tastes, preferences, availabilities, needs, etc., are not so dissimilar as to invalidate a comparison of income levels *inter se*; furthermore, conditions in many Latin American countries are not unlike those prevailing in certain other parts of the world (compare for instance, Italy, Spain and other Mediterranean countries with Argentina, Uruguay, Chile, Mexico, etc.); and it is only when extremes are related to each other (e.g., Haiti and Argentina, or Ecuador and the United States) that serious doubts arise as to the significance of the relative income levels. In such cases, the attitude adopted by the author is that even when very poor countries are compared with those in a high income category, the data still have considerable usefulness in indicating orders of magnitude and in throwing light on the broad disparities of real incomes.

The present study aims, then, to provide an indication of the real (purchasing power) levels of Latin American incomes in terms of the U.S. dollar, to ascertain how those incomes compare *inter se*, to relate them as far as possible to similar levels for other parts of the world, and to disclose the real structure of the national accounting aggregates when the component sectors are measured in terms of uniform prices. The material available and the methodology adopted permit an evaluation of the gross domestic product only by type of expenditure; and no estimates can be made for output by sector of activity nor income by distributive shares. Notwithstanding this limitation, it is hoped that the results will contribute to a better appreciation of income levels in real terms for Latin America and provide a starting point for work of a complementary nature based on alternative approaches.

B. The Availability of Real Income Estimates

Since prevailing exchange rates are inadequate for expressing national accounts data in a realistic monetary denominator, various expedients have been adopted to develop alternative conversion factors which could provide more reliable and more meaningful results. The most common practice has been the selection of a rate in some "normal year" when distorting influences were at a minimum, this being projected forwards or backwards with the aid of indexes which (it was hoped) took into account changes in price levels throughout the years. The weakness of assuming "normality" in any period is of course an obvious one—the proponents of this method justifying it only with the argument that: (a) no satisfactory alternatives are available; and (b) the adoption of a rate prevailing in an earlier period eliminates many of the elements which affect exchange rate equilibrium in the current period (this being undoubtedly true for Latin America in the immediate post-war years when multiple exchange rate systems, governmental controls, imperfect trade flows and the influence of exchange reserves accumulated during World War II tended to distort the monetary situation). The projection of exchange rates based on a "normal" period has accordingly been used as a stop-gap measure by many international organizations, including for instance the United Nations Statistical Office in calculating its dollar estimates of per capita real income, covering seventy

countries in 1949 [3]. Real income estimates made by the Economic Commission for Latin America for the period beginning 1945 and published at 1950 (later 1960) prices [4] followed along such lines, though in this case the procedure was a mixed one since for some countries—e.g., Central America, Mexico and the Caribbean—it was assumed that the 1950 exchange rate provided an appropriate parity between national currencies and the U.S. dollar; similarly, for countries where no satisfactory pre-war rate existed (as in Chile) or when an extrapolated exchange rate failed to give reasonable results (as in Brazil), a "parity" rate was established very arbitrarily in accordance with the judgment of economists familiar with price levels and living standards in the countries concerned.

The need to avoid reliance on conventional exchange rates when expressing incomes, salaries, wages, etc., for two or more countries in a common monetary denominator has led to the so-called "purchasing power parity" approach which had a practical application as early as 1908 when the British Board of Trade published the results of a cost of living comparison between the United Kingdom on the one hand and Germany, France, Belgium and the United States on the other (using however, only food and rent prices). [5] In the same way, the so-called "Unilever enquiry" of 1930 aimed to determine the salaries needed in certain countries to provide a standard of living similar to that enjoyed at specified income levels by residents of England. [6] The "Ford-Filene" enquiry of 1931, conducted by the International Labour Office, likewise sought to determine the wages which ought to be paid in fourteen European cities to achieve living standards equal to those enjoyed in Detroit, USA. [7] A number of more recent studies—notably that of the International Labour Office in 1951 (which endeavoured to evaluate the food-purchasing power of wages for workers in the textile industries of certain countries) [8], the 1954 study of the High Authority of the European Coal and Steel Community (which related the prices of some 200 consumption goods and services to the wages of steel workers and coal miners in Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands and the Saar [9], plus the 1954 measurement of the cost of living and real wages in Denmark, Finland, Norway and Sweden [10]—were all concerned with the inter-country relationship of prices to wage rates along purchasing power parity lines.

On the other hand, the application of a purchasing power parity concept within the context of national accounting aggregates in order to obtain comparative inter-spatial data was virtually unknown until just before the Second World War when Colin Clark produced his well-known study: *The Conditions of Economic Progress* [11] in which the incomes for a wide range of countries were expressed in terms of "international units" of 1929 purchasing power. Clark had only fragmentary information to work with; he was unable to obtain price material for either the government sector or investment; he was forced to accept secondary information for prices of consumption goods and to rely heavily on imputation; while in his extrapolations he made extensive use of index numbers which were never designed for the purpose to which he put them. His work nevertheless constituted an outstanding advancement in the knowledge

of real income levels, and still remains as virtually the only source of estimates on a world-wide scale for years prior to 1948.

For Latin America, a little known study was made in 1947 by Loreto Dominguez when he used certain consumer goods prices to establish approximate purchasing power equivalents and in this way to translate 1940 national income estimates into real (dollar) terms. [10] The national income data available at that time were very roughly estimated while prices used by Dominguez related to only twelve items, most of which were food. The results were therefore subject to wide margins of error, the more so since no account was taken of investment goods nor of governmental expenditure. They nevertheless provided a crude estimate of real income levels and served to illustrate the wide disparities which existed between Latin America countries and the United States at that time.

The first important study to remedy the defect of incomplete coverage in the establishment of purchasing power equivalents was that made by Gilbert and Kravis for comparative income levels in selected countries of Western Europe and the United States in 1950 [1]. The initial project related only to the latter country plus United Kingdom, France, Germany and Italy—the work being amplified later to include Belgium, Denmark, the Netherlands and Norway with data for 1955 as well as 1950 [2]. It was unfortunately not kept up-to-date; nor was anything on a comparable nature attempted anywhere outside of Western Europe; and even though it still constitutes the most authoritative work in this field, the passage of time has by now rather curtailed its usefulness.

For other parts of the world, only fragmentary information exists. Studies of varying utility and widely differing methodology were made for Thailand and the United Kingdom by Usher [14]; for Mainland China and the United States by Hollister [15]; for the URSS and the United States by Bornstein[16]; for India and the United States by Patel [17]; for Canada and the United States by Daly and Walters [18]; and for Yugoslavia and France by Stajić [19]. In addition, information on the purchasing power equivalence of the yen and the US dollar was provided by a 1963 study carried out by the Japanese Economic Research Institute [20]; while the Statistical Office of the Federal Republic of Western Germany used price material collected through German diplomatic offices abroad to make rather rough estimates of purchasing power equivalence for over fifty currencies vis-à-vis the deutschmark [21] and [22]. These data were used *inter alia* for dollar estimates of 1960 per capita private consumption in selected countries given by Beckerman in an OECD study which surveyed the work done in the field of international real income comparisons, and at the same time proposed an alternative method of estimating private consumption expenditure, based on non-monetary indicators [23]. The use of non-monetary indicators —such as steel consumption per head of population—was not of course a new proposal since it had been advocated earlier by Bennett [24] and Niewiaroski [25]. No satisfactory procedure was, however, devised for selecting and combining the indicators in such a way that they reflected levels of living on a sound statistical basis, and up to now this method has had virtually no acceptance for interspatial income comparisons.

There is then little of a usable nature with which Latin American real

income estimates can be compared—the best of these (despite the need for extrapolation) being undoubtedly the 1950–1955 estimates of Gilbert, Kravis and Associates. Some use can also be made of the private consumption expenditure figures estimates by Beckerman on the basis of the purchasing power equivalents of the German Statistical Office. The Daly-Walters estimates for Canada have also a certain usefulness. For remaining studies, the data differs too widely in coverage and methodology to be related directly to the present Latin American data.

C. The Establishment of Purchasing Power Equivalents for Latin American Currencies

Efforts to establish purchasing power equivalents for Latin American currencies date back to the middle of the decade of the 1950s when the Economic Commission for Latin America decided to replace its provisional estimates of real dollar income and to devise a set of conversion factors which would take into account the purchasing power of each Latin American currency. A series of experimental projects was accordingly carried out, using for the most part secondary material collected by both national and international offices. This was followed up by field work designed to ascertain the most efficient way of collecting price material and at the same time to make a selection of goods and services which could be considered representative of all branches of the national product or expenditure. A methodology was subsequently devised and a weighting system formulated which could yield indexes of prices and purchasing power for the gross domestic product and for the main component groups or sectors. Results were initially confined to the inter-relationship of Latin American currencies, the relevant data being presented in the ECLA Conference Document: E/CN.12/589 *A Measurement of Price Levels and the Purchasing Power of Currencies in Latin America, 1960–1962* [13]. As this study provided the basis of the purchasing power equivalents used for the dollar income estimates contained in the present paper, the salient points of coverage and methodology may be noted. These were as follows:

(1) In that the procedure chosen for the ECLA study had to be both theoretically justifiable and administratively practicable, many of the more complicated formulae and the more nebulous approaches (e.g., a global market basket whose composition would vary from country to country in such a way as to equate total satisfaction or well-being in all situations) had to be rejected. Similarly, for practical reasons an output approach along the lines of the Paige and Bombach study for the United Kingdom [26] in which a quantitative comparison of the gross domestic product would be made in added value terms (with prices serving as weights) was also discarded, even though the resulting data would undoubtedly have proved more useful for many aspects of economic analysis. The approach adopted was, then, a conventional expenditure one, based on a common basket of goods and services whose composition at the item level was considered identical in all situations—thus assuming implicitly that aggregate satisfaction would also be identical, even though variations in tastes,

customs, preferences, needs, availabilities, price patterns, and income levels obviously existed throughout Latin America.

(2) A preliminary inspection of available material for the base year, 1960, indicated that for private consumption expenditure the proportions devoted to the main categories—food, clothing, housing, transportation, etc.—were rather similar for Latin American countries; and only at the item level (when for instance a greater consumption of cereals offset a smaller consumption of meat or fish) did the patterns differ materially *inter se*. The situation was however changed radically when governmental expenditure and fixed investment were included, since the proportions of the gross domestic product devoted to administration, defence, construction, producers' durables, transport equipment, etc., were subject to wide variation, not only on account of income levels but also due to factors such as governmental policy, degree of industrialization, costs of production, tariff levels, etc. etc. Leaving aside for the moment the problem of the differing importance of each main sector in the various countries (which was subsequently solved by applying purchasing power equivalents to each national accounts sector separately) it was found possible to select a uniform market basket which was typical not only of private consumption expenditure, but also of governmental services and investment. While many of the selected items were later discarded as superfluous or impractical when used for comparing price levels, the number of items which remained in the final price comparison was 261 for consumption expenditure and 113 for investment, many of the latter being subdivided according to quality, type, size, horse-power or other salient characteristics.

(3) Price collections were carried out during the years 1960–62 in the capital cities of the countries in accordance with specifications which took into account not only quality but also conditions of sale, type of district (residential or working class), income level of the typical purchaser, etc. Adjustments were subsequently made to take account of seasonal influences and of any deviations from specifications which could be evaluated satisfactorily. All data were then related to two common reference points, June 1960 and June 1962, in this way providing the basis for a network of interspatial price relatives and purchasing power equivalents.

(4) For combining prices, the question inevitably arose as to the best formula to be adopted and the way in which weights should be determined. It was in the first place considered indispensable that the results should be mutually convertible for all Latin American countries (the United States to be included only at a later stage because of the wide divergence from Latin America for income levels, demand schedules, expenditure patterns, etc.). A formula using a standard Latin American weighting pattern was therefore decided on—the choice to a large extent being determined by the need to avoid a complicated series of binary comparisons in which each country would provide the weights (thereby resulting in three or four hundred results for each sector, once the whole Latin American network was covered). Another influential factor was the scarcity of detailed information relating to the pattern of consumption and investment for each country in the base year, since even though national accounts

provide a framework at the sectoral level, use could only be made of secondary material (consumer expenditure surveys, trade and production statistics, government accounts, etc.) to obtain an expenditure distribution at the group or item level. It was furthermore believed that an average expenditure pattern for the region would eliminate many of the distortions or eccentricities existing in the patterns for individual countries and would at the same time provide a common basket of goods and services which had, on the whole, the greatest similarity to, or the least dissimilarity from, the expenditure pattern of each individual country.

(5) In the same way, it was decided that as each country was of equal interest for an inter-spatial study of per capita expenditure or income levels, the weighting should give equal importance to each Latin American country—thus eliminating the possibility that the final price relative or purchasing power ratios might resemble an index with single-country weights.[2] An average per capita rather than a total expenditure basis was accordingly chosen as the criterion for determining the relative importance of each country within the region.

(6) Quantity weights were preferred to expenditure weights—mainly because the latter necessitated the selection of a country of reference whose price pattern would, for the majority of formulae in current use, unfortunately influence the results.

(7) Finally, since the resources available did not include electronic computers, all the more complicated alternatives (e.g. a Geary-type or a Kloek-Theil type) had to be rejected.

The formula for the intra-regional price comparison then became:

$$\bar{P}_{ko} = \frac{\sum_{i=1}^{n} p_{ik} q_{j\bar{o}}}{\sum_{i=1}^{n} p_{io} q_{j\bar{o}}} \qquad \begin{matrix} (i = 1,2,3, \ldots j \ldots n \text{ items}, \\ o = a,b,c, \ldots k \ldots m \text{ countries}) \end{matrix} \tag{1}$$

where $\bar{P}_{ko}$ was the price ratio of any Latin American country k to country o (o being any country in the region);

p_{ik} and p_{io} were the prices of item i in countries k and o; and $q_{j\bar{o}}$ was the average per capita consumption of item j in quantity terms for all countries of the region [j being roughly equal to item i[3]].

Because purchasing power is inversely proportional to the relative price level, the index of purchasing power equivalence, $\bar{R}_{ko}$, for the currencies of countries k and o, may be expressed:

$$\bar{R}_{ko} = \frac{\sum_{i=1}^{n} p_{io} q_{j\bar{o}}}{\sum_{i=1}^{n} p_{ik} q_{j\bar{o}}} \tag{2}$$

2. Total expenditure weights would have given Brazil an importance of 24 per cent in the regional pattern; Argentina and Mexico each 21 per cent; Venezuela 7 per cent; Colombia and Chile each 6 per cent; and the remaining thirteen countries only 13 per cent among them. The method used gave each country an importance of approximately 5 per cent.

3. Because of imputations, the item used for weighting purposes must differ to some extent from that selected for pricing purposes.

As the resulting purchasing power equivalents were expressed only in terms of Latin American currencies and based only on Latin American weights, the calculations had to be extended in scope before they could provide valid measures of monetary equivalence in terms of the United States dollar. Use was accordingly made of price data specially collected for ECLA by the Bureau of Labour Statistics in Houston and Los Angeles where it was felt that conditions were not too dissimilar from those encountered in many Latin American cities. A United States weighting pattern, based on per capita expenditure in 1960, was also formulated along lines comparable with that used for Latin America. When each set of weights was applied, first to Latin American and then to United States prices, two sets of purchasing power equivalents emerged; while the geometric crossing of the latter results provided a further set along Fisher-Ideal formula lines.

The algebraic expression for the latter was:

$$\bar{R}_{ku} = \sqrt{\frac{\sum_{i=1}^{n} p_{iu}q_{j\bar{o}}}{\sum_{i=1}^{n} p_{ik}q_{j\bar{o}}} \cdot \frac{\sum_{i=1}^{n} p_{iu}q_{ju}}{\sum_{i=1}^{n} p_{ik}q_{ju}}} \qquad (3)$$

(k being any Latin American country; u being the United States; and other symbols maintaining the significance assigned to them in the preceding formulae).

Which of the three measures of purchasing power equivalence is the most suitable for expressing and comparing national accounts aggregates in terms of dollars is a question which can be argued from various angles. It might, for instance, be considered preferable to use only a Latin American weighting system on the assumption that this would prevent the expenditure pattern of a non-Latin American country (i.e. the United States) from influencing the results. However, quantities, prices and values are inter-related; and the exclusive use of Latin American quantity weights for combining prices would signify that in a Latin American–United States income comparison, the derived quantity (or real expenditure) levels would be reciprocally weighted according to the price (or expenditure) structure of the United States.[4] A similar situation applies when series

4. Let k represent any Latin American country; u the United States; V, p and q values, prices and quantities respectively; and i any item. When quantities of country k are revalued in prices of country u,

$$V_{ku} = \sum_{i=1}^{n} q_{ik}p_{iu} \qquad (4)$$

A comparison of the value V_{ku} with corresponding value V_{uu} for the United States gives a quantity comparison in which

$$Q_{ku} = \frac{V_{ku}}{V_{uu}} = \frac{\sum_{i=1}^{n} q_{ik}p_{iu}}{\sum_{i=1}^{n} q_{iu}p_{iu}} \quad \text{or} \quad \frac{\sum_{i=1}^{n} q_{iu}p_{iu} \cdot \frac{q_{ik}}{q_{iu}}}{\sum_{i=1}^{n} q_{iu}p_{iu}} \qquad (5)$$

It is obvious from the form of the equation that Q_{ku} is a quantity index in which the prices of country u serve as weights.

in dollar prices are compared for a single country over time.[5] Equally, United States-weighted price relatives or purchasing power equivalents provide a derived quantity or real income series implicitly weighted according to a Latin American (national) price pattern. There is therefore no clear-cut argument in favour of either of these two weighting systems.

