PART II

TIME-SERIES DATA FOR POLICY ANALYSIS

What kind of data are needed to understand policy? And how should the statistics be presented?

Of the twelve time-series chapters offered here, two chapters (on U.S. assistance and balance of payments) involved reconceptualization of data presented in the original sources; one (budgetary analysis) involved generation of new data; one (population) required choosing logical series from among many alternative views; and one (food and agricultural supply) required meshing data from two major sources to obtain a comparative series for all Latin American countries and the U.S. Four chapters (education, exchange rates, Gross National Product, and inflation) required research to take into account the change of definitions internally within series; and data on two chapters (total Latin American trade and U.S.-Latin American trade) required conversion of various currency values into dollars and a search for consistency. Only one chapter (total energy consumption) involved simple compilation of data, but the inclusion of this item is importantly related to juxtaposition of other data, especially the subtotal of electricity.

PART II-A

AN OVERVIEW

Data given here have not necessarily been chosen for their "representativeness" but rather to show some major series that are available for interpretation.† Since my emphasis is on allocation of scarce resources, it is vital to include statistics on expenditure policy. I have, therefore, prepared from original research comparative budgetary figures (Chapter VII) for Bolivia, Costa Rica, and Mexico. Detailed Costa Rican budgetary data are published in full for the period 1929-1968, based upon my research in Costa Rica during 1969.[1] Data for Mexico and Bolivia involve updating my previously published series. With regard to the Bolivian time series on budgetary data which I had feared to be broken when I completed research in 1967 for my *Bolivian Revolution and U.S. Aid Since 1952* (1969), I am pleased to say that the series has been reconstructed for the late 1960's (see Table VI:9, note d) and allows unbroken continuance of my data series beginning with the year 1929. Tables have been generated to provide a classificatory scheme with three components (social, economic, and administrative) and 26 to 36 subcategories. The three overall categories must be used with common sense: two different presidents may place equal emphasis on economic outlay, but analysis of subcategories offered might show, for example, that one chief executive emphasized agricultural development and the other industrial growth. (Data on projected budgets have not been given for Bolivia and Costa Rica because in those countries projections are not usually used for propaganda as in Mexico and, in any case, the difference between projected and actual expenditures is not great – it is said that because the Bolivian budget is prepared with such lateness, planned expenditures appear after most expenditures have already been made; hence, projections can be in line with the audit which may even precede circulation of planned financing.) The government expenditures in Chapter VII may be converted to constant terms using price indexes in Chapter XII and to per capita terms using population figures in Chapter VIII.

Data on population growth in Chapter VIII not only show the stress placed on state development policy (which theoretically must provide constantly expanding services to an ever-growing population) but also permits the reader to gain an idea of the internal market and/or possibilities for economic and educational mobilization of the populace for increased national productivity. The population series were not completed without difficulty, as noted in the methodological discussion (Table VIII:2). Given the problems in estimates for the early 1900s, data for some countries are extremely erratic. Demographic change in Nicaragua shows the following percentile growth by decade since 1900: 29.3, 17.5, 7.1, 20.8, 28.5, 39.3, and 41.0 per cent. Is the high growth between 1900 and 1910 probable, especially compared with the decreases of the 1910s and drastic drop of the 1920s?

Clearly, population data need to be investigated in relation to (a) conditions of national politico-social economy conditions of a given epoch and (b) the propensity for governments to overstate their populations at the beginning of the century and to understate them by the 1960s. Following my plan of presenting conveniently available statistics, however, I have utilized this problematic data as the basis for my own interpolations for missing years. Population figures should not be accepted at face value but tested in relation to specific research. Even if erroneous figures, be they from censuses or from estimates, they give an idea of what countries approximated their populations to be in different eras. Only when censuses or estimates have been questioned in specific terms have I omitted them, as in the cases of Honduras (the census of 1901 was discredited by the census of 1905), Uruguay (the census of 1900 was not considered to be a general census), and El Salvador (the census of 1901 apparently resulted in a serious undercount owing to organizational problems of the Statistical Agency). As a point of interest, we may compare my original estimate of El Salvador's population for 1910 with an official estimate which I subsequently located. Since my estimate is only 2 000 different than a 1941 estimate by the Salvadorian Statistical Agency[2], I have let it stand.