A crossing of the two results, as adopted in the present study, is also open to certain objections—mainly because the weights refer to no specific country, more information is needed to establish them, the calculations are more tedious, the results are difficult to interpret, and additional problems arise since the aggregate of the components will not equal an independently-calculated total.[6] Some authorities go as far as to say that crossed-weight formulae have little to recommend them save their ability to satisfy time or factor-reversal tests. On the other hand, an average weighting pattern, whether calculated arithmetically, harmonically or geometrically, has the greatest similarity to, or the least deviation from, the various patterns of the countries involved in the comparison. In this respect, a crossed-weighting system has as much justification as any other average which seeks to represent an array of data in singular form. It has also the practical advantage of being the one most commonly adopted in the field of interspatial price or income comparisons; and therefore gives results more readily comparable with those obtained for other parts of the world. For similar reasons, the calculations lend themselves more readily to an extension in geographic scope or coverage, should this be found desirable at a later stage.

Since no weighting system gives universal satisfaction, it is a question of selecting that which satisfies the major conceptual and practical requirements; and in this respect, the geometric crossing of formulae based on regional and United States weights appears to present a convenient solution. It is accordingly the one adopted for the greater part of the estimates contained in the present paper—results based on other weighting systems being included only by way of comparison. The purchasing power equivalents concerned are shown in Table 1.

5. The formula shown in footnote 4 can again be used, K′ representing one time period and K″ another. The quantity index $Q_{k''k'}$ is then equal to $\frac{V_{k''u}}{V_{k'u}}$ which in turn equals

$$\frac{\sum_{i=1}^{n} q_{ik''} p_{iu}}{\sum_{i=1}^{n} q_{ik'} p_{iu}}. \qquad (6)$$

6. This disadvantage is not peculiar to crossed-weight series only. It applies in all cases where indexes have been calculated with a weighting structure different from that of the series to which those indexes are later applied.

TABLE 1

PURCHASING POWER EQUIVALENTS OF LATIN AMERICAN CURRENCIES, BY MAIN SECTORS OF EXPENDITURE, JUNE 1960[a]
(Units of national currency per U.S. dollar)

Country	Currency unit	Consumption		Construction	Producers' durables	Inventory changes	Trade balance
		Private	Government				
Argentina	Peso	52.6	26.8	70.9	164.6	52.4	82.7
Bolivia	Peso	8.30	2.36	6.64	17.20	9.41	11.88
Brazil	New Cr. $[b]	.1219	.0853	.1126	.3243	.1157	.1376
Chile	Escudo	1.036	.590	.694	2.000	1.103	1.050
Colombia	Peso	5.53	2.79	3.52	9.27	5.87	6.60
Ecuador	Sucre	12.33	6.04	8.20	21.60	14.06	15.78
Paraguay	Guaraní	79.0	39.4	75.6	195.2	90.6	119.1
Peru	Sol oro	17.62	8.03	15.68	35.80	19.45	27.24
Uruguay	Peso	6.88	3.30	7.43	20.52	7.98	11.43
Venezuela	Bolívar	4.89	4.30	3.62	4.15	4.80	3.35
Costa Rica	Colón	5.37	2.97	4.33	7.97	5.96	6.20
Dominican Republic	Peso	1.082	.559	.725	1.375	1.274	1.000
El Salvador	Colón	2.22	1.30	1.44	3.00	2.59	3.50
Guatemala	Quetzal	1.007	.583	.613	1.228	1.117	1.000
Haiti	Gourde	4.04	2.36	2.97	5.94	4.68	5.00
Honduras	Lempira	2.149	1.023	1.255	2.536	2.350	2.000
Mexico	Peso	8.30	6.04	7.63	15.28	9.70	12.50
Nicaragua	Córdoba	6.88	4.10	6.08	9.73	8.12	7.00
Panama	Balboa	.937	.543	.829	1.205	.990	1.000

Source: Economic Commission for Latin America: Series compiled by the Special Studies Section.
[a]Obtained by geometrically averaging results obtained for each section on the basis of Latin American and United States weights.
[b]New Cr. $ (New Cruzeiro) = 1000 cruzeiros (as from February 1967).

D. Dollar Estimates of Expenditure on the Latin American Gross Domestic Product, 1960

1. *The regional total*

A detailed breakdown of the gross domestic product by type of expenditure is unfortunately available for very few countries in Latin America; and only very broad categories can usually be distinguished, these relating to private consumption, governmental consumption, construction, producers' durables, transport equipment and the foreign trade balance. Changes in inventories are recorded for only certain countries, the figures being furthermore incomplete since many inventories, e.g., those held by wholesale and retail traders, are generally omitted. To the extent that published data for 1960 were available, a revaluation in terms of U.S. dollars was affected by applying to the data for each sector in national currency[7] the conversion factors corresponding respectively to official exchange rates[8] and purchasing power equivalents. The results are shown for each sector and for the regional total in Table 2.

TABLE 2

Latin America[a]; Expenditure on the Gross Domestic Product in Dollars, 1960
(Calculated at prevailing exchange rates and with purchasing power equivalents)

Expenditure sector	At prevailing exchange rates	With purchasing power equivalents using: Latin American weights	United States weights	Geometric mean
	(a) *Total (million dollars)*			
Private consumption	48 263	73 012	50 738	60 857
Governmental consumption	7 043	15 663	11 496	13 405
Fixed investment	11 193	10 441	11 305	10 834
Changes in inventories	460	783	527	643
Foreign trade balance	112	112	112	112
Total (all sectors)	*67 072*	*100 012*	*74 178*	*85 850*
	(b) *Per capita* (dollars)			
Private consumption	242	367	255	306
Governmental consumption	35	79	58	67
Fixed investment	56	52	57	54
Changes in inventories	2	4	3	3
Foreign trade balance	1	1	1	1
Total (all sectors)	*337*	*502*	*373*	*431*

[a]Excludes Cuba.

7. National currency data were based on statistics actually published by the individual countries. In some cases, the U.N. *Yearbook of National Accounts Statistics, 1965*, was used as the source. When no breakdown of fixed investment was available, the subdivision between construction and producers' equipment had to be estimated.

8. Where these were not available, the exchange rates implicit in the country's trade statistics were applied (these being obtained through relating the value of trade in dollars to the value of the same trade in national currency).

It will be observed that while official (or trade) rates gave an average expenditure for the region of $337 per head, the use of geometrically-crossed equivalents raised the figure to $431—the level being $502 when a Latin American weighting pattern was adopted and $373 when the weights were based on the United States. (These data may be compared with the estimate of $392 per head which appeared in ECLA's *Economic Survey of Latin America, 1965* edition, when conversion factors were obtained principally by an extrapolation of pre-war exchange rates.) The use of purchasing power equivalents in place of exchange rates thus raised the regional level of the 1960 gross domestic product by almost 50 per cent when a Latin American expenditure pattern was used for weighting purposes, 10 per cent when a United States pattern was used and a little less than 30 per cent when a crossed average of the two was taken. This is in keeping with the disparity observed by other investigators, notably Gilbert and Associates of the OEEC, whose data for eight European countries gave on the average an increase of 67 per cent in 1950 (and 54 per cent in 1955) when purchasing power equivalents based on national expenditure patterns were used instead of exchange rates (the increase being 19 and 11 per cent for the same two years when a United States pattern was used) [2]. For individual European countries, there was, moreover, a greater range between maximum and minimum data than that observed for Latin America, though this may well be due to differing methodology—particularly since national weighting was used for the European study and average regional weighting for Latin America.[9]

So far as the component sectors are concerned, Table 2 indicates that the greater part of the region's expenditure related to private consumption, the average level for which was $306 per head on the basis of geometrically-crossed equivalents, as against $242 on the basis of exchange rates. In the same way, the level for governmental consumption rose from $35 with exchange rates to $67 in terms of purchasing power equivalents. On the other hand, for fixed investment, the figure of $56 was actually higher on an exchange rate basis than that of $52 obtained with geometrically-crossed purchasing power equivalents—the explanation being found in the high price levels for machinery and equipment in Latin America which more than offset low prices for the construction sub-sector. In consequence, the proportion of the total product allocated to investment fell from 17 per cent (on an exchange rate basis) to less than 13 per cent (in real or purchasing power terms). A compensating increase, from 10.5 to 17 per cent, applied to the government sector for which United States price levels were very much higher than those prevailing in Latin America. The share of private consumption expenditure within the regional total was little changed, with a figure slightly above 70 per cent.

As will be seen later, rather different situations applied to each individual

9. A precise evaluation has not been made for Latin America as to the effect of applying national rather than regional weighting patterns; but a short-cut method using price relatives for homogenous groups of commodities indicated that in practice national weights changed the results very little—the dollar valuation being generally 2 to 5 per cent lower on this basis. The average expenditure level of the region thus fell from $502 (with regional weights) to $484 per head (with national weights). This would in turn reduce the level obtainable with a Fisher-type formula from $431 to $425 per head.

country; and as the regional average is a resultant of conflicting changes for the component countries when expenditure is expressed in real rather than nominal terms, it is convenient to examine the country detail.

2. *Estimates for individual countries*

The adoption of purchasing power equivalents instead of exchange rates for measuring national product or expenditure involved an increase of substantial magnitude for most countries, this being most pronounced when the calculations were based on a Latin American quantity weighting pattern. An exception was Venezuela where the results decreased by roughly one-sixth (the price level being higher than in the United States). For Uruguay, Bolivia, Peru, Argentina, Paraguay and Ecuador, on the other hand, the dollar estimates, on the basis of regionally weighted purchasing power equivalents, increased by fifty to one hundred per cent. Lesser increases applied to such countries as Brazil, Colombia, Chile, etc.; while smallest increases were registered for Honduras, Guatemala, Nicaragua and the Dominican Republic where the price level was more nearly similar to that of the United States.

A revaluation of Latin American expenditure at U.S. prices using a national or a regional (quantitative) weighting pattern, however, gives dollar levels which are generally at a high extreme—due to the strong inverse correlation existing between prices charged and quantities consumed (expenditure in each situation tending to adjust itself in such a way that a greater quantity of cheap items are consumed and a lesser quantity of the expensive ones). When Latin American weights are used, the quantitative consumption of items cheap in the region is in normal circumstances maximised. However, the U.S. prices applied to those quantities are in many cases also at a high extreme (e.g. food, transportation, services). The combination of large quantitative consumption and high relative prices affects the purchasing power equivalence in such a way that a correspondingly high dollar valuation is given to Latin American income or expenditure. A converse situation prevails when a United States (quantitative) weighting pattern is applied to prices—the dollar values then being at a low extreme. For Latin America, this latter change was not uniform, however—the southernmost countries (Argentina, Bolivia, Chile, Paraguay and Uruguay) being affected most and the northernmost countries (Mexico, Central America, Venezuela) least.

A geometric crossing of the respective equivalents inevitably provides a series intermediate in level *vis-à-vis* regionally-weighted and United States-weighted estimates. The dollar values for Argentina, Bolivia, Peru, Paraguay, Uruguay and Mexico were nevertheless still 50 to 60 per cent higher than those obtained with exchange rates (the percentage being almost 80 in the case of Uruguay). For Chile, Brazil, most of Central America and the Caribbean, the increase percentage-wise was less pronounced; while for Venezuela, the dollar level was 20 per cent below that obtained with exchange rates. As a result, the highest *per capita* expenditure figures corresponded to Argentina ($868) and Uruguay ($853) for which values of $561 and $477 had been obtained with exchange rates. (See Table 3.) Next came Venezuela where the real expenditure

level of $809 contrasted strongly with that of $1043 obtained with the exchange rate. In fourth place was Chile with $658, followed by Mexico, Panama and Costa Rica,—for all of which real expenditure figures approximated $500 per head. Other countries were in the $200–$400 bracket except Bolivia ($165) and Haiti (estimated roughly as $94).

The application of purchasing power equivalent rather than exchange rates thus involved a certain change in the ranking of the countries—Venezuela dropping to third highest when valued in terms of purchasing power, instead of highest (easily) at prevailing exchange rates. Argentina moved up from third to first; Uruguay from fourth to second; Mexico from seventh to fifth; Peru from fifteenth to eighth; Ecuador from fourteenth to tenth; and Paraguay from seventeenth to fourteenth. On the other hand, Chile fell from second to fourth; Panama from fifth to sixth, Costa Rica from sixth to seventh; Guatemala from eighth to eleventh; Brazil from the tenth to twelfth; the Dominican Republic from eleventh to fifteenth; Nicaragua from twelfth to sixteenth; and Honduras from sixteenth to seventeenth. The relative positions of Colombia (ninth); El Salvador (thirteenth), Bolivia (eighteenth), and Haiti (last) were unchanged.

In the same way, various changes occurred in the relative importance of each country within the regional total. With expenditure expressed in purchasing power terms, the percentage represented by both Argentina and Mexico increased; as also did that of Peru, Uruguay and, to a lesser extent, Ecuador, Paraguay and Colombia. On the other hand, the relative importance of Venezuela (in particular), Chile, the Dominican Republic and one or two Central American countries such as Guatemala and Nicaragua declined. The regional total none the less continued to be dominated by three countries—Brazil (24 per cent), Mexico and Argentina (each 21 per cent)—with Venezuela (7 per cent), Chile and Colombia (each 6 per cent), Peru (4 per cent) and Uruguay (2.5 per cent) accounting for the greater part of the balance.

When Latin American incomes are related to the 1960 level of the United States, Table 4 reveals that no country in the region had an average expenditure equal in real terms to one third of that prevailing in the United States ($2775). At a low extreme were two countries—Haiti and Bolivia—whose per capita expenditures (measured on the basis of geometrically crossed equivalents) were as low as 3 and 6 per cent respectively of the United States level; four countries were in the range 7½ to 10 per cent; six from 10 to 12½ per cent; three from 17 to 20 per cent; one had 24 per cent; one, 28 per cent; and for two, 1960 real expenditures were 31 per cent of the United States level. It is to be emphasized, however, that comparisons of this type are hazardous because of the large differences in income and expenditure characteristics of the countries concerned. On the other hand, the results indicate orders of magnitude and confirm the fact that in many parts of the Latin American region, the real income of the inhabitants is very much below what in the United States would be considered a subsistence level.

A comparison with other countries is even more hazardous in view of the lack of usable material, plus differences in methodology (and the difference in income and expenditure characteristics). As a rough approximation, a com-

TABLE 3

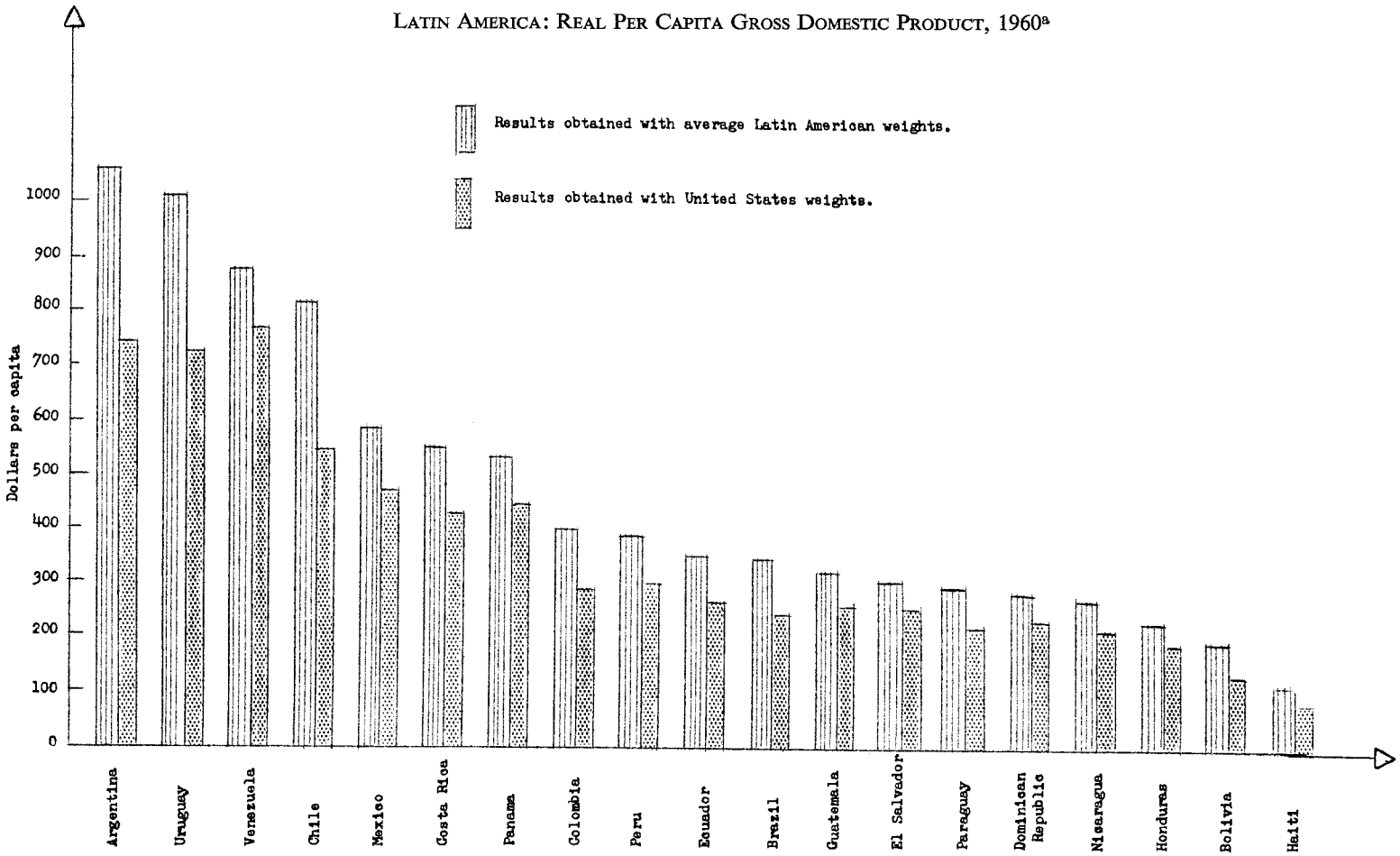
DOLLAR ESTIMATES OF EXPENDITURE ON THE GROSS DOMESTIC PRODUCT IN LATIN AMERICAN COUNTRIES, 1960
Calculated with alternative conversion factors

Country	Total (million dollars)				Per capita (dollars)			
		With purchasing power equivalents based on:				With purchasing power equivalents based on:		
		Weighting pattern of				Weighting pattern of		
	With exchange rates[a]	Latin America	United States	Geometric mean	With exchange rates[a]	Latin America	United States	Geometric mean
Argentina	11 602	21 602	14 914	17 947	561	1045	721	868
Bolivia	376	745	499	609	102	101	135	165
Brazil	17 575	24 080	17 213	20 305	250	342	245	289
Chile	4 724	6 304	4 177	5 128	606	809	536	658
Colombia	4 003	6 133	4 470	5 203	259	396	289	336
Ecuador	933	1 518	1 141	1 312	216	352	264	304
Paraguay	283	524	389	450	160	296	220	255
Peru	2 074	3 899	2 958	3 387	207	389	295	338
Uruguay	1 188	2 522	1 798	2 124	477	1 012	722	853
Venezuela	7 648	6 388	5 595	5 933	1 043	871	763	809
Costa Rica	453	648	501	568	376	537	415	471
Dominican Republic	723	863	686	766	239	285	226	253
El Salvador	567	765	640	698	228	307	257	280
Guatamala	1 021	1 230	980	1 094	271	327	260	291
Haiti	298	436	350	390	72	105	84	94
Honduras	378	448	372	406	194	230	191	208
Mexico	12 471	20 965	16 735	18 688	346	582	464	518
Nicaragua	337	409	317	359	228	277	214	243
Panama	448	531	443	484	439	520	434	474
Latin America[b]	*67 072*	*100 012*	*74 178*	*85 850*	*337*	*502*	*373*	*431*

[a]Where official rates were not available, trade rates were used.
[b]Excludes Cuba.

FIGURE I

LATIN AMERICA: REAL PER CAPITA GROSS DOMESTIC PRODUCT, 1960[a]



[a]Based on figures from Table 3.

parison is made with the real income levels of Western European countries, obtained by extrapolating to 1960 the purchasing power coefficients given for 1955 in the OEEC study *Comparative National Products and Price Levels* [2]. It must of course be pointed out that this extrapolation was effected with indexes not designed for such a purpose; and that the expenditure patterns would differ if 1960 were used as the base year. Nevertheless, the application of estimated

TABLE 4

REAL PER CAPITA PRODUCT OR EXPENDITURE IN SELECTED COUNTRIES, 1960

Country	U.S. dollars		Indexes: U.S.A. = 100	
	At prevailing exchange rates	With purchasing power equivalents[a]	At prevailing exchange rates	With purchasing power equivalents[a]
United States	2 775	2 775	100.0	100.0
Germany, F.R.	1 285	1 813	46.3	65.3
Denmark	1 303	1 670	47.0	60.2
United Kingdom	1 358	1 631	48.9	58.8
France	1 322	1 595	47.6	57.5
Norway	1 265	1 559	45.6	56.1
Belgium	1 219	1 479	43.9	53.3
Netherlands	987	1 431	35.6	51.6
Italy	647	890	23.3	32.1
Latin America[b]	*337*	*431*	*12.1*	*15.5*
Argentina	561	868	20.2	31.3
Uruguay	477	853	17.2	30.7
Venezuela	1 043	809	37.6	29.2
Chile	606	658	21.8	23.7
Mexico	346	518	12.5	18.7
Panama	439	474	15.0	17.1
Costa Rica	376	471	13.5	17.0
Peru	207	338	7.5	12.2
Colombia	259	336	9.3	12.1
Ecuador	216	304	7.8	11.0
Guatemala	271	291	9.8	10.5
Brazil	250	289	9.0	10.4
El Salvador	228	280	8.2	10.1
Paraguay	160	255	5.8	9.2
Dominican Republic	239	253	8.6	9.1
Nicaragua	228	243	8.2	8.8
Honduras	194	208	7.0	7.5
Bolivia	102	165	3.7	5.9
Haiti	72	94	2.6	3.4

Source: European Countries: Comparative National Products and Price levels, *op. cit.*, extrapolated from 1955 to 1960.

Latin American countries: Table 3.

[a]Calculated as a geometric average of results obtained with alternative weighting patterns.

[b]Excludes Cuba.

purchasing power equivalents to 1960 expenditure data reveals that while the *per capita* level for most Western European countries was two to three times higher than that prevailing in Latin America, in Italy the figure of $890 differed little from that of Argentina ($868) and Uruguay ($853). This is certainly not out of line with what an empirical appraisal of income levels and standards of living in those countries would suggest.[10]

E. Expenditure on the Gross Domestic Product by Sector, 1960

(1) *Main sector of expenditure for individual countries*

In the preceding chapter, an analysis was made of the dollar aggregates obtained when alternative conversion factors were applied to the national currency data for each expenditure sector. The relative importance of expenditure sectors varied, however, from country to country and different price levels applied to each. It is therefore convenient to examine each sector individually, comparing the results obtained at prevailing exchange rates with those established in accordance with geometrically-crossed purchasing power equivalents. The relevant data (as totals rather than per capita averages) are given in Table 5.

The most striking feature of this table is the change in the relative importance of fixed investment for those countries where the price level of producers' equipment was very much higher than that applicable to other goods and services. Since low construction prices tended to offset high equipment prices, this meant that the dollar value of fixed investment was little different in purchasing power terms from that obtained by applying exchange rates. On the other hand, the low relative price level for consumer goods and services signified a much higher dollar valuation in real terms for those items, this being most pronounced in the governmental sector. In consequence, the proportion of the total domestic product devoted to consumption generally increased while a corresponding decrease applied to fixed investment.

Of the countries most affected, Argentina provides the outstanding example since *fixed investment* fell from 22 to 11 per cent when measured in real rather than nominal (national currency) terms. A similar though less marked decline—from 16½ to 12 per cent—applied to Brazil; and from 15 to 12 per cent in the case of Mexico. Other countries affected were Uruguay (from 15 to 10 per cent), plus Paraguay and Peru (with in both cases a decrease from 17 to 12 per cent). On the other hand, for a few countries the relative price level for investment goods was lower than that for consumer goods; and a calculation in real terms changed the percentages in a contrary direction. The main one to be affected in this manner was Venezuela (fixed investment increasing from under 19 to more than 21 per cent of total expenditure).

As already indicated, *government consumption expenditure* was generally of much greater importance in terms of purchasing power equivalence. At a high extreme were Ecuador, the Dominican Republic and Brazil, in respect of which

10. On this point see Table B 3 of *The Level of Living of Nations: Meaning and Measurement*, by Donald H. Niewiaroski, in *Estadistica*, Vol. XXIII, Inter-American Statistical Institute (Washington) March 1965.

the sector represented from 21 to 23 per cent of the total in real terms as against 12 to 15 per cent in national currency. For eight other countries (including notably Argentina, Chile, Costa Rica, Peru and Uruguay), it represented 17–19 per cent in real terms as against 9–11 per cent on a nominal (national currency) basis. At a low extreme was Mexico where a figure of 7 per cent in real terms (or 5 per cent in national currency) raises doubts as to the reliability of the sectoral data shown in that country's national accounts.

With percentages ranging from 65 to 75 in the majority of countries, the share of *private consumption* in total expenditure was generally lower in purchasing power terms than in national currency (thus reflecting very largely the greatly increased importance of governmental consumption expenditure). Chief changes applied to Bolivia, Ecuador, El Salvador, Guatemala, Honduras, Panama and the Dominican Republic where the decline amounted to six or seven percentage points. Lesser, but still pronounced, declines also applied to Colombia, Chile, Peru, Venezuela, Costa Rica and Haiti; while only in the case of Argentina and Mexico did the share in total expenditure actually increase. (For Argentina this reflected the decline in the relative importance of investment, not fully offset by an increased importance of governmental consumption.) In the case of Venezuela, the percentage for the sector was exceptionally low, whether measured in national currency or in terms of purchasing power. This is however explained by the unusual characteristics of the Venezuelan economy since national income originates largely in the mining industry and expenditure is devoted partly to payments abroad, partly to investment, and only a relatively small part (56 per cent on a national currency basis, 50 per cent in terms of purchasing power) to private consumption. If the foreign trade balance is excluded, the proportion devoted to private consumption rises in Venezuela's case to 64 per cent on a national currency basis, and 59 per cent in terms of dollar purchasing power.

For other countries, it may be noted that despite the changes brought about when a valuation was made with purchasing power equivalents rather than exchange rates, the proportion of the gross domestic product devoted to private consumption expenditure appeared to be still unusually high for Chile, Guatemala and Nicaragua (all about 77 per cent), Haiti (79 per cent) and Mexico (a rather doubtful 82 per cent). Peculiarities, however, existed in the national accounts data of all those countries: e.g. consistently negative household savings for Chile and a low value placed on construction for the same country; an unusually high proportion (28 per cent) of the gross domestic product derived from internal trade in Guatemala; and 26 per cent (at 1950 prices) for the same sector in Mexico, etc. This serves to strengthen the view that national accounts data in Latin America, as in other parts of the world, are subject to wide margins of error, this being especially so when inflation distorts the price and value structure and when sectors such as private consumption expenditure (or savings) are calculated as a residual.

2. *The per capita level for main sectors*

The data shown in Table 5 have been converted to a per capita basis in Table 6 in order to show the relative difference in income levels within the region.

TABLE 5

MAIN SECTORS OF EXPENDITURE ON THE GROSS DOMESTIC PRODUCT, 1960
(Estimated in dollars with exchange rates and with purchasing power equivalents)

Country	With exchange rates						With purchasing power equivalents[a]					
	Consumption		Fixed investment	Inventories	Trade balance	Total	Consumption		Fixed investment	Inventories	Trade balance	Total
	Private	Public					Private	Public				
	(a) *Total (million dollars)*											
Argentina	8 065	1 042	2 518	117	−140	11 602	12 716	3 223	1 968	181	−140	17 947
Bolivia	317	33	54	3	−29	377	453	115	65	4	−29	609
Brazil	12 103	2 693	2 904	137	−262	17 575	13 669	4 345	2 390	162	−262	20 305
Chile	3 834	485	487	21	−103	4 724	3 897	866	449	20	−103	5 128
Colombia	3 001	251	731	98	−80	4 003	3 583	594	995	111	−80	5 203
Ecuador	668	120	125	17	4	933	821	300	170	17	4	1 312
Paraguay	214	22	48	[b]	0	283	330	67	53	[b]	0	450
Peru	1 400	174	348	100	53	2 074	2 179	595	419	142	53	3 387
Uruguay	938	107	179	30	−67	1 188	1 558	372	217	44	−67	2 124
Venezuela	4 284	1 058	1 432	−86	959	7 648	2 937	824	1 272	−60	959	5 932
Costa Rica	344	53	77	6	−27	453	398	111	81	6	−27	568
Dominican Republic	501	92	75	[b]	55	723	463	164	83	[b]	55	766
El Salvador	457	57	79	[b]	−26	567	515	110	98	[b]	−26	698
Guatemala	852	80	103	6	−20	1 021	846	137	126	5	−20	1 094
Haiti	250	26	20	[b]	2	298	310	54	25	[b]	2	390
Honduras	297	37	48	5	−8	378	277	72	62	4	−8	406
Mexico	10 138	639	1 858	[b]	−165	12 471	15 279	1 322	2 252	[b]	−165	18 688
Nicaragua	274	28	46	[b]	−10	337	279	48	43	[b]	−10	359
Panama	325	47	62	6	−22	448	347	87	66	6	−22	484
Latin America[c]	*48 263*	*7 043*	*11 193*	*460*	*112*	*67 072*	*60 857*	*13 405*	*10 834*	*643*	*112*	*86 850*

TABLE 5 *(Concluded)*

Country	With exchange rates						With purchasing power equivalents[a]					
	Consumption		Fixed investment	Inventories	Trade balance	Total	Consumption		Fixed investment	Inventories	Trade balance	Total
	Private	Public					Private	Public				
	(b) *Percentage represented by each sector*											
Argentina	69.5	9.0	21.7	1.0	−1.2	100.0	70.8	18.0	11.0	1.0	−.8	100.0
Bolivia	84.0	8.6	14.2	.8	−7.7	100.0	74.4	18.9	10.8	.7	−4.8	100.0
Brazil	68.9	15.3	16.5	.8	−1.5	100.0	67.3	21.4	11.8	.8	−1.3	100.0
Chile	81.2	10.3	10.3	.4	−2.2	100.0	76.0	16.9	8.8	.4	−2.0	100.0
Colombia	75.0	6.3	18.3	2.5	−2.0	100.0	68.9	11.4	19.1	2.1	−1.5	100.0
Ecuador	71.6	12.8	13.4	1.8	.4	100.0	62.6	22.9	13.0	1.3	.2	100.0
Paraguay	75.6	7.6	16.8	[b]	—	100.0	73.4	14.8	11.8	[b]	—	100.0
Peru	67.5	8.4	16.8	4.8	2.5	100.0	64.3	17.6	12.4	4.2	1.6	100.0
Uruguay	79.0	9.0	15.1	2.6	−5.6	100.0	73.3	17.5	10.2	2.0	−3.1	100.0
Venezuela	56.0	13.8	18.7	−1.1	12.5	100.0	49.5	13.9	21.4	−1.0	16.2	100.0
Costa Rica	76.0	11.7	17.0	1.2	−6.0	100.0	70.0	19.5	14.2	1.1	−4.8	100.0
Dominican Republic	69.3	12.7	10.4	[b]	7.6	100.0	60.5	21.4	10.8	[b]	7.2	100.0
El Salvador	80.5	10.1	13.9	[b]	−4.5	100.0	73.8	15.8	14.0	[b]	−3.7	100.0
Guatemala	83.5	7.8	10.1	.6	−2.0	100.0	77.3	12.5	11.5	.5	−1.8	100.0
Haiti	84.1	8.6	6.8	[b]	.5	100.0	79.4	13.9	6.4	[b]	.4	100.0
Honduras	78.7	9.7	12.7	1.2	−2.2	100.0	68.2	17.6	15.3	1.0	−2.1	100.0
Mexico	81.3	5.1	14.9	[b]	−1.3	100.0	81.8	7.1	11.9	[b]	−0.9	100.0
Nicaragua	81.3	8.3	13.6	[b]	−3.1	100.0	77.7	13.2	11.9	[b]	−2.9	100.0
Panama	77.7	11.2	14.8	1.4	−5.2	100.0	71.7	17.9	13.7	1.3	−4.6	100.0
Latin America[c]	*71.9*	*10.5*	*16.7*	*.7*	*.2*	*100.0*	*70.9*	*15.6*	*12.6*	*.7*	*.1*	*100.0*

[a]Geometrically-crossed equivalents obtained with Latin American and United States weights.
[b]Presumably included in private consumption expenditure.
[c]Excludes Cuba.

At the same time, the estimates are related to similar data for the United States and certain countries in Western Europe, thus placing the Latin American estimates in an extra-regional perspective. As pointed out earlier, the methodology and coverage of the various sets of estimates differ considerably from each other. Furthermore, for the extra-regional figures (other than the United States), the only purchasing power equivalents available related to an earlier year and had to be extrapolated with price indexes—thus introducing an additional error to the extent that those indexes were not consistent with the national accounts figures to which they were applied. The results should therefore be treated as approximations rather than as precise measures of magnitude. A number of interesting facts are nevertheless revealed, the main ones being discussed in the analysis of expenditure levels which follows.

a. Private consumer expenditure

At official rates of exchange, private consumption expenditure in 1960 ranged from $60 per head (for Haiti) to $584 (for Venezuela), with intermediate levels of $492 for Chile, $390 for Argentina, $377 for Uruguay, $281 for Mexico and $172 for Brazil, etc.

When measured on the basis of geometrically-crossed purchasing power equivalents, Venezuela ($401) was superseded as the Latin American country with the highest level of per capita private consumption by Uruguay ($626), Argentina ($615), Chile ($500), and Mexico ($424). Next came Panama ($340) and Costa Rica ($330). Remaining countries had levels which in no case exceeded $250 in real terms—three of these (Honduras, Bolivia, and Haiti) being under $150. This gave for the region as a whole an average in terms of purchasing power of $306 (compared with $242 at official exchange rates).