Granted the key role of demographic development in any country's history, it is astounding how often history textbooks discuss a ruler without mentioning the number of persons being ruled. It is

†Given the wide range of data that might be included here, it could be argued that selection might best be made in terms of categories fitting into one theoretical construct or another. Since no comprehensive theory of state policy and/or national development exists, however, this approach does not seem feasible. Even if wide coverage is the goal, selectivity means that varying authors place different emphasis on essential series: Thus, where I include data on energy to indicate level of economic development, a standard volume dealing with long-term U.S. economic development presents time-series data for *1 200* categories, none of which concern energy; cf. U.S. Bureau of the Census, *Long Term Economic Growth [of the United States], 1860-1965* (Washington, D.C.: Government Printing Office, 1966).

[1]Because space limitations imposed by the original publisher of Chapter VI necessitated eliminating all my summary budgetary statistics for Costa Rica, full data are published for the first time in Chapter VII.

[2]Rodolfo Barón Castro, *La Población de El Salvador* (Madrid: Consejo Superior de Investigaciones Científicas, 1942), p. 470.

one reason, I believe, that politics often is seen to take place in a vacuum – little attention can be paid by observers to social pressures on the government if contemporary writers take no account of the demographic context within which leaders act. In short, leaders tend to feel pressure even if it is only implicit. Regarding one country in which leaders have been explicitly aware of population factors, note what Nathan L. Whetten has written about Guatemala:

> The first general census for the Republic was taken in 1880. The census takers faced various difficulties in working with a population unaccustomed to such procedures. The count was especially unsatisfactory in the predominantly Indian departments of Totonicapán, El Quiché, and Huehuetenango; census officials could only estimate the number of inhabitants for those areas. The census was more complete than the previous ones, but it was still of limited scope. The 1940 census might have been fairly adequate if the figures had not been deliberately tampered with. President Jorge Ubico, who wanted to show a large population for political purposes, issued orders to the local authorities to alter the count after the census was taken. Relevant papers in the central files were carefully destroyed, but enough documentary evidence has been found in the offices of local authorities to indicate that the census results were inflated by at least 900 000 inhabitants. The published result was 3 283 209. An estimate of the correct total, 2 221 923, was made by a subsequent administration on the basis of calculations from the 1950 census. . . . [Apparently] so much careful planning went into the taking of the census of 1950 that it appears to be reasonably adequate.[3]

Ubico's activities might seem oddly humorous if they did not reflect the fact that estimates for Guatemala for the early decades of this century vary more widely than for any other country in Latin America. Among the estimates for 1900, which range from 885 000 to 1 627 000 persons,[4] the low estimate is given in Table VIII:1, meshing with the population figure of 1 272 000 given for 1920. Alternative estimates by decade are offered in comparative decennial population data for Latin America given in Table VIII:3, including estimates based upon analysis of birth and death rates by O. Andrew Collver. Collver concludes that the population of Guatemala in 1900 was 1 430 000 persons, a figure accepted by Nicolás Sánchez Albornoz (Table VIII:3), but which means that Guatemalan population grew about 75 per cent faster per year between 1850 and 1900 than between 1900 and 1930.[5] Given problems in making definitive judgments for so many cases early in this century, it is important to compare data in Tables VIII:1 and 3.

Estimates given in Table VIII:1 generally do not include jungle Indian populaces. Then, as the previously uncounted Indians are incorporated into national life, the figures may show a sudden percentage increase in population, especially in the smaller countries.

Migration between countries may play a significant role in population trends, potentially a much larger one than the "discovery" of Indians who have been under- or overestimated. Many Mexicans, for example, have entered the United States illegally and, if those persons move back and forth as some are prone to do, they may not be counted (or wish to be counted) anyplace. Migration from south to north is heavy from Guatemala to Mexico; and, in the reverse direction, Argentina receives migrant labor from its neighbors Bolivia and Paraguay. Too, there are forced migrations to be contended with. How many persons have fled Castro's Cuba? It is estimated that at least 600 000 Cubans migrated to the United States alone between 1959 and 1972,[6] and one can easily imagine what effect so large an exodus would have on the Cuban economy. Castro may well claim that Cuba is better off without the *"gusanos"* (worms) who departed, but on one hand it will take many years to achieve the number of high-level specialists that Cuba once had. On the other hand, Castro's revolution would have probably been equally as difficult – if not impossible – had he faced the political alienation of at least 600 000 persons. Even if Castro had wanted to take a census of persons departing, however, it would not have been possible since so many persons fled by secret means.