The wide disparity in income levels, expenditure patterns, etc., makes a comparison between Latin America and the United States controversial. The present estimates would, however, suggest that in terms of purchasing power the average level for the region was approximately 18 per cent of that in the United States (the corresponding figure being 14 per cent when measured with exchange rates). For individual countries, the situation nevertheless varied considerably. For Uruguay and Argentina, the real level for the sector was as high as 36 or 37 per cent; in Chile 29 per cent (the same figure being obtained with official exchange rates); in Mexico, 25 per cent; in Venezuela 23 per cent; while in Panama and Costa Rica private consumption expenditure was approximately 20 per cent of the corresponding United States level. Countries having levels below the regional average *vis-à-vis* the United States included, notably, Colombia (14 per cent), Guatemala and Peru (13 per cent), Brazil, Ecuador, Paraguay and Nicaragua (each 11 per cent), with Honduras (8 per cent), Bolivia (7 per cent) and Haiti (4 per cent) at the bottom of the scale. It must of course be recognized that these levels are only approximate since private consumption expenditure is generally calculated as a residual in Latin American national accounts and therefore contains the overall error in the level of the gross domestic product plus the net errors for other sectors. The figures can, neverthe-

TABLE 6

REAL PER CAPITA EXPENDITURE IN SELECTED COUNTRIES, BY MAIN SECTOR[a], 1960

Based on geometrically crossed purchasing power equivalents[b]

Country	(a) U.S. dollars					(b) Indexes (USA = 100)			
	Consumption		Fixed investment	Inventories	Total[c]	Consumption		Fixed investment	Total[c]
	Private	Public				Private	Public		
United States	1 697	396	655	19	2 775	100	100	100	100
Canada	1 381	357	483	22	2 227	81	90	74	80
Germany	1 034	313	432	15	1 813	61	79	66	65
Denmark	1 082	242	323	26	1 670	64	61	49	60
United Kingdom	1 106	353	260	36	1 631	65	89	40	59
France	1 027	237	297	2	1 595	60	60	45	58
Norway	905	258	448	−6	1 559	53	65	68	56
Belgium	997	237	275	3	1 479	58	60	42	53
Netherlands	811	254	337	−17	1 431	48	64	51	52
Italy	523	196	198	12	890	31	50	30	32
Latin America[d]	*306*	*67*	*54*	*3*	*431*	*18*	*17*	*8*	*16*
Argentina	615	156	95	7	868	36	39	14	31
Uruguay	626	149	87	19	853	37	37	13	31
Venezuela	401	112	174	−9	809	23	28	27	29
Chile	500	111	58	2	658	29	28	9	24

TABLE 6 *(Concluded)*

Country	(a) U.S. dollars					(b) Indexes (USA = 100)			
	Consumption		Fixed investment	Inventories	Total[c] balance	Consumption		Fixed investment	Total[c]
	Private	Public				Private	Public		
Mexico	424	37	62	0	518	25	9	10	19
Panama	340	84	65	7	474	20	21	10	17
Costa Rica	330	92	67	5	471	19	23	10	17
Peru	217	59	42	14	338	13	15	6	12
Colombia	232	38	64	7	336	14	10	10	12
Ecuador	190	70	39	4	304	11	18	6	11
Guatemala	225	36	33	1	291	13	9	5	10
Brazil	194	62	34	2	289	11	16	5	10
El Salvador	207	44	39	0	280	12	11	6	10
Paraguay	187	38	30	0	255	11	10	5	9
Dominican Republic	153	54	27	0	253	9	14	4	9
Nicaragua	189	32	29	0	243	11	8	4	9
Honduras	142	37	32	2	208	8	9	5	8
Bolivia	123	31	18	1	165	7	8	3	6
Haiti	75	13	6	0	94	4	3	1	3

[a]Because of the definitions adopted in each country, incomparabilities may apply for each sector and for the total.
[b]Based on equivalents obtained from the following sources:
Canada: *Real Income Comparison Canada—United States 1965 and selected years back to 1950* [18].
Western Europe: *Comparative National Products and Price Levels* [2].
Latin America: Calculations of the ECLA Special Studies Section.
[c]Includes changes in inventories and the foreign trade balance.
[d]Excludes Cuba.

less, be used to provide some guide regarding probable inter-country relationships.

When Latin America is compared with Western Europe, it will be seen that a sizeable gap also existed, especially in relation to the expenditure of countries like Western Germany, the United Kingdom, France, and Denmark. On the other hand, the per capita level of the private consumption sector was higher in Argentina and Uruguay than that estimated by the author for Italy on the basis of purchasing power equivalents established by Gilbert and Associates for 1955. An extrapolation of these equivalents would give a 1960 level of $523 for Italy as against $615 and $626 respectively for Argentina and Uruguay. A similar estimate, made by Beckerman [23] using purchasing power equivalents established by the Statistical Office of Western Germany, put the Italian level at $550.[11] Beckerman also gave estimates of $471 for Spain, $330 for Portugal and $230 for Turkey. If these estimates can be accepted, it would signify that while Italy ranked below Uruguay and Argentina, its private consumption expenditure level was appreciably ahead of that calculated for Chile. Chile, in turn, ranked above Spain; and Spain above both Mexico and Venezuela. Panama and Costa Rica would have levels close to Beckerman's estimate for Portugal; while Colombia, Guatemala, and Peru would be roughly equivalent in terms of *per capita* private consumption to Turkey.

b. Governmental consumption expenditure

As Table 6 shows, per capita expenditure in the government sector was low in Latin American countries, even when purchasing power equivalents were used for conversion purposes. For 1960, only Argentina, Uruguay, Venezuela and Chile had, in real terms, an expenditure exceeding $100; while of the remainder only Brazil, Ecuador, Peru, Costa Rica, Panama, and the Dominican Republic spent the equivalent of $50 or more. Lowest estimates apply to Haiti where the amount spent probably represented between $10 and $15 per head of population. This meant that on the average the regional expenditure was only $67 per head in real terms (the figure being $35 at official rates of exchange). This was very much below that of the United States where a figure of approximately $500 in 1960 reflects both a high income level and a more comprehensive infrastructure with heavy commitments for items like defence, foreign aid, etc., which had little counterpart in the national accounts of the Latin American region.

When individual countries are related to the United States, it will be found that in Argentina and Uruguay, real governmental expenditure was 39 and 37 per cent respectively of the corresponding United States level, the figure falling to 28 per cent in Venezuela and Chile; 21–23 per cent in Panama and Costa Rica; 14–18 per cent in the Dominican Republic, Ecuador, Peru, and Brazil; 7–11 per cent in El Salvador, Paraguay, Colombia, Mexico, Honduras, Guatemala, Nicaragua, and Bolivia; but only 3 per cent in Haiti. A further comparison may be made in very rough terms with 1960 levels for Western Europe, once again using as a basis the calculations of Gilbert and Associates of the

11. Basic German data were drawn from *Statistisches Jahrbuch für die Bundesrepublic Deutschland*, 1964, page 124.

OEEC. As shown in Table 6, per capita governmental consumption expenditure was considerably higher in the European countries quoted than in any part of Latin America. In this respect the figures once again reflect the fact that in a well-to-do society, governmental services—despite higher salaries—are relatively greater in quantitative terms than in a low-income area such as Latin America.

c. Fixed investment

At official rates of exchange, 1960 fixed investment in the Latin American region ranged from $5 to $195 per inhabitant—the regional average being $56, or roughly one-tenth of the corresponding level in the United States.[12] When a revaluation was made on the basis of geometrically-crossed purchasing power equivalents, the dollar estimates for countries such as Argentina, Brazil, Chile, and Venezuela fell—in this way reflecting the high cost of locally-produced equipment and, in the case of imported goods, high tariff barriers, which in addition to transport costs and dealers' mark-ups, automatically raised the price of equipment, machinery, etc., above the United States level. Even though low construction costs to some extent brought the sector price levels down, it was generally speaking only in countries with little domestic industry (and hence low protective trade barriers) that the dollar valuation of fixed investment was higher in real terms than at prevailing exchange rates.

Looking at the estimates for individual countries, it will be found that Venezuela was easily the highest with $174 per head ($195 at prevailing exchange rates). Corresponding figures for Argentina were $95 and $122. Six other countries had per capita investment levels equivalent in purchasing power to $50 or more—these being Uruguay, Costa Rica, Panama, Colombia, Mexico, and Chile. Elsewhere, the figure ranged from $30 to $50 per head, though for the Dominican Republic, Bolivia, and Haiti still lower levels prevailed.

This gave for the region as a whole an average in real terms of $52 per head; that is to say, only 8.4 per cent of the per capita level in the United States —the percentages for individual countries fluctuating between 1 per cent for Haiti and 27 per cent for Venezuela, with intermediate levels of 14½ per cent for Argentina, 13 per cent for Uruguay, 10 per cent for Colombia, Costa Rica, Mexico, and Panama, a notably low figure of 9 per cent for Chile (where the construction figures seem much understated), 5 to 6 per cent for Peru, Ecuador, Brazil, El Salvador, Guatemala, Honduras, and Paraguay, but only 3 to 4 per cent for Nicaragua, the Dominican Republic, and Bolivia. If a comparison is made with the principal countries of Western Europe, it will be found that 1960 per capita investment in the latter area was substantially higher, even in Italy where a figure of US $198 per head—equal to 30 per cent of the United States level—easily surpassed that of Argentina, Uruguay, and all other Latin America countries including Venezuela.

12. Exact information in this respect was difficult to obtain and many items, e.g., construction for defence purposes, were classified differently in the various national statistics. Strict comparability within the region and with the United States was not therefore possible. (This problem also affected the comparability of data relating to governmental consumption expenditure.)

d. Changes in inventories

Changes in inventories are ill-defined for most Latin American countries and are probably recorded in part only. For some—e.g., Paraguay, El Salvador, Mexico, Nicaragua, and the Dominican Republic—the sector was not shown separately, the common practice being to include the values implicitly in private consumption expenditure seeing as this was usually obtained as a residual. Where changes in stocks were actually registered, they related to a few readily-identifiable commodities only; e.g., agricultural raw materials in Argentina, and coffee, livestock, etc., in Colombia. The method of valuation was also a potential source of error and little could be ascertained regarding practices adopted in national accounting, particularly in cases where inflationary price conditions affected the values assigned to the commodities concerned. For the most part, the magnitudes —recorded or unrecorded—of inventory changes would not however be large; and even in statistically-advanced countries, as in Western Europe, they rarely exceed two or three per cent of the gross domestic product. For Latin America in 1960, only Colombia and Uruguay showed magnitudes of 2 per cent or more —the majority being at the level of 0.5 to 1.0 per cent. In dollars at prevailing exchange rates, this represented exceedingly small per capita amounts, the maximum being $12 for Uruguay, $10 for Peru, and $6 for Argentina, Colombia, and Panama. A revaluation with purchasing power equivalents (calculated on the assumption that the inventories were composed almost entirely of non-durable consumer goods or raw materials) changed the level very little, the maximum values being $17 per capita for Uruguay and $14 for Peru. The influence on overall expenditure was accordingly minimal.

e. The foreign trade balance

This was converted into dollars with the exchange rates which actually applied to international trade; and, according to the concept adopted, the magnitudes remained unaltered in terms of dollar purchasing power. As was the case for inventory changes, the sector represented a minor fraction of the gross domestic product—though this varied considerably from country to country and from year to year. In the case of Venezuela, for instance, the excess of exports over imports in 1960 was $131 per head or $1,000 million in total—thus constituting one-eighth of the 1960 gross domestic product. In the Dominican Republic, the per capita figure equalled $18 and in Peru $5. Elsewhere, the balance was either negligible or unfavourable—the negative magnitudes ranging up to $22 per head in Costa Rica and $27 per head in Uruguay. As the situation was so unstable over time, undue importance should not, however, be attached to these figures.

F. Historical Series: 1955–1964 Expenditure Expressed in dollars of 1960 purchasing power

1. *Total expenditure*

For the period 1955–64, estimates in dollars of 1960 purchasing power

were obtained by applying to the data of each country (expressed in national currency at 1960 prices) conversion factors applicable to each expenditure sector in 1960—the sectoral data being then aggregated in order to obtain the regional total for each year. Unfortunately, the aggregation of regional data presumes a comparability and reliability which does not always hold true for an area like Latin America where methods of compilation are inconsistent and with varying degrees of accuracy. This may not be of transcendental importance in analysing data for an individual country, where changes over time are of more interest than absolute magnitudes. On the other hand, the usefulness of regional data may be seriously prejudiced, especially where inter-country relationships or comparative levels are concerned. Since, too, the regional aggregates are dominated by a few large countries—Brazil, Argentina, and Mexico—any errors in the estimates for these will inevitably influence the aggregate to a greater extent than errors, for, say, Haiti, Bolivia, or Nicaragua (which are specifically mentioned seeing as their data contain—outwardly at least—the greatest elements of estimation). For a series over time, the incomparabilities are, moreover, greater than those for a single year, the expression of annual data at base-year prices introducing additional errors because of the methods used to deflate the current price data or to extrapolate data compiled for a benchmark period. In the first case, price indicators, and, in the second, quantum indexes, are generally applied (some countries relying on one method, some on the other, and some on a mixture of the two). Invariably, the indexes used are subject to severe limitations, since only in exceptional cases does a country calculate a series especially for deflating or extrapolating its national accounts.

The aggregates shown in terms of exchange rates and of geometrically-crossed purchasing power equivalents in Table 7 must therefore be treated with caution since the summation of country data compiled with widely different methods (and also accuracy) leads to a set of regional estimates in respect of which not all changes can be attributed to variations in the actual expenditure or income levels. Subject to these limitations, the data nevertheless reveal a marked increase in real income or expenditure for the period reviewed—the change being, on a per capita basis, from $308 in 1955 to $356 in 1964 if official exchange rates are used; and from $397 to $460 in terms of purchasing power equivalents.

The sectoral structure of real expenditure is given for the years 1955–64 in Table 8. This indicates clearly that while the overall figures for total and per capita expenditure increased slowly but steadily throughout the period under review, the increase did not apply equally to all sectors. In particular, investment lagged behind private consumption expenditure and percentage-wise represented less in 1962–64 than in preceding years. If absolute levels are considered, per capita investment was no higher in 1964 than in 1957, 1961, or 1962; and only a fraction above that prevailing in other years. The growth rate for this sector was accordingly negligible and indicated that in real terms total investment merely kept pace with the growth of population. On the other hand, the growth rate for per capita private consumption expenditure was 1.6 per cent per annum (notwithstanding substantial year-to-year fluctuations, perhaps due

TABLE 7

LATIN AMERICA[a]: EXPENDITURE ON THE GROSS DOMESTIC PRODUCT 1955–64, IN 1960 DOLLARS

Calculated with exchange rates and with purchasing power equivalents[b]

Year	Total (million 1960 dollars)		Per capita (1960 dollars)	
	With exchange rates	With purchasing power equivalents	With exchange rates	With purchasing power equivalents
1955	53 106	68 455	308	397
1956	55 170	70 972	311	400
1957	58 846	75 137	322	411
1958	61 556	78 864	327	420
1959	63 500	80 452	328	416
1960	67 279	85 850	338	431
1961	70 458	90 390	344	442
1962	73 410	93 584	349	444
1963	75 185	95 747	347	442
1964	79 313	102 461	356	460

[a]Excludes Cuba. Data for some of the countries were estimated in certain years.

[b]Geometrically-averaged equivalents obtained with Latin America and United States weights.

to the usual Latin America practice of calculating this sector as a residual); while for governmental expenditure a slightly faster growth rate, of 1.9 per cent annually, can be discerned.

2. *Country totals*

When individual countries are considered, it will be seen from Table 9 and Graph II that Uruguay was, in the years 1955–57, the country with the highest real expenditure per head of population. It was then superseded by Argentina and, in 1963, by Venezuela as well. In the same way, the substantial gap in expenditure levels between Venezuela and Argentina was steadily reduced until in 1963 Venezuela became (temporarily at least) the country with the highest level—Argentina regaining that role in 1964. Chile remained throughout the period in fourth place with an expenditure level ranging from $600 to $700 —though Mexico and Panama showed more rapid growth and substantially reduced the margin in their income levels vis-à-vis Chile (both approaching $600 per capita in 1964). Costa Rica, whose per capita expenditure in 1955 had roughly equalled that of Mexico and Panama, had a much slower rate of growth, per capita expenditure reaching only $490 in 1963–64. This was nevertheless sufficient to maintain its level well ahead of Colombia and Peru, both of which (despite a comparatively rapid growth rate for Peru) remained in the $300–$400 bracket. The ranking of these two countries, however, changed—Peru being the higher from 1960 onwards.

TABLE 8

LATIN AMERICA[a]: MAIN SECTORS OF EXPENDITURE, 1955–64, IN 1960 DOLLAR EQUIVALENTS[b]

Year	Consumption		Fixed investment	Inventories	Trade balance	Total
	Private	Public				
	(a) *Total (million 1960 dollars)*					
1955	49 323	10 261	9 014	371	−517	68 455
1956	50 403	10 996	9 581	211	−218	70 972
1957	54 698	11 185	10 067	483	−1 294	75 137
1958	57 653	11 683	10 107	−43	−533	78 864
1959	57 607	11 977	9 927	499	442	80 452
1960	60 857	13 405	10 834	643	112	85 850
1961	63 729	14 121	11 481	597	461	90 390
1962	65 984	14 740	11 495	620	747	93 584
1963	67 714	15 215	11 521	316	980	95 747
1964	73 107	15 446	12 258	984	663	102 461
	(b) *Per capita (1960 dollars)*					
1855	286	59	52	2	−3	397
1956	284	62	54	1	−1	400
1957	299	61	55	3	−7	411
1958	307	62	54	—	−3	420
1959	298	62	51	2	2	416
1960	306	67	54	3	1	431
1961	311	69	56	3	2	442
1962	313	70	55	3	4	444
1963	312	70	53	1	4	442
1964	328	69	55	4	3	460

[a]Excluding Cuba.

[b]Based on a geometric average of results obtained for each sector with Latin American and United States weights.

The trends for Brazil, Ecuador, El Salvador, and Guatemala were all very similar, per capita expenditure increasing from approximately $250 in 1955 to $310 to $320 in 1964. Paraguay and Nicaragua on the other hand failed to show any significant increase, and as a result, expenditure in these countries was more or less equalled in 1964 by that of the Dominican Republic whose level had been some ten per cent lower in 1955. Honduras and Bolivia both showed a slight increase, though the figures for the latter are largely estimated and hence unreliable. The same remarks apply to Haiti where a virtual stagnation in expenditure (at the $95 mark) may or may not be accurate.

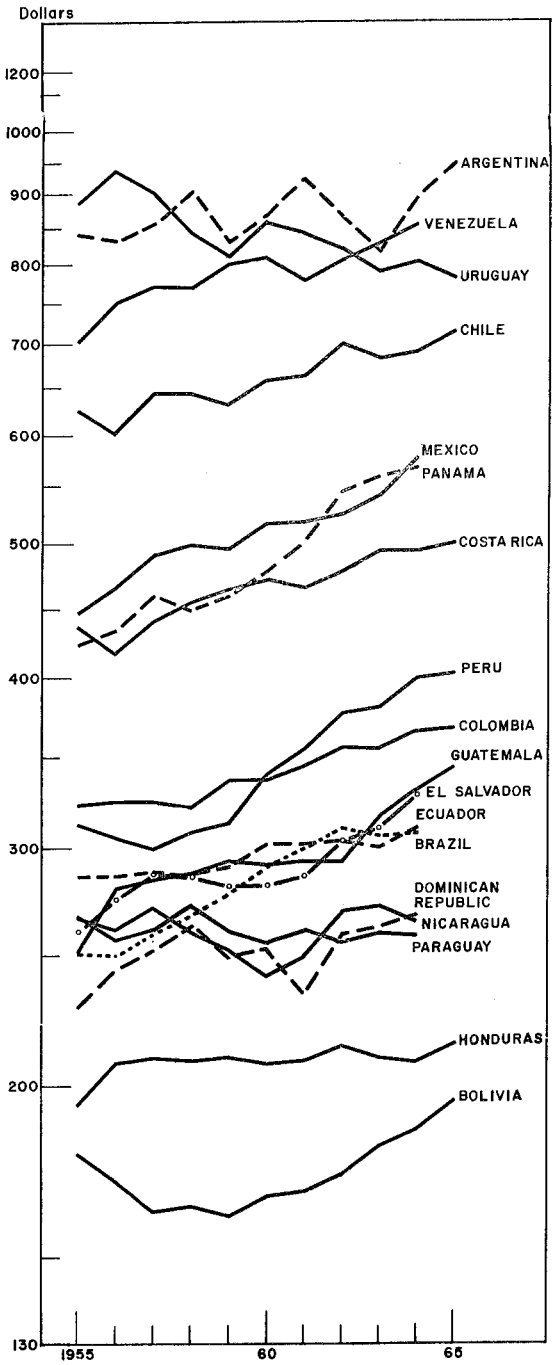
The changes indicated above signify a certain amount of divergence in per capita growth rates; and while the average for the region was 1.6 per annum, in the case of Panama, Guatemala, Peru, Mexico, and El Salvador higher rates, approximating 2.5 to 3 per cent, applied. In the same way, Brazil, Venezuela, and the Dominican Republic increased their real expenditure levels 2 per cent annually. Against this, for Colombia, Costa Rica, Chile, Honduras, and Ecuador, the increase was only 1 per cent; Nicaragua, Bolivia, and Argentina showed

FIGURE II

LATIN AMERICA: REAL PER CAPITA GROSS DOMESTIC PRODUCT, 1955–65[a]

(dollars at 1960 purchasing power)

Semi-logarithmic scale



[a]Based on figures from Table 9b.

TABLE 9

REAL EXPENDITURE ON THE GROSS DOMESTIC PRODUCT, 1955–64, IN 1960 DOLLAR EQUIVALENTS[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *Total (million 1960 dollars)*					
Argentina	15 875	16 033	16 819	18 012	16 916	17 947	19 477	18 555	17 790	19 612
Bolivia	593	576	565	580	581	608	629	662	710	747
Brazil	15 228	15 554	16 613	17 639	18 903	20 305	21 749	23 002	23 432	24 224
Chile	4 305	4 268	4 663	4 773	4 822	5 128	5 306	5 718	5 722	5 922
Colombia	4 334	4 477	4 602	4 700	5 041	5 203	5 475	5 786	5 961	6 295
Ecuador	1 050	1 082	1 129	1 153	1 216	1 312	1 354	1 397	1 421	1 511
Paraguay	417	413	426	455	450	450	472	478	496	513
Peru	2 741	2 759	2 764	2 921	3 050	3 387	3 648	3 988	4 163	4 509
Uruguay	2 075	2 226	2 169	2 050	1 991	2 124	2 122	2 100	2 053	2 105
Venezuela	4 279	4 737	5 097	5 257	5 670	5 933	5 920	6 347	6 736	7 193
Costa Rica	427	425	470	506	536	568	582	622	668	694
Dominican Republic	591	652	696	741	737	766	734	840	880	926
El Salvador	558	608	653	666	678	698	730	809	848	927
Guatemala	815	929	984	1 022	1 071	1 094	1 136	1 159	1 295	1 387
Haiti	360	391	363	388	370	390	386	411	421	431
Honduras	321	355	372	382	397	406	422	447	455	465
Mexico	13 782	14 756	15 961	16 829	17 210	18 688	19 342	20 266	21 623	23 894
Nicaragua	330	338	360	358	358	359	381	424	447	450
Panama	374	393	429	432	454	489	531	573	625	656
Total Latin America[b]	*68 455*	*70 972*	*75 137*	*78 864*	*80 542*	*85 850*	*90 390*	*93 584*	*95 747*	*102 461*

TABLE 9 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *Per capita (1960 dollars)*					
Argentina	840	833	857	902	832	868	927	869	820	891
Bolivia	178	170	163	164	161	165	166	171	180	185
Brazil	252	250	259	266	277	289	300	308	305	307
Chile	627	605	645	644	635	658	665	699	684	691
Colombia	322	324	324	321	335	336	344	354	354	364
Ecuador	285	285	287	285	291	304	304	305	301	310
Paraguay	267	256	259	270	261	255	261	257	260	262
Peru	312	306	299	308	313	338	353	375	380	399
Uruguay	884	937	904	844	810	853	841	822	794	804
Venezuela	707	751	776	770	801	809	780	808	828	854
Costa Rica	434	415	439	454	463	471	464	477	492	492
Dominican Republic	228	244	253	261	251	253	234	259	263	267
El Salvador	260	275	287	284	280	280	284	305	310	328
Guatemala	250	278	285	288	293	291	294	291	316	329
Haiti	97	103	94	98	91	94	91	95	95	95
Honduras	193	208	210	209	210	208	209	214	210	208
Mexico	449	466	488	498	493	518	519	526	542	579
Nicaragua	265	262	271	260	252	243	249	268	273	265
Panama	422	432	458	449	458	474	499	545	558	568
Total Latin America[b]	*397*	*400*	*411*	*420*	*416*	*431*	*442*	*444*	*442*	*460*

[a]Calculated for 1960 on the basis of geometrically-averaged purchasing power equivalents, using Latin American and United States weights.
[b]Excludes Cuba.

little overall change (though with substantial year-to-year fluctuations); Paraguay and Haiti had a slight tendency to decline; while Uruguay is noteworthy as being the only country where real per capita expenditure declined sharply—this being most pronounced in the years 1962–64 as a result of the economic recession experienced by that country.

The growth rates given above may be compared with increases of 1.5 per cent over the same years for the United States—per capita income of this country being $2719 in 1955 and $3093 in 1964. In the same way, for Western Europe, the rate of increase was 2.6 and 2.9 per cent in the United Kingdom and Sweden; it ranged from 3.0 to 3.9 per cent in Switzerland, Ireland, the Netherlands, Belgium, and Norway; from 4.0 to 4.9 per cent in Denmark and France; and was over 6 per cent in Italy and Western Germany. Elsewhere, in Canada the rate was 1.9 per cent; in Australia 2.2 per cent; and in Japan a high of 13.7 per cent.[13] Consequently in real terms, the spread in income levels between Latin America and non-Latin American countries increased noticeably in the period under review. In Italy for instance, 1955 real expenditure (at prices of 1960) was only $690 per capita—a figure much lower than that of $880 estimated for Uruguay and Argentina, and roughly equal to the level of $710 for Venezuela; by 1964 with $1070, Italy was almost twenty per cent higher than any of the other three. In the same way, while per capita real expenditures for countries such as Belgium, Denmark, France, Germany, Norway, etc. were in 1955 slightly more than three times the average for Latin America, by 1964 the European levels were over four times as high (rising to almost five times in the case of Western Germany). Only vis-à-vis the United States, Canada, and to some extent the United Kingdom, did the spread in income levels remain about the same—due, very probably, to the high degree of dependence of Latin American economies on conditions prevailing in those countries.

3. *Private consumption expenditure*

The relatively large share of the gross domestic product devoted to private consumption expenditure signified that in most respects the trends for total expenditure were reflected in those for the private consumption sector. That is to say, the rates of growth were, generally speaking, similar and the relative importance of each country within the region was the same. Once again, the highest per capita levels corresponded to Argentina and Uruguay, Uruguay ranking first in certain years (1956, 1957, and 1960) and Argentina in the remainder. For both countries, however, consumption expenditure in the private sector tended to stagnate and 1963–1964 levels were lower than those prevailing in 1955–56. A somewhat similar situation applied to Chile and Venezuela where increases in the years 1955–57 were followed by periods of stagnation or decline. In contrast the trend was consistently upwards in the Dominican Republic, Mexico, Panama, and Peru—also, to a lesser degree (and with some fluctuations), in Colombia, Costa Rica, El Salvador, and Guatemala. In the case of Brazil, Ecuador, Honduras, and Paraguay, the situation showed little

13. All figures relate to the years 1955 and 1964 only. Intervening years are ignored.

change; likewise Bolivia and Nicaragua, though data for these countries are largely estimated and must be considered only as very rough approximations. Similarly, the marked irregularity which characterized expenditure levels in many countries suggests that this might have been due not only to economic factors but also to the method generally adopted of calculating private consumption expenditure as a residual (thus including the net errors of other sectors plus the global error in the gross domestic product).

Comparing private consumption expenditure in Latin America with that for other parts of the world, it will be found that the increase in those extra-regional countries studied (see Table 13) was in the majority of cases substantially greater than that encountered for the region. In Austria, Italy, Western Germany, and Japan, for instance, the per capita level in 1964 was 50 to 75 per cent higher than that prevailing in 1955; in Belgium, Denmark, France, the Netherlands, Norway, and Portugal, the increase was between 25 and 50 per cent; in Canada and the United Kingdom roughly 20 per cent. On the other hand, for Latin America, no country had a private consumption expenditure level 50 per cent higher in 1964 than in 1955; and in only four countries did the increase exceed 25 per cent. At the other extreme were those countries—Uruguay, Paraguay, and Ecuador—where no increase at all took place, while for six countries the increase was limited to a maximum of 15 per cent (this figure also constituting the average increase for the region as a whole). Once again, these results confirm the finding that, even though per capita consumption expenditure on the whole increased for Latin America, this did not apply to all the countries; furthermore, the increase was much below that encountered in, say, Western Europe or Japan and the spread in the levels for the respective regions became steadily greater.

4. *Governmental consumption expenditure*

As already observed, expenditure in the governmental sector increased at a slightly faster pace than that of the private sector, particularly in the years 1959–60 when abrupt increases for Brazil, Venezuela, Panama, and Mexico (less so, Argentina and Chile) were reflected in an increase of over ten per cent in the regional total. Further increases took place in later years, but only in keeping with the demographic expansion. In consequence, the per capita level in 1960–64 remained fairly steady with a figure of $67–$70, as against $59–$62 at the beginning of the period.

Of the individual countries, Uruguay and Argentina with real expenditures of over $150 per capita were those with the highest levels (Argentina, however, showing a decline in 1963–64 when the figure dropped to $140). Chile remained stable with a level of around $100. On the other hand, increases applied to Venezuela (from $90 to $110), to Costa Rica and Panama (from $77 to $100), and to Brazil, Ecuador, Peru, El Salvador, Mexico, and the Dominican Republic where levels between $30 and $50 per capita prevailed.

Faster rates of growth were once again shown by non-Latin American countries—especially Japan, Portugal, Western Germany, Italy, and Belgium where increases of 45–90 per cent for 1964 (in relation to 1955) greatly exceeded those for Latin American countries. There were nevertheless some extra-

TABLE 10

REAL PER CAPITA PRIVATE CONSUMPTION EXPENDITURE, 1955–64, IN 1960 DOLLAR EQUIVALENTS[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Argentina	631	612	641	677	602	615	670	633	610	661
Bolivia	127	127	125	125	123	123	126	127	133	136
Brazil	176	167	176	189	190	194	195	202	197	201
Chile	441	437	492	485	468	500	510	498	507	505
Colombia	221	213	215	211	222	232	234	246	245	253
Ecuador	185	187	188	191	187	190	186	186	181	184
Paraguay	207	197	194	200	196	187	191	188	195	198
Peru	215	210	207	212	219	217	225	244	263	276
Uruguay	631	675	674	581	551	626	600	611	560	586
Venezuela	352	374	460	417	449	401	388	396	401	428
Costa Rica	310	307	315	313	335	330	323	327	334	334
Dominican Republic	142	152	155	159	151	153	146	180	187	193
El Salvador	196	198	207	200	191	207	202	221	227	244
Guatemala	207	216	224	230	231	225	221	222	238	252
Haiti	75	75	73	76	71	75	74	77	77	77
Honduras	139	141	150	152	146	142	146	146	150	149
Mexico	361	377	400	410	401	424	424	428	441	473
Nicaragua	199	202	203	199	181	189	187	201	201	189
Panama	280	290	323	337	352	340	350	359	377	403
Total Latin America[b]	*286*	*284*	*299*	*307*	*298*	*306*	*311*	*313*	*312*	*328*

[a]Based on geometrically-averaged purchasing power equivalents for 1960.
[b]Excludes Cuba.

TABLE 11

REAL PER CAPITA GOVERNMENTAL CONSUMPTION EXPENDITURE, 1955–64, IN 1960 DOLLAR EQUIVALENTS[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Argentina	140	153	144	146	145	156	157	148	142	138
Bolivia	30	29	29	29	29	31	34	36	38	39
Brazil	48	53	52	51	54	62	65	67	69	66
Chile	114	107	111	108	107	111	110	131	113	109
Colombia	44	41	36	36	36	38	39	42	43	48
Ecuador	63	62	61	59	62	70	73	73	70	75
Paraguay	46	46	39	45	39	38	37	37	36	35
Peru	56	59	57	57	56	59	66	67	68	74
Uruguay	156	154	156	153	148	149	150	155	153	151
Venezuela	90	85	87	115	101	112	109	107	114	107
Costa Rica	77	76	77	80	81	92	86	90	104	103
Dominican Republic	44	49	53	59	59	54	51	62	62	59
El Salvador	36	37	45	45	45	44	47	47	45	45
Guatemala	29	32	34	34	37	36	37	33	31	32
Haiti	19	20	16	15	14	13*	13*	13*	13*	13*
Honduras	28	38	34	38	36	37	38	35	35	34
Mexico	31	32	34	35	34	37	37	39	41	44
Nicaragua	35	35	35	34	33	32	34	33	34	35
Panama	79	85	79	80	80	84	87	97	100	101
Total Latin America[b]	*59*	*62*	*61*	*62*	*62*	*67*	*69*	*70*	*70*	*69*

[a]Based on geometrically-averaged purchasing power equivalents for 1960.
[b]Excludes Cuba.

regional territories—for instance, the Netherlands, and the United Kingdom—where the increase was of rather limited dimensions, while in the case of Canada no increase at all is apparent—thus resembling the situation encountered in Argentina, Chile, and Uruguay.

5. *Fixed investment*

In real terms, fixed investment represented in most years about 18 per cent of the total Latin American gross domestic product, the percentage being slightly lower in the 1959–61 period. The regional figure was, however, influenced considerably by the fluctuation which applied to investment in Venezuela and to the conflicting trends displayed by Mexico, Argentina and Brazil, particularly during the years 1962–64. (See Table 12.) In Venezuela's case, the per capita level approximated $230–$240 in the years 1955–59, fell to $143 in 1961–63 but rose again to $166 in 1964. For Argentina, it rose from $76 in 1955 to $106 in 1961, falling to $78 in 1963 when the economic recession for that country was reflected in all sectors of expenditure. For Brazil, the level rose from $26 in 1955 to $36 in 1961, declining to $30 in 1964 when economic difficulties affected its investment also. In Mexico, on the other hand, the increase was sustained throughout the period, the level rising from $53 in 1966 to $73 nine years later.

If some of the intervening years are ignored, an expansion in *per capita* investment can also be discerned for Chile and Panama. This was not the case for remaining countries—the per capita level being more or less stable for Colombia, Ecuador (until 1964), Paraguay (with certain exceptions), Costa Rica and Honduras. For the Dominican Republic, Nicaragua, Peru, El Salvador and Guatemala, an undulating pattern prevailed, since periods of expansion were offset by declines in subsequent years. In the worst position was Uruguay where the trend was continually downwards—the level of $58 per capita in 1964 being little more than half that of $110 which prevailed in 1955. In consequence, while in 1955 Uruguay ranked as the country with the second highest level of per capita fixed investment (being exceeded only by Venezuela), it was by 1964 in eighth position, preceded by Venezuela, Argentina, Panama, Costa Rica, Chile, Mexico and Colombia. Haiti, with an estimated investment level of only $6 per head in real terms, remained easily in last position, being exceeded (in ascending order) by Bolivia, Paraguay, Brazil, Honduras, El Salvador, Nicaragua, Guatemala, Ecuador, Peru and the Dominican Republic—the sequence of these countries being very little different in 1964 than in 1955.

For the countries in other parts of the world which were studied, fixed investment increased at a much more rapid pace—Japan for instance, having a 1964 level which was four times higher than that prevailing in 1955. In the same way, an increase of 50 to 100 per cent for the same years characterized investment in Austria, Denmark, France, Western Germany, Italy, the Netherlands and the United Kingdom. These increases greatly exceeded anything apparent for a Latin American country (a maximum of 43 per cent being registered for Panama with slightly lower rates for Paraguay, Guatemala, and Mexico). It may also be noted that no extra-regional country covered by the

TABLE 12

REAL PER CAPITA FIXED INVESTMENT, 1955–64, IN 1960 DOLLAR EQUIVALENTS[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Argentina	76	78	83	90	70	95	106	94	78	81
Bolivia	22	15	14	14	16	18	14	20	22	21
Brazil	26	27	29	30	32	34	36	34	34	30
Chile	59	48	48	54	44	58	75	77	73	73
Colombia	80	76	63	58	62	64	68	69	63	64
Ecuador	38	37	36	33	37	39	40	37	36	45
Paraguay	21	19	32	31	27	30	31	29	28	29
Peru	50	60	62	45	40	42	51	56	51	53
Uruguay	110	101	101	81	81	87	86	79	67	58
Venezuela	229	239	243	231	228	174	142	143	144	166
Costa Rica	70	71	81	75	70	67	69	70	71	73
Dominican Republic	52	55	56	58	39	27	22	35	46	55
El Salvador	38	51	46	40	40	39	33	32	36	42
Guatemala	32	49	52	45	40	33	34	34	37	44
Haiti	7	8	8	7	6	6*	6*	6*	6*	6*
Honduras	38	36	38	32	31	32	29	36	37	36
Mexico	53	57	59	56	55	62	61	59	64	73
Nicaragua	46	42	44	36	32	29	32	42	44	47
Panama	54	62	72	68	67	65	75	79	90	77
Total Latin America[b]	*52*	*54*	*55*	*54*	*51*	*54*	*56*	*55*	*53*	*55*

[a]Based on geometrically-averaged purchasing power equivalents for 1960.
[b]Excludes Cuba.

comparison showed a decline—the lowest overall increase being 15 per cent for Canada, and 7 per cent for the United States. (See Table 13.)