The question as to whether or not a census should even be undertaken is a serious one in underdeveloped countries. As Bolivia's students put the problem: How can a poor country spend money to count people when it could better be spent to feed them? This philosophy has been hard to combat in Bolivia (which took its last census in 1950) especially

---

[3]Nathan L. Whetten, *Guatemala: The Land and Its People* (New Haven: Yale University Press, 1961), p. 20.

[4]The high figure is interpolated from data in Guatemala, Dirección General de Estadística, *Censos 1964: Población; Resultados de Tabulación por Muestreo,* p. 6.

[5]Sánchez Albornoz gives Guatemala's population as being 850 000 in 1900; *The Population of Latin America,* p. 169.

[6]*National Geographic* 144:1 (1973), p. 68.

because of the aftermath of the 1952 revolution made in the name of the masses. If the Bolivian government were to develop a capacity for planning, however, a census would seem to be worth the cost in order to know where roads, dams, markets, and industries need to be built. It is argued, however, that if the productive population is moving into the capital city of La Paz, there is no need to take a census. The government was nevertheless persuaded at least to take a census of La Paz in 1970, thus once more delaying the national population census, which is now scheduled for 1975. Richard W. Patch has explained how unreliable the La Paz census was:

> In La Paz there were 562 682 persons counted by census-takers on June 2, 1970. This is the first published figure, released by the Ministry of Planning on June 6. The figure, "corrected," eventually will be a guide to hundreds of government bureaus and agencies, scores of international institutions, and will be accepted as truth by thousands of readers.
>
> This Bolivian case study is not typical. Even for Latin America, which is not known for the reliability of its statistics, it represents an extreme example. Comprehensive, statistically valid data on population are being assembled in many developing countries, often with the technical assistance of the United Nations or other organizations that operate internationally. But the study does illustrate the kinds of problems encountered throughout the developing world.
>
> The La Paz census of 1970 is in gross error. It was immediately protested by the Postal Workers Union, who declare that there are 800 000 persons in La Paz. The Society of Friends of La Paz requested that the government annul the census and recognize that there exist some 700 000 persons in the city. Not even the government would defend its preliminary total. The Director of the Census and Statistics said there had been "errors." On June 3 the error was put at 20 per cent; on June 4 the figure was arbitrarily reduced to 10 per cent.
>
> The errors do not cancel themselves, and the mistake is of more than academic interest. All errors except one skew the total to an underestimation of population. The preliminary total probably falls short by 200 000 persons. This is serious indeed for a country which is imposing a planned economy.

That the disparity between actual population and the "official" figures used as the basis for government planning demands immediate concern is easily demonstrated. Maintenance of an adequate food supply at reasonable prices is but one example.[7]

This case contrasts with the efficiency of the Mexican government in recruiting and training in 1969-1970 over 1 million census-takers who counted over 48 million citizens. One of the able Mexican officials in charge of this campaign, Javier Bonilla García (currently President of Mexico's National Minimum Salary Commission) believes that if the government were to adopt the same kind of training program for other purposes, the country's high unemployment rate as well as its shortage of industrially qualified workers might be alleviated. Regardless of Mexico's efficiency or Bolivia's inefficiency, innovative solutions will have to be developed if the Latin American region is to better the quality of life for population, particularly in light of the population projections given in Table 1.[8]

In educational data series (Chapter IX), one problem is to develop categories of student enrollment for various educational levels. Because teacher training was not considered to be university level in nature, and subsequent changes have reclassified students as enrolled in universities rather than in secondary-level schools, it is difficult to follow trends of enrollment.

At the level of primary schools, the problem often is different in that because of confusion in educational bureaucracies the exact number of schools may not be known let alone the size of enrollment. The Bolivian case offers an example of such problems: The Center for Human Resource Research of Ohio State University found that in the mid-1960s Bolivian educational officials were neither sure how many students they had enrolled nor how many schools there were. The results of Ohio State's survey (see Table 2) offer a unique opportunity to check official estimates: A comparison of the enrollment data (excluding preschool) for 1966 with data presented in Chapter IX yields a surprise. Data here fall midway between the UNESCO and AID estimates given in Tables IX:1 and IX:2, respectively. Thus, if figures for Bolivia offer any criterion, it is that figures on enrollment for other countries presented in Chapter IX offer an upper and lower range of "real enrollment," with AID figures representing the upper and UNESCO data the lower. Real enrollment perhaps is impossible to attain because enrollment figures vary with time of year, dropouts increasing toward the end.