Using once again the example of Italy (since its average income level in 1960 resembled that of the more well-to-do countries in Latin America), calculations made by the author indicate that the 1955 real investment level of $135 per capita (at 1960 prices) was between that of Venezuela ($229), Uruguay ($110) and Argentina ($81). By 1964, however, Italy's investment level had risen to $227 per capita while Venezuela's declined to $166, Uruguay's declined to $58 and Argentina's was very little changed. The author's estimates for other parts of Western Europe (extrapolating to 1960 the 1955 purchasing power equivalents calculated by Gilbert and Associates) indicated increases along similar lines. Thus, in Denmark, France, the United Kingdom, Belgium and the Netherlands, 1955 real investment (at 1960 prices) ranged from $195 to $260 per capita; by 1964 the figures had risen to a minimum of $330 and at a high extreme to $410. For Germany, a still more accentuated increase—from $275 to $500—took place (though to a certain extent this was due to the inclusion of the Saar and West Berlin from 1960 on). If, then, the Western European countries studied can be considered representative of the industrially-developed world, it is obvious that while investment for the latter showed an appreciable expansion, in Latin America the situation stagnated and the gap between the two progressively widened. An exception is undoubtedly the United States since per capita real investment there was little different in 1964 from 1955—once again suggesting a link between the Latin American situation and that prevailing in the United States.

6. *Other expenditure sectors*

For *changes in inventories*, the Latin American data are of such dubious validity that little purpose is served in analysing levels or trends. (In many cases no figures of any kind were available; in others, the data refer only to a limited number of commodities.) The available data are not presented in this paper but are included in figures within the expenditure totals for each country and for the region as a whole.

In the same way, figures are not shown for the *foreign trade balance* since its movement was highly erratic and the magnitudes generally small. An exception was Venezuela where in per capita terms it ranged from $+131 to $+158 in the years 1960–64 (values being much lower in earlier years, as for example 1957 when a nadir of $-2 was registered).

A summary of the changes which occurred for each main sector in Latin America and elsewhere between 1955, 1960 and 1964 is shown in index form in Table 13.

G. Historical Series: 1955–1964 Expenditure Expressed in Dollars of Current Purchasing Power

In the tables so far presented, all values have been expressed in dollars with the purchasing power equivalence which applied in the year 1960. The comparison of data over a period such as 1955–64 thus provided a quantitative

series in which the distortions due to price changes were ostensibly removed.[14] For some purposes, it may not be convenient to use 1960 as the reference point, nor to have data expressed uniquely at the prices of a selected year. Accordingly, a further set of data has been constructed in which the national accounts aggregates are expressed in dollars at the parity prevailing in each particular year.

Since both the dollar and the Latin American currencies changed in purchasing power from one year to the next, it is obvious that these data will differ from those at 1960 prices by factors which reflect the changes in prices of the United States relative to changes in the prices (converted at exchange rates prevailing in each year) of the Latin American country. Thus, when both prices and exchange rates were stable in a Latin American country (e.g., Panama) or when Latin American price movements were accompanied by a corresponding revaluation in the exchange rate, the only[15] difference between the dollar series at 1960 prices and the dollar series at current prices would be due to the moderate inflation of the United States price level (and the consequent devaluation of the dollar) which applied in the period under review. More commonly, however, price changes in Latin American countries occurred without a compensatory modification in the exchange rate—any currency revaluation differing in extent and in timing from the movement of internal prices. Accordingly, an additional factor due to fluctuations in the external purchasing power of the Latin American currency is introduced, which has a consequent impact on dollar values when these are expressed in current (as distinct from constant) prices.

As price data were not available for the calculation of purchasing power equivalents in each year, the only practical expedient (given the resources available) was to rectify the 1960 (and 1962) equivalents to take account of overall price changes for each sector of expenditure. Price indexes were accordingly obtained for each expenditure group or sub-group (e.g. meat, fruit, transportation, government purchases, construction, etc.), and a revaluation was made of the market baskets used in the original 1960 (and 1962) calculations. When these were compared with the corresponding basket in the United States, a series of purchasing power equivalents was obtained at the expenditure sector level for each year based on (a) Latin American quantity weights; (b) United States quantity weights; and (c) a geometric average of the two. The dollar values based on the geometrically-crossed equivalents are presented as regional aggregates in Table 14—figures at constant (1960) prices being at the same time shown in order to illustrate the relationship of the two series in the various years.

In terms of current prices, the regional total rose from $64 thousand million in 1955 to $86 thousand million in 1960 and $112 thousand million in 1964. This signified an increase in per capita expenditure from $370 in 1955 to $431 in 1960 and $501 in 1964. These levels, it will be observed, were slightly lower than those in constant dollars prior to 1960,[16] but slightly higher

14. Unfortunately this was not always true—particularly when values at base year prices were obtained by applying inappropriate price indexes to current value series—or vice versa.

15. Differences due to statistical inaccuracies—or to the incompatibility of the national accounts data and the indicators used for extrapolation or deflation purposes—are ignored.

16. 1958 was an exception, due mainly to eccentricities in the data for Brazil.

TABLE 13

CHANGES IN THE LEVEL OF REAL PER CAPITA EXPENDITURE IN SELECTED COUNTRIES, 1955–64[a]

(Indexes: 1955 = 100)

Country	1960				1964			
	Consumption		Fixed investment	Total[b]	Consumption		Fixed investment	Total[b]
	Private	Public			Private	Public		
Austria	127	114	133	128	149	128	155	146
Belgium	110	119	118	110	125	147	143	131
Canada	108	94	102	104	119	98	115	118
Denmark	115	111	153	121	136	133	210	143
France	115	119	130	120	137	128	172	140
Western Germany	138	134	143	136	163	170	184	159
Italy	120	129	147	128	153	150	168	155
Japan	133	133	237	154	176	191	399	223
Netherlands	113	98	119	115	136	108	150	130
Norway	112	115	101	113	127	141	127	135
Portugal	121	123	163	123	143	173	198	153
United Kingdom	112	97	130	111	122	105	163	123
United States	106	101	96	102	117	112	107	114

TABLE 13 *(Concluded)*

Country	1960				1964			
	Consumption		Fixed investment	Total[b]	Consumption		Fixed investment	Total[b]
	Private	Public			Private	Public		
Latin America[c]	*107*	*114*	*104*	*109*	*115*	*117*	*106*	*116*
Argentina	98	111	125	103	105	99	108	106
Brazil	110	129	131	115	114	138	115	122
Chile	113	97	98	105	114	96	124	110
Colombia	105	86	80	104	114	109	80	113
Ecuador	103	111	103	107	100	119	118	109
Paraguay	90	83	143	96	96	76	138	98
Peru	101	105	84	108	128	132	106	128
Uruguay	99	96	79	96	93	97	53	91
Venezuela	114	124	76	114	122	119	73	121
Costa Rica	106	119	96	108	108	134	104	113
Dominican Republic	108	123	52	111	136	134	106	117
Guatemala	109	124	103	116	122	110	138	132
Honduras	102	132	84	108	107	121	95	108
Mexico	117	119	117	115	131	142	138	129
Panama	121	106	120	112	144	128	143	135

[a]Based on purchasing power equivalents established for 1960 and applied to data at 1960 prices. (A somewhat different methodology applied to Latin American and non-Latin American countries.)

[b]Includes changes in inventories and the foreign trade balance.

[c]Includes estimates for Bolivia, El Salvador, Haiti and Nicaragua. Excludes Cuba.

TABLE 14

LATIN AMERICA[a]: EXPENDITURE ON THE GROSS DOMESTIC PRODUCT, 1955–64 IN CURRENT AND CONSTANT (1960) DOLLARS

Calculated with geometrically-crossed purchasing power equivalents[b]

Year	Total (million dollars)		Per capita (dollars)	
	In current dollars	In 1960 dollars	In current dollars	In 1960 dollars
1955	63 942	68 455	370	397
1956	69 377	70 972	391	400
1957	74 241	75 137	406	411
1958	79 817	78 864	425	420
1959	80 929	80 452	418	416
1960	85 850	85 850	431	431
1961	91 340	90 390	446	442
1962	98 376	93 584	467	444
1963	100 538	95 747	464	442
1964	111 676	102 461	501	460

[a]Excludes Cuba. Data for some countries were estimated in certain years.

[b]Obtained by crossing equivalents using Latin American and United States weights.

thereafter—a result to be expected because of the moderate price inflation in the United States during the period under review. There seemed nevertheless to be a tendency for Latin American prices in recent years to rise more rapidly than those of the United States—the price index implicit in the relationship of the current and constant value data suggesting that by 1964 the price level for Latin America had increased 9 per cent relative to 1960, as against a 5 per cent increase for the United States. (See Table 15.) Too much significance cannot, however, be attached to these differences since the Latin American total is a composite in which countries had a varying importance in each year (e.g. in 1963, Argentina constituted a smaller proportion of the total, and Mexico a larger one than in any of the earlier years). Furthermore, different methods of calculation were used in the individual countries in order to obtain expenditure data in current and constant prices. As a result the implicit price deflator has a rather erratic movement which limits its usefulness in measuring temporal price changes.

For individual countries, the trends of expenditure in current and constant (1960) prices were for the most part so similar that no useful purpose would be served by analysing them in detail. The principal series are therefore presented in Table 16 and Graph III, without comment.

In order to indicate, however, what changes took place when Latin America expenditure levels were related to that of the United States, a further table has

17. Note however that 1955 data excluded the Saar and West Berlin.

TABLE 15

LATIN AMERICA[a]: INDEXES OF EXPENDITURE ON THE GROSS DOMESTIC PRODUCT, IN DOLLARS, 1955–64

Expressed at current and constant (1960) prices[b]

(1960 = 100)

Year	Value (Based on current dollars)	Quantum (Based on 1960 dollars)	Price	
			Implicit price deflator[c]	U.S.A. consumer price index[d]
1955	74.5	79.7	93.4	91.2
1956	80.8	82.7	97.8	92.2
1957	86.5	87.5	98.8	95.5
1958	93.0	91.9	101.2	98.0
1959	94.3	93.7	100.6	99.0
1960	100.0	100.0	100.0	100.0
1961	106.4	105.3	101.0	101.0
1962	114.6	109.0	105.1	102.9
1963	117.1	111.5	105.0	103.9
1964	130.1	119.3	109.0	104.9

[a]Excluding Cuba.

[b]Obtained with geometrically-averaged purchasing power equivalents, using Latin American and United States weights.

[c]Obtained by dividing the regional total in current dollars by the corresponding total in 1960 dollars.

[d]Sources: *International Financial Statistics*, I.M.F. (Washington D.C.).

been constructed in which per capita data for each country are expressed in index form with the United States expenditure level as base. These data are presented in Table 17.

From this, it is clear that per capita expenditure in Latin America progressed at very much the same rate as in the United States—the regional averages being between 15 to 16 per cent of the corresponding United States figure in virtually all years. There were however notable exceptions—countries with an increasing index, and hence faster growth rates, being Paraguay, Peru, Mexico and Panama—those with a declining index (or slower growth rates) Argentina, Brazil (particularly in 1962–64), Costa Rica, Guatemala and (from 1957) Venezuela. For Uruguay, despite the economic difficulties of that country the index was surprisingly stable and even rose in 1964 (though this may be due to problems in measurement). In this connection it must be emphasized that, as with the constant value series, many of the apparent anomalies result from inadequate estimation methods, especially when current and constant values are derived one from the other with the aid of unsuitable price or quantum indexes.

The lack of satisfactory equivalents of purchasing power for other countries in the world also makes a comparison between income levels in those countries and Latin American exceedingly difficult. An attempt has nevertheless been

TABLE 16

THE REAL GROSS DOMESTIC PRODUCT OF LATIN AMERICAN COUNTRIES, 1955–64 IN CURRENT DOLLAR EQUIVALENTS[a]
Expressed at parities prevailing in each year

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *Total (million dollars)*					
Argentina	13 974	15 304	15 793	17 788	17 533	17 947	18 896	18 734	18 230	22 111
Bolivia	642*	642*	632*	619	561	608	633	641	712	734
Brazil	15 621	16 906	17 443	19 402	19 636	20 305	21 406	23 647	22 964	23 845
Chile	4 112	4 169	4 262	4 545	4 682	5 128	5 484	6 233	6 321	6 701
Colombia	3 898	4 144	4 452	4 547	4 790	5 203	5 544	6 239	6 110	6 616
Ecuador	912	998	1 070	1 114	1 179	1 312	1 347	1 429	1 472	1 566
Paraguay	290	317	353	400	407	450	466	499	544	557
Peru	2 437	2 621	2 740	2 963	3 122	3 387	3 767	4 170	4 524	4 933
Uruguay	1 774	1 824	1 935	1 934	1 834	2 124	2 308	2 400	2 523	2 852
Venezuela	4 113	4 731	5 728	5 823	5 945	5 933	6 399	6 756	7 158	7 712
Costa Rica	409	428	472	513	529	568	586	630	660	686
Dominican Republic	548	632	712	741	711	766	772	917	1 004	1 093
El Salvador	498*	567*	576*	661	653	698	728	827	877	959
Guatemala	766	924	1 006	1 019	1 049	1 094	1 134	1 217	1 340	1 420
Haiti*	317	382	340	368	361	390	380	431	425	395
Honduras	279	344	354	380	391	406	419	463	480	493
Mexico	12 717	13 765	15 629	16 215	16 757	18 688	20 149	22 109	24 017	27 769
Nicaragua*	285	311	330	347	329	359	387	442	511	548
Panama	348	368	414	438	460	484	535	592	666	686
Latin America[b]	63 942	69 377	74 241	79 817	80 929	85 850	91 340	98 376	100 538	111 676

TABLE 16 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *Per Capita (dollars)*					
Argentina	740	795	805	890	863	868	899	877	840	1004
Bolivia	193*	189*	183*	175	155	165	168	166	180	182
Brazil	258	271	272	293	288	289	298	317	299	303
Chile	599	591	589	613	616	658	687	762	755	782
Colombia	290	300	313	311	318	336	348	381	363	382
Ecuador	247	263	272	275	282	304	302	312	311	321
Paraguay	186	196	214	237	236	255	259	268	285	285
Peru	277	291	297	313	320	338	365	392	413	437
Uruguay	755	768	806	796	746	853	897	939	976	1090
Venezuela	680	750	872	853	840	809	841	860	880	916
Costa Rica	416	418	442	461	457	471	467	482	486	486
Dominican Republic	212	237	259	261	242	253	246	283	300	315
El Salvador	232*	257*	253*	282	270	280	284	312	321	340
Guatemala	235	276	292	287	287	291	293	306	327	337
Haiti*	85	100	88	93	89	94	90	99	96	87
Honduras	168	201	200	208	207	208	208	222	222	220
Mexico	414	434	478	480	480	518	541	574	602	673
Nicaragua*	229	242	248	252	231	243	253	279	312	323
Panama	393	405	442	455	464	474	508	545	595	595
Latin America[b]	370	391	406	425	418	431	446	467	464	501

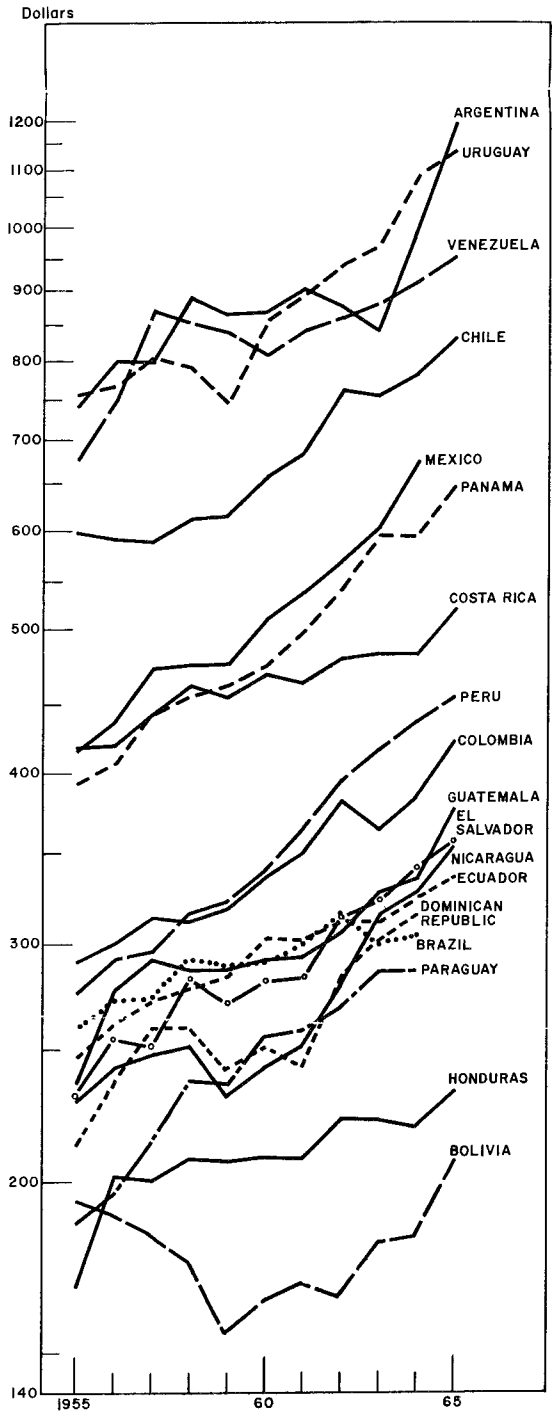
[a]Obtained by summating real expenditure estimates for all sectors, in terms of purchasing power equivalents.
[b]Excludes Cuba.
*Estimated

FIGURE III

LATIN AMERICA: REAL PER CAPITA GROSS DOMESTIC PRODUCT, 1955–65[a]

(dollars at each year's purchasing power)

Semi-logarithmic scale



[a]Based on Figures from Table 16.