---

[7] Richard W. Patch, "The La Paz Census of 1970," *American University Field Staff Reports*, June, 1970.

[8] See "The Stork Vs. the Steel Mill," *Forbes Magazine*, August 15, 1973, pp. 33-36.

TABLE 1

PROJECTED POPULATION GROWTH OF LATIN AMERICA AND THE UNITED STATES, Five-Year Intervals, [a]1975-2000

(Millions of Persons)

COUNTRY	1975	1980	1985	1990	1995	2000
ARGENTINA	26.3	28.2	30.1	31.9	33.6	35.3
BOLIVIA	5.3	6.0	6.8	7.8	8.9	10.1
BRAZIL	107.5	124.0	142.9	164.4	188.5	215.5
CHILE	10.6	11.5	12.5	13.7	15.0	16.3
COLOMBIA	26.4	31.4	37.0	43.1	49.7	56.7
COSTA RICA	2.0	2.3	2.6	2.9	3.3	3.7
CUBA	9.2	10.1	11.0	12.1	13.2	14.3
DOMINICAN REPUBLIC	5.2	6.2	7.4	8.7	10.6	12.5
ECUADOR	7.1	8.4	10.0	11.8	13.8	16.1
EL SALVADOR	4.1	4.9	5.9	7.1	8.6	10.4
GUATEMALA	6.1	7.0	8.1	9.4	10.8	12.4
HAITI	6.0	6.8	7.9	9.1	10.6	12.3
HONDURAS	3.1	3.7	4.4	5.2	6.1	7.2
MEXICO	60.2	71.4	84.4	99.7	116.7	135.1
NICARAGUA	2.4	2.8	3.3	4.0	4.6	5.5
PANAMA	1.7	1.9	2.3	2.7	3.1	3.6
PARAGUAY	2.9	3.5	4.1	4.9	5.7	6.6
PERU	15.9	18.5	21.6	25.1	29.1	33.5
URUGUAY	3.1	3.3	3.4	3.6	3.8	4.0
VENEZUELA	12.7	15.0	17.4	20.0	22.9	26.1
LATIN AMERICA	317.5	366.8	423.2	487.3	558.7	637.2
UNITED STATES	227.9	250.5	274.7	300.1	328.5	361.4

[a]For Yearly population estimates between 1900 and 1972, see Chapter VIII.

Source: Centro Latinoamericano de Demografía, (CELADE), *Boletín Demográfico* 5:10 (1972), pp. 4-5; and *América en Cifras* (1972), Table 201-03.

Another important data series for Latin America is represented in the indexes for food and agricultural supply (Chapter X). It is important not only to know how governments spend their funds, how many people exist, and how many persons are being educated, but it is also vital to know the level of agricultural production for society's needs. One problem with developing a series dealing with total agricultural output is that neither the U.N. Food and Agriculture Organization (FAO) nor the U.S. Department of Agriculture (USDA) – the basic producers of such statistics – cover all countries for all years. I used both sources to prepare a complete listing for Latin America since 1950 when data are available. In order to understand how the two sources compare, Table 3 is presented to test intercountry comparisons in Chapter X.