TABLE 17

REAL PER CAPITA EXPENDITURE IN LATIN AMERICA COMPARED WITH THAT OF THE UNITED STATES, 1955–64
(Calculated in current dollars in accordance with the parity prevailing in each year)[a]

(Indexes: USA = 100)

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
United States	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Argentina	30.9	32.0	31.3	34.7	31.7	31.2	31.8	29.4	27.2	31.0
Bolivia	8.1	7.6	7.1	6.8	5.7	5.9	5.9	5.6	5.8	5.6
Brazil	10.8	10.9	10.6	11.4	10.6	10.4	10.6	10.6	9.7	9.3
Chile	25.0	23.8	22.9	23.9	22.6	23.7	24.3	25.6	24.5	24.1
Colombia	12.1	12.1	12.2	12.1	11.7	12.1	12.3	12.8	11.8	11.8
Ecuador	10.3	10.6	10.6	10.7	10.4	10.9	10.7	10.5	10.1	9.9
Paraguay	7.8	7.9	8.3	9.2	8.7	9.2	9.2	9.0	9.2	8.8
Peru	11.6	11.7	11.5	12.2	11.8	12.2	12.9	13.2	13.4	13.5
Uruguay	31.5	30.9	31.3	31.0	27.4	30.7	31.8	31.5	31.6	33.6
Venezuela	28.4	30.2	33.9	33.3	30.8	29.2	29.8	28.8	28.5	28.3
Costa Rica	18.2	17.3	18.0	18.2	16.7	16.9	16.5	16.2	15.8	15.0
Dominican Republic	8.8	9.5	10.1	10.2	8.9	9.1	8.7	9.5	9.7	9.7
El Salvador	9.7	10.4	9.8	11.0	9.9	10.1	10.1	10.5	10.4	10.5
Guatemala	9.8	11.1	11.3	11.2	10.5	10.5	10.4	10.3	10.6	10.4
Haiti	3.5	4.0	3.4	3.6	3.3	3.4	3.2	3.3	3.1	2.7
Honduras	7.0	8.1	7.8	8.1	7.6	7.5	7.4	7.4	7.2	6.8
Mexico	17.3	17.5	18.6	18.7	17.6	18.7	19.2	19.3	19.5	20.8
Nicaragua	9.6	9.8	9.6	9.8	8.5	8.8	9.0	9.4	10.1	10.0
Panama	16.4	16.3	17.2	17.7	17.0	17.0	18.0	18.2	19.3	18.3
Latin America[b]	15.5	15.7	15.9	16.6	15.3	15.5	15.8	15.7	15.0	15.4

[a]Obtained by geometrically crossing purchasing power equivalents for each expenditure sector, using Latin American and United States weights.

[b]Excludes Cuba.

made to estimate data in current dollar equivalents for the Western European countries covered by the OEED study: *Comparative National Products and Price levels.* The author's estimates made on this basis indicate that per capita incomes were much closer there to the United States level in 1964 than they were in 1955. Expenditure in Germany, for instance, equalled 71 per cent of the United States figure in 1964 as against 48 in 1955; in Denmark, corresponding percentages were 65 as against 52; in France, 61 as against 49; in Italy, 36 as against 26; and, although in Belgium, Norway, the United Kingdom and the Netherlands, the 1964 percentages of 58, 58, 57 and 53 represented much smaller relative increases (ten per cent in two cases and fifteen to twenty per cent in the others), it was evident that in current dollar equivalents, the gap in real income levels between the countries covered and the United States was gradually reduced, while that for Latin America vis-à-vis the United States remained unchanged. Obviously, then, for Latin America vis-à-vis the Western European countries, the gap steadily widened and a greater real income difference existed in 1964 than had been the case in 1955.

TABLE 18

ROUGH ESTIMATES OF REAL PER CAPITA EXPENDITURE IN SELECTED COUNTRIES 1955, 1960 AND 1964

(Calculated in current dollar equivalents[a])

	In current dollars			Indexes: USA = 100		
Country	1955	1960	1964	1955	1960	1964
United States	2 394	2 775	3 241	100	100	100
Belgium	1 206	1 479	1 867	50	53	58
Denmark	1 250	1 670	2 096	52	60	65
France	1 178	1 595	1 963	49	57	61
Western Germany	1 158	1 813	2 296	48	65	71
Italy	634	890	1 152	26	32	36
Netherlands	1 098	1 431	1 729	46	51	53
Norway	1 255	1 559	1 888	52	57	58
United Kingdom	1 263	1 631	1 853	53	59	57
Latin America[b]	370	431	501	15	15	15

[a]Obtained by geometrically averaging purchasing power equivalents for each year, using Latin American and United States weights.

[b]Excluding Cuba.

La mesure et la comparaison interspaciale des niveaux de revenus réels latino-américains font appel à des techniques fondamentalement différentes de celles habituellement utilisées; lesquelles utilisent les taux de change officiels ou du libre marché selon leur importance relative à une période donnée. Les raisons en sont variées, les principales étant que, dans une région comme l'Amérique Latine, il est bien connu que les prix sont instables, que leur structure diffère nettement de celle d'autres régions et que le système des taux de change est caracterisé par de fréquentes et irrégulières modifications. Dans certains pays, un régime de taux de changes multiples rend impossible des conversions sur base d'un seul facteur. Comme autre raison, il y a le problème commun à tous les pays en voie de développement, à savoir que dans une large mesure, les taux reflètent la valeur d'échange d'un nombre limité de biens d'exportation contre un très grand nombre de biens importés.

Ils ne nous renseignent absolument pas sur les relations entre les prix domestiques et étrangers de la plus grande partie de la production qui, par sa structure propre, n'a pas sa place dans les transactions commerciales internationales. L'auteur a tenté de surmonter ces difficultés en utilisant la méthode de la "parité des pouvoirs d'achat" qui est souvent discutée et selon laquelle les données de comptabilités nationales sont réduites à un commun dénominateur monétaire — en l'occurrence, le dollar américain — exprimé en termes réels ou quantitatifs, qui éliminent autant que possible les différences de prix interspaciales. Les résultats sont présentés et analysés d'abord pour l'année de base 1960 et ensuite pour la période allant de 1955 à 1964 pour les secteurs de grandes dépenses et pour le produit domestique brut total. Dans la mesure où les statistiques disponibles le permettent, l'auteur compare ces résultats avec ceux concernant les Etats Unis et certains pays d'Europe Occidentale. Son intention, ce faisant, est de déterminer la valeur approximative de l'écart entre les revenus de ces différents pays et d'évaluer le sens et l'importance de son évolution.

ANNEX A

Note on Revised Series for Chile

Since going to print, revised national accounts series have been received from the *Oficina de Planificación, Chile* relating to the years 1960–1965. These data differ substantially from anything previously published for that country, the general effect being to lower the level of output and expenditure by some fifteen or twenty per cent. This did not, however, uniformly apply to all sectors, nor in all years.

In 1960, for example, per capita expenditure on the gross domestic product (converted into dollars with the purchasing power equivalents given in Table 1) declined from $658 to $564; in 1961 from $687 to $594; in 1962 from $762 to $651; and so on. In the same way private consumption expenditure fell from $500 (in 1960) to $386, and governmental expenditure from $111 to $97. Fixed investment on the other hand rose from $58 to $87—largely because of an upward revision of the construction figures which, as pointed out by the author in Part E (2)(c) of the present document, were previously much understated. The conflicting movement and magnitude of the revisions inevitably altered the relative importance of the various sectors—private consumption expenditure dropping from 76 per cent in 1960 to 68 per cent; governmental expenditure remaining at 17 per cent; and fixed investment rising from 9 per cent to the more realistic figure of 15 per cent.

When expenditure levels are compared with those of other countries, the relative position of Chile inevitably declines. In 1960 for instance, the per capita figure of $564 was only 20.3 per cent of that prevailing in the United States (in place of 23.7 per cent); while for private consumption expenditure it was only 22.9 per cent (as against 29.6 per cent). The ranking of Chile within Latin America was not, on the other hand, changed to any great degree as its per capita figure was still fourth highest, following Argentina, Uruguay and Venezuela in all years. A change in ranking nevertheless applied to the private consumption sector since the new level of $386 per capita placed Chile fifth, following Mexico and Venezuela, instead of third, ahead of those two countries. In the same way, the revised figure places Chile below Spain, if Beckerman's estimate [23] of

$471 for private consumption expenditure in that country can be accepted (see Part E (2) above).

Since Chile represented only 6 per cent of the aggregate for Latin America the revised data did not have any great impact on totals for the region as a whole, changes being in the vicinity of one to two per cent (upwards for fixed investment; downwards for the remainder and for the total).

The most important of the revised data are given in Table 19 below.

TABLE 19

REVISED DATA FOR THE GROSS DOMESTIC PRODUCT, 1960–64

	At current prices					At constant (1960) prices			
	1960	1961	1962	1963	1964	1961	1962	1963	1964
					(*a*) CHILE[a]				
					Total expenditures (million dollars)				
At prevailing exchange rates	3 951	4 470	5 391	4 571	4 523	4 195	4 404	4 612	4 805
In purchasing power equivalents	4 395	4 743	5 322	5 465	5 782	4 634	4 882	5 125	5 326
					Per capita expenditure (dollars)				
At prevailing exchange rates	507	560	660	546	632	526	539	551	560
In purchasing power equivalents	564	594	651	653	674	581	597	612	621
Of which: Private consumption	386	414	444	444	464	402	407	413	425
Government	97	103	114	106	106	97	100	96	97
Fixed investment	87	94	101	110	105	98	100	109	102
					Percentage of total[b]				
Private consumption	68.4	69.7	68.2	68.0	68.8	69.3	68.2	67.4	68.4
Government	17.2	17.4	17.5	16.2	15.7	16.6	16.8	15.6	15.6
Fixed investment	15.4	15.8	15.4	16.8	15.6	16.8	16.6	17.8	16.4
Other sectors	−1.0	−2.9	−1.1	−1.1	−1.0	−2.7	−1.6	−0.8	−0.4
					Indexes USA = 100[b]				
Private consumption	22.9	24.1	25.0	25.4	24.1	23.7	23.2	22.9	22.7
Total	20.3	21.1	21.8	21.2	20.8	20.9	20.5	20.6	20.1
					(*b*) LATIN AMERICA[c]				
					Per capita expenditure (dollars)				
Total: At prevailing rates	333	347	334	351	391	340	345	345	356
Total: In dollar equivalents	428	443	461	460	497	438	440	439	457
Of which: Private consumption	301	308	321	323	352	307	310	309	352
Government	67	74	75	77	76	68	69	70	69
Fixed investment	56	57	58	54	60	57	55	55	56

[a]Based on revised series published by the Oficina de Planificación.

[b]In terms of purchasing power equivalence.

[c]Revised to include new series for Chile.

TABLE 20

EXPENDITURE ON THE GROSS DOMESTIC PRODUCT, 1955–64, IN NATIONAL CURRENCY
Data used as a basis for estimates in dollars
(Millions of currency unit indicated)[a]

Country	Unit	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *At current prices*						
Argentina	Peso (000)	171	218	271	387	740	961	1 148	1 411	1 734	2 363
Bolivia	Peso	569*	1 221*	3 184*	3 361	3 862	4 479	4 872	5 327	5 736	6 505
Brazil	New cr$[b]	695	887	1 060	1 314	1 806	2 419	3 499	5 498	9 591	18 867
Chile	Escudo	1 041	1 668	2 309	2 995	4 227	4 974	5 538	6 699	9 993	15 072
Colombia	Peso	13 249	14 863	17 811	20 682	23 472	26 418	30 067	33 578	42 707	52 700
Ecuador	Sucre	11 049	11 266	12 007	12 357	13 009	14 140	15 075	16 104	17 437	19 414
Paraguay	Guaraní	14 311	17 933	22 996	26 230	29 454	34 523	39 735	43 787	48 461	49 953
Perú	Sol oro	29 610	33 007	36 114	40 302	47 353	56 909	63 885	73 376	80 519	97 419
Uruguay	Peso	4 602	5 163	6 118	6 616	8 865	13 583	17 304	18 846	22 518	33 330
Venezuela	Bolívar	17 893	20 400	23 847	24 585	25 557	25 620	26 641	28 506	30 657	35 749
Costa Rica	Colón	2 121	2 174	2 397	2 582	2 664	2 811	2 889	3 189	3 463	3 702
Dominican Republic	Peso	565	633	714	714	697	723	691	876	992	1 085
El Salvador	Colón	1 181*	1 307*	1 292*	1 388	1 351	1 418	1 446	1 616	1 708	1 883
Guatemala	Quetzal	813	901	940	971	991	1 020	1 043	1 092	1 214	1 329
Haití*	Gourde	1 405	1 560	1 522	1 595	1 496	1 489	1 517	1 606	1 589	1 572
Honduras	Lempira	624	665	688	725	751	756	795	852	880	932
Mexico	Peso (000)	88	101	116	129	138	156	166	180	195	228
Nicaragua*	Córdoba	2 331	2 368	2 387	2 595	2 454	2 361	2 531	2 853	3 253	3 636
Panama	Balboa	331	344	380	383	403	418	458	500	554	583

TABLE 20 *(Concluded)*

Country	Unit	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *At 1960 prices*						
Argentina	Peso (000)	822	835	881	945	890	961	1 028	1 009	973	1 052
Bolivia	Peso	4 556	4 354	4 207	4 308	4 294	4 479	4 572	4 828	5 138	5 421
Brazil	New cr$[b]	1 819	1 853	1 981	2 112	2 267	2 419	2 595	2 734	2 777	2 864
Chile	Escudo	4 120	4 143	4 578	4 702	4 682	4 974	5 150	5 485	5 579	5 784
Colombia	Peso	21 756	22 639	23 144	23 713	25 371	26 418	27 722	29 117	30 082	31 674
Ecuador	Sucre	11 309	11 711	12 327	12 609	13 261	14 140	14 477	15 123	15 509	16 525
Paraguay	Guaraní	30 609	30 246	32 349	34 067	33 959	34 523	36 483	37 049	38 251	39 437
Peru	Sol oro	43 460	43 269	43 214	46 662	50 134	56 909	61 424	67 101	69 196	74 175
Uruguay	Peso	13 612	13 849	13 989	13 485	13 108	13 583	13 989	13 681	13 541	14 073
Venezuela	Bolívar	18 633	20 529	22 847	23 325	25 193	25 620	25 700	27 510	29 093	31 130
Costa Rica	Colón	2 128	2 108	2 341	2 530	2 665	2 811	2 890	3 087	3 281	3 407
Dominican Republic	Peso	557	612	650	685	690	723	692	788	827	878
El Salvador	Colón	1 146	1 242	1 324	1 359	1 387	1 418	1 492	1 663	1 744	1 909
Guatemala	Quetzal	788	860	908	946	992	1 020	1 059	1 086	1 222	1 305
Haiti	Gourde	1 330	1 446	1 360	1 468	1 399	1 489*	1 465*	1 563*	1 604	1 640
Honduras	Lempira	598	654	697	714	743	756	786	834	850	875
Mexico	Peso (000)	116	124	133	140	144	156	161	169	180	198
Nicaragua	Córdoba	2 198	2 233	2 381	2 357	2 357	2 361	2 509	2 816	2 976	3 173
Panama	Balboa	324	339	373	375	394	418	459	498	542	569

Source: National statistics; also *Yearbook of National Accounts Statistics*, 1965, United Nations (New York), 1966.

[a]For Argentina and Mexico, thousand millions.

[b]New cruzeiro = 1 000 cruzeiros (as from February 1967).

*Estimated

TABLE 21

PRIVATE CONSUMPTION EXPENDITURE, 1955–64, IN NATIONAL CURRENCY
(Millions of units of national currency[a])

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *At current prices*					
Argentina	125	160	201	279	538	668	805	962	1 221	1 682
Bolivia	493*	1 110*	2 696*	2 803	3 285	3 763	4 214	4 411	4 799	5 064
Brazil	488	618	754	960	1 271	1 666	2 330	3 752	6 403	12 615
Chile	832	1 306	1 893	2 421	3 324	4 037	4 440	5 179	7 819	11 716
Colombia	10 110	10 898	12 803	15 151	17 017	19 810	22 389	25 039	32 833	41 134
Ecuador	7 850	8 125	8 537	8 980	9 270	10 122	10 751	11 562	12 672	14 212
Paraguay	11 406	13 793	18 318	20 906	23 029	26 065	30 630	34 141	38 783	39 540
Peru	21 736	22 906	25 290	28 952	34 300	38 405	42 960	49 538	57 117	67 381
Uruguay	3 635	4 003	4 790	5 112	7 199	10 727	12 740	13 991	16 427	24 652
Venezuela	9 126	10 861	13 376	13 611	14 602	14 352	14 725	16 074	17 047	19 472
Costa Rica	1 585	1 656	1 796	1 951	1 997	2 136	2 242	2 403	2 638	2 774
Dominican Republic	399	442	486	498	472	501	488	644	724	792
El Salvador	941*	1 006*	993*	1 071	1 043	1 142	1 128	1 274	1 376	1 524
Guatemala	669	719	755	808	827	852	862	922	1 017	1 108
Haiti*	1 202	1 268	1 295	1 323	1 261	1 252	1 305	1 350	1 359	1 372
Honduras	505	494	547	566	587	595	617	651	686	728
Mexico	71	80	94	106	112	127	134	145	156	181
Nicaragua*	1 800	1 870	1 863	1 989	1 804	1 919	2 003	2 225	2 517	2 748
Panama	255	263	301	308	322	325	342	361	395	426

TABLE 21 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *At 1960 prices*					
Argentina	627	619	660	711	653	668	740	710	694	765
Bolivia	3 497	3 571	3 591	3 678	3 692	3 763	3 945	4 075	4 377	4 568
Brazil	1 294	1 266	1 374	1 525	1 576	1 666	1 721	1 839	1 840	1 936
Chile	3 137	3 196	3 683	3 727	3 684	4 037	4 215	4 220	4 400	4 489
Colombia	16 418	16 263	16 871	17 110	18 448	19 809	20 570	22 221	22 741	24 200
Ecuador	8 440	8 769	9 091	9 547	9 633	10 122	10 236	10 518	10 534	11 053
Paraguay	25 638	25 158	25 210	26 655	26 722	26 065	27 327	27 609	29 322	30 690
Peru	33 305	33 377	33 736	35 443	37 664	38 405	40 892	45 748	50 831	54 913
Uruguay	10 204	11 041	11 135	9 716	9 328	10 727	10 407	10 714	9 923	10 567
Venezuela	10 397	11 540	14 756	13 904	15 537	14 352	14 377	15 210	15 936	17 622
Costa Rica	1 637	1 691	1 802	1 868	2 082	2 136	2 177	2 293	2 434	2 529
Dominican Republic	398	439	461	489	479	501	496	629	679	724
El Salvador	933	972	1 044	1 038	1 022	1 142	1 149	1 297	1 373	1 525
Guatemala	679	727	779	823	848	852	859	891	981	1 071
Haiti	1 122	1 158	1 145	1 210	1 167	1 252*	1 270*	1 343*	1 375*	1 408*
Honduras	495	520	572	598	592	594	631	657	696	715
Mexico	92	99	108	115	116	127	131	137	146	162
Nicaragua	1 700	1 785	1 860	1 889	1 775	1 919	1 965	2 188	2 267	2 201
Panama	232	247	283	304	326	325	345	365	395	436

[a]For currency units and sources, see Table 20.
*Estimated

TABLE 22

GOVERNMENTAL CONSUMPTION EXPENDITURE 1955–64, IN NATIONAL CURRENCY
(Millions of units of national currency)[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *At current prices*					
Argentina	17	22	23	38	64	86	117	156	176	243
Bolivia	53*	97*	295*	310	362	387	450	492	553	614
Brazil	94	130	153	180	249	371	542	853	1 563	2 909
Chile	107	162	222	310	433	511	552	761	975	1 348
Colombia	938	959	1 022	1 196	1 369	1 659	2 016	2 356	3 149	3 484
Ecuador	1 375	1 365	1 407	1 413	1 533	1 813	2 067	2 155	2 232	2 590
Paraguay	1 320	1 733	1 797	2 300	2 313	2 629	2 862	3 168	3 281	3 475
Peru	2 240	2 958	3 127	3 504	4 199	4 776	5 938	6 771	7 714	9 933
Uruguay	434	463	616	701	767	1 228	1 828	2 616	3 043	4 440
Venezuela	2 241	2 284	2 556	3 573	3 130	3 544	3 644	3 732	4 245	4 367
Costa Rica	206	230	245	272	300	328	356	381	456	501
Dominican Republic	60	69	80	92	99	92	90	130	156	165
El Salvador	120*	127*	140*	141	139	143	149	161	159	162
Guatemala	49	57	64	70	78	80	83	77	83	90
Haiti*	176	194	158	157	141	128	134	138	139	140
Honduras	47	66	63	72	70	73	78	77	81	88
Mexico	4	4	5	6	6	8	9	10	11	13
Nicaragua*	191	191	192	204	194	195	209	218	266	282
Panama	38	43	42	47	49	47	50	56	67	65

TABLE 22 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *At 1960 prices*					
Argentina	71	79	76	78	79	86	88	85	82	82
Bolivia	331	335	339	347	348	387	428	466	503	526
Brazil	246	273	286	290	313	371	402	424	453	442
Chile	464	447	475	471	478	511	518	631	556	524
Colombia	1 645	1 591	1 419	1 481	1 503	1 659	1 750	1 896	2 006	2 310
Ecuador	1 406	1 421	1 444	1 442	1 563	1 813	1 974	2 018	2 004	2 202
Paraguay	2 847	2 933	2 536	3 003	2 685	2 629	2 655	2 678	2 705	2 710
Peru	3 948	4 277	4 243	4 307	4 352	4 776	5 500	5 753	6 029	6 739
Uruguay	1 207	1 204	1 235	1 228	1 199	1 228	1 251	1 309	1 293	1 307
Venezuela	2 334	2 298	2 449	3 390	3 086	3 544	3 562	3 627	3 993	3 885
Costa Rica	226	232	243	264	277	328	320	348	418	434
Dominican Republic	64	73	82	94	97	92	89	113	117	114
El Salvador	101	106	134	137	140	143	155	162	164	166
Guatemala	55	63	68	71	79	80	84	77	74	79
Haiti	169	181	145	144	136	129*	126*	134*	137*	140*
Honduras	47	67	62	70	69	73	78	75	78	78
Mexico	6	6	7	7	7	8	8	9	10	11
Nicaragua	178	184	192	195	191	195	210	216	229	270
Panama	38	42	40	42	43	47	50	57	61	64

[a]For currency units and sources, see Table 20.
*Estimated

TABLE 23

FIXED INVESTMENT EXPENDITURE, 1955–64, IN NATIONAL CURRENCY
(Millions of units of national currency)[a]

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *At current prices*					
Argentina	30	40	54	77	125	208	270	320	316	390
Bolivia	83*	169*	463*	489	526	637	532	835	924	958
Brazil	99	117	138	181	288	400	600	894	1 580	2 696
Chile	87	138	247	310	405	513	720	812	1 275	1 971
Colombia	2 383	2 527	2 643	3 339	3 908	4 827	5 540	6 126	7 301	8 787
Ecuador	1 538	1 560	1 561	1 516	1 734	1 897	2 047	1 959	2 146	2 339
Paraguay	1 655	1 966	4 101	4 383	4 296	5 841	6 701	6 902	7 072	7 855
Perú	5 488	7 743	8 949	9 220	8 441	9 541	12 293	15 141	15 111	16 610
Uruguay	624	692	961	711	1 008	2 045	2 766	2 939	2 876	3 588
Venezuela	4 410	5 098	5 950	5 964	6 060	4 797	4 286	4 635	5 073	6 317
Costa Rica	362	404	462	390	504	479	411	453	498	525
Dominican Republic	104	124	129	142	116	75	60	97	140	177
El Salvador	116*	160*	153*	165	160	197	168	173	203	263
Guatemala	80	135	150	137	113	103	109	108	125	160
Haití*	113	111	84	102	93	101	108	109	89	89
Honduras	83	84	94	92	89	96	87	113	127	130
Mexico	13	17	19	19	20	23	24	25	28	37
Nicaragua*	403	384	426	369	424	320	370	503	546	661
Panama	33	47	56	52	55	62	80	86	97	88

TABLE 23 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *At 1960 prices*					
Argentina	140	148	158	171	139	208	246	223	180	192
Bolivia	729	495	478	490	550	637	531	830	873	889
Brazil	261	281	316	335	371	400	437	429	436	390
Chile	427	408	467	462	394	513	664	690	704	717
Colombia	5 660	5 370	4 027	3 828	4 114	4 827	5 218	5 257	4 921	5 325
Ecuador	1 574	1 622	1 602	1 547	1 767	1 897	1 967	1 943	1 971	2 501
Paraguay	3 518	3 295	5 732	5 674	4 934	5 841	6 111	5 803	5 798	6 209
Peru	9 108	11 903	12 835	11 128	8 856	9 541	12 099	14 053	13 679	14 252
Uruguay	2 577	2 379	2 441	1 769	1 858	2 045	2 273	2 324	1 910	1 621
Venezuela	5 239	5 682	6 040	5 986	6 158	4 797	4 080	4 260	4 438	5 294
Costa Rica	409	440	513	488	473	479	499	542	570	609
Dominican Republic	120	131	138	146	109	75	60	103	141	176
El Salvador	171	226	209	189	192	197	172	171	195	236
Guatemala	85	134	145	129	119	103	108	110	123	151
Haití	12	119	85	102	95	101*	99*	106*	108*	111*
Honduras	592	94	104	93	90	96	88	114	129	128
Mexico	17	19	20	20	20	23	23	23	26	31
Nicaragua	442	408	439	369	333	320	368	501	551	600
Panamá	46	54	64	63	64	62	78	84	96	85

[a]For currency units and sources, see Table 20.
*Estimated

TABLE 24

PREVAILING EXCHANGE RATES FOR LATIN AMERICAN COUNTRIES, 1955–64[a]
(Units of national currency per U.S. dollar)

Country	Unit	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Argentina	peso	—	16.19	23.58	28.36	85.70	82.85	82.71	135.00	138.90	137.60
Bolivia	peso[b]	2.85	7.360	8.375	8.855	11.88	11.88	11.88	11.88	11.88	11.88
Brazil	new cr$[b]	.0461	.0580	.0581	0.764	.1174	.1376	.2050	.3469	.5260	.9841
Chile	escudo[b]	.1623	.3365	.5237	.6985	1.053	1.053	1.053	1.053	1.840	2.350
Colombia	peso	2.50	2.50	4.06	6.36	6.40	6.60	6.70	6.82	9.00	9.00
Ecuador	sucre	15.15	15.15	15.15	15.15	15.15	15.15	15.15	18.18	18.18	18.18
Paraguay	guaraní	42.52	59.48	75.15	111.3	122.0	122.0	126.0	126.0	126.0	126.0
Peru	sol oro	19.19	19.20	19.07	23.29	27.61	27.44	26.81	26.81	26.82	26.82
Uruguay	peso	3.30	4.30	3.14	7.06	10.15	11.43	11.03	10.98	16.50	16.40
Venezuela	bolívar	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	4.50
Costa Rica	colón	6.20	6.20	6.20	6.20	6.18	6.20	6.35	6.65	6.65	6.65
Dominican Republic	peso	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
El Salvador	colón	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Guatemala	quetzal	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Haiti	gourde	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Honduras	lempira	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Mexico	peso	12.49	12.49	12.49	12.49	12.49	12.49	12.49	12.40	12.49	12.49
Nicaragua	córdoba	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Panama	balboa	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: *International Financial Statistics*, IMF (Washington).

[a]Official rates are shown for June of each year except the following:

Argentina: 1956–58 Rate implicit in import statistics; 1959–64 Free market rate.
Bolivia: 1955–56 Free market rate.
Brazil: Rate implicit in import statistics.
Chile: 1955–58 Rate implicit in import statistics.
Colombia: Principal selling rate.
Paraguay: 1955–57 Rate implicit in import statistics.
Peru: 1955–59 Rate implicit in import statistics.
Uruguay: 1955–59 Free market rate.
Venezuela: Controlled selling rate.
Costa Rica: 1955–61 Rate implicit in import statistics.
Nicaragua: Rate implicit in import statistics.

[b]The following currency changes should be noted:

Bolivia: 1 peso = 1 000 bolivianos (as from January 1963).
Chile: 1 escudo = 1 000 pesos (as from January 1960).
Brazil: 1 new cruzeiro = 1 000 cruzeiros (as from February 1967).

TABLE 25

POPULATION ESTIMATES FOR LATIN AMERICAN COUNTRIES, 1955–64
As at 30 June in each year
(Thousands of inhabitants)

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Argentina	18 893	19 250	19 614	19 979	20 325	20 669	21 011	21 350	21 688	22 019
Bolivia	3 322	3 392	3 464	3 539	3 616	3 696	3 778	3 863	3 951	4 042
Brazil	60 453	62 305	64 227	66 209	68 240	70 309	72 411	74 554	76 744	78 990
Chile	6 868	7 052	7 233	7 415	7 599	7 791	7 982	8 175	8 371	8 574
Colombia	13 441	13 828	14 223	14 627	15 042	15 468	15 908	16 360	16 821	17 298
Ecuador	3 691	3 800	3 929	4 049	4 183	4 317	4 455	4 579	4 726	4 877
Paraguay	1 565	1 613	1 648	1 687	1 728	1 768	1 812	1 858	1 906	1 955
Peru	8 790	9 004	9 235	9 483	9 746	10 025	10 320	10 632	10 958	11 298
Uruguay	2 348	2 375	2 400	2 429	2 459	2 491	2 523	2 555	2 586	2 617
Venezuela	6 049	6 309	6 569	6 829	7 080	7 331	7 588	7 858	8 136	8 423
Costa Rica	984	1 025	1 068	1 112	1 158	1 206	1 255	1 305	1 358	1 412
Dominican Republic	2 587	2 667	2 752	2 840	2 933	3 030	3 132	3 239	3 350	3 466
El Salvador	2 142	2 210	2 277	2 346	2 416	2 480	2 568	2 649	2 734	2 822
Guatemala	3 258	3 747	3 451	3 546	3 652	3 765	3 868	3 980	4 096	4 217
Haiti	3 722	3 799	3 873	3 958	4 049	4 140	4 234	4 330	4 432	4 541
Honduras	1 660	1 712	1 769	1 828	1 887	1 950	2 017	2 088	2 161	2 237
Mexico	30 701	31 685	32 704	33 766	34 878	36 046	37 270	38 546	39 873	41 254
Nicaragua	1 245	1 288	1 332	1 378	1 424	1 477	1 529	1 583	1 638	1 695
Panama	885	910	936	963	991	1 021	1 052	1 085	1 119	1 154
Latin America[a]	172 604	177 571	182 704	187 983	193 406	198 990	204 713	210 589	216 648	222 891

Source: *Statistical Bulletin for Latin America*, Vol. III, No. 2, Economic Commission for Latin America (Santiago), September 1966.
[a]Excludes Cuba.

TABLE 26

REAL PER CAPITA EXPENDITURE, 1955–64, IN CURRENT DOLLAR EQUIVALENTS[a]
Expressed at parities prevailing in each year

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(a) *Private Consumption Expenditure*					
Argentina	525	574	601	632	620	615	629	578	580	676
Bolivia	148*	150*	138*	129	114	122	127	121	132	125
Brazil	181	185	189	212	201	194	196	214	202	213
Chile	445	440	472	475	457	500	519	541	557	580
Colombia	197	193	199	204	208	232	235	259	251	274
Ecuador	155	167	172	180	178	190	187	198	201	211
Paraguay	138	140	162	177	176	187	195	204	222	219
Peru	179	178	182	195	211	217	233	232	274	277
Uruguay	531	533	572	546	562	626	618	631	653	742
Venezuela	319	370	460	438	439	401	420	444	454	499
Costa Rica	264	298	309	326	316	330	332	337	338	332
Dominican Republic	131	144	151	157	141	153	153	179	188	197
El Salvador	168*	181*	176*	199	191	207	204	231	243	260
Guatemala	183	206	220	222	221	225	221	241	256	261
Haiti*	67	75	69	72	70	75	72	79	78	71
Honduras	118	129	140	142	142	142	140	148	152	151
Mexico	339	354	392	399	396	424	441	468	486	542
Nicaragua*	168	180	183	182	160	189	193	211	233	236
Panama	277	283	324	336	340	340	356	368	391	406
Latin America[b]	263	275	293	306	299	306	312	325	328	357

TABLE 26 *(Continued)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(b) *Governmental Consumption*					
Argentina	158	167	152	193	142	156	193	212	191	227
Bolivia	34*	29*	35*	35	33	31	34	34	38	38
Brazil	51	57	56	58	58	62	66	67	62	50
Chile	93	91	91	106	104	111	114	142	123	119
Colombia	41	38	36	36	33	38	41	48	46	41
Ecuador	54	57	58	58	60	70	73	74	70	75
Paraguay	31	36	33	40	36	38	36	37	37	37
Peru	42	53	52	55	58	59	69	73	78	89
Uruguay	147	138	158	163	124	149	182	243	247	255
Venezuela	87	87	99	129	107	113	117	119	130	132
Costa Rica	68	73	76	81	85	92	94	95	106	108
Dominican Republic	38	43	48	56	57	54	54	68	75	76
El Salvador	38*	39*	43*	46	44	44	45	48	46	45
Guatemala	22	28	33	33	36	36	37	35	36	36
Haiti*	16	19	14	14	13	13	13	13	13	12
Honduras	23	35	34	37	35	37	37	35	36	35
Mexico	25	27	30	30	30	37	38	42	47	51
Nicaragua*	30	32	33	32	30	32	33	34	36	40
Panama	74	80	78	88	89	84	88	96	113	104
Latin America[b]	58	63	62	69	62	67	74	80	77	77

TABLE 26 *(Concluded)*

Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
					(c) *Fixed Investment*					
Argentina	73	66	71	79	64	95	104	99	65	85
Bolivia*	17*	17*	19*	18	16	18	15	19	22	21
Brazil	21	21	22	25	29	34	34	35	32	29
Chile	46	38	40	41	48	58	78	87	80	84
Colombia	58	58	57	58	62	64	71	74	69	72
Ecuador	33	34	34	31	36	39	40	35	35	32
Paraguay	17	16	29	28	25	30	31	30	29	33
Peru	53	63	68	67	49	42	51	62	58	59
Uruguay	92	97	111	68	61	87	96	91	71	76
Venezuela	172	194	227	227	223	174	151	149	143	168
Costa Rica	60	65	73	59	75	67	56	55	56	57
Dominican Republic	43	51	53	55	41	27	23	34	46	56
El Salvador*	26*	35*	33*	36	35	39	35	32	36	44
Guatemala	26	45	47	45	38	33	38	34	38	46
Haiti*	7	7	5	6	5	6	6	6	5	5
Honduras	31	31	34	31	30	32	28	36	38	37
Mexico	46	54	62	55	55	62	64	63	69	84
Nicaragua*	39	38	42	34	38	29	32	42	44	52
Panama	36	52	62	56	59	65	77	83	94	81
Latin America[b]	44	46	50	50	49	54	56	57	53	59

[a]Obtained by geometrically crossing equivalents using Latin American and United States weights.
[b]Excludes Cuba.
*Estimated

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