The Latin American countries selected for discussion in this test are the only countries in the hemisphere to have had major land reforms before 1970. Redistribution of land to the peasants in Mexico, Bolivia, and Venezuela dates officially from 1916, 1953, and 1959, respectively. The Cuban case represents state seizure of the land which is operated on a basis of state farms rather than redistribution. Cuban data are incomplete in the USDA series after 1966 because the United States lost official interest after it was certain the Castro would remain in power. In comparing the series prepared by different agencies (Table 3), no clear-cut pattern emerges. The USDA series was higher than the FAO series for Cuba in the pre-Castro years, usually lower in the post-1959 period. Also the USDA data for Mexico are higher than FAO figures. While the USDA might be influenced to favor Mexican land reform as opposed to the Cuban model, the same cannot be said for Bolivia where the United States sent so much assistance, unless the United States would like to justify its sending of Food for Peace to swamp the Bolivian market. (It is difficult to imagine that the USDA consciously would tamper with its agricultural series for political reasons,[9] but if it received pessimistic data through the many United States offices set up in Bolivia, a built-in bias might have occurred.) USDA data for Bolivia are higher than FAO figures until the revolution of 1952, after which the pattern is reversed during the period of U.S. aid. With regard to Venezuela and Latin America as a whole, however, both time-series presentations are fairly close, as with United States figures. Data for Cuba are surprising; after all the criticism of agricultural problems in that country, agricultural production in Cuba has outstripped growth in Mexico and Bolivia, trailing only Venezuela, a country that is not even known by many to have had a sweeping land reform. Nevertheless, in per capita terms (Table X:1), production has declined significantly in relation to Bolivia, Mexico, and Venezuela.[10] Within the context of this discussion, then, figures presented in Chapter X would appear to be useful for analysis, except for subsistence agriculture, which the indexes do not reflect.

Supply of energy is shown in Chapter XI. Use of electricity has been selected to indicate the level of societal adaptation to (or ability to absorb) modern technological "hardware" – David G. McClelland notes

---

[9]In light of the "Watergate Affair," government tampering with data would not seem impossible, especially under President Nixon who in 1971 was accused by the chairman of the House Subcommittee on Census and Statistics (Charles Wilson) of "censoring" data, the *New York Times*, November 17, 1971).

[10]For discussion of land problems, see James W. Wilkie, *Measuring Land Reform; Supplement to the Statistical Abstract of Latin America,* 1974.

TABLE 2

BOLIVIAN ENROLLMENT IN THE FORMAL EDUCATIONAL SYSTEM BY LEVEL, TYPE, AND GEOGRAPHICAL AREA, 1966

Type and Area	Total		Preschool		Literacy Training		Primary		Secondary Level		Normal (Superior)		University		Other Superior-level Education	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
PUBLIC	567 719	80	44 061	92	8 990	100	428 190	80	68 504	67	2 783	85	11 084	100	4 107	100
URBAN (CAPITAL)	191 157	27	10 069	21	5 566	62	114 020	21	43 528	43	2 783	85	11 084	100	4 107	100
URBAN (OTHER)	158 101	22	8 712	18	283	3	127 200	24	21 906	22	-	-	-	-	-	-
RURAL	218 461	31	25 280	53	3 141	35	186 970	35	3 070	3	-	-	-	-	-	-
PRIVATE	143 488	20	3 966	8	29	#	105 428	20	33 541	33	494	15	30	#	-	-
URBAN (CAPITAL)	72 359	10	3 187	7	29	#	38 404	7	30 215	30	494	15	30	#	-	-
URBAN (OTHER)	13 133	2	779	2	-	-	9 140	2	3 214	3	-	-	-	-	-	-
RURAL	57 996	8	-	-	-	-	57 884	11	112	#	-	-	-	-	-	-
TOTAL	711 207	100	48 027	100	9 019	100	533 618	100	102 045	100	3 277	100	11 114	100	4 107	100

#Less than .5 percent.

Source: Center for Human Resource Research, *Human Resources in Bolivia: Problems, Planning and Policy* (Columbus: Ohio State University, 1971), p. 150.

TABLE 3

[a]FAO AND USDA TOTAL FOOD AND AGRICULTURAL PRODUCTION INDICES COMPARED

[b]Selected Countries [c]1954-1971
(1963 = 100)

	MEXICO		BOLIVIA		VENEZUELA		CUBA		LATIN AMERICA		UNITED STATES	
	FAO	USDA	FAO	USDA	FAO	USDA	FAO	USDA	[d]FAO	[e]USDA	FAO	USDA
1954	63	68	53	65	63	63	108	127	76	71	84	83
1955	70	74	54	70	67	64	106	127	78	75	86	86
1956	71	72	69	76	67	69	108	128	81	76	87	86
1957	79	79	72	85	72	72	123	142	84	80	84	84
1958	83	85	81	85	74	74	123	138	89	85	91	91
1959	79	82	81	91	79	78	130	148	89	88	92	93
1960	84	88	87	90	87	87	132	142	91	87	93	95
1961	88	91	92	93	91	86	143	144	97	93	94	95
1962	93	100	92	90	96	95	117	114	97	96	95	96
1963	100	100	100	100	100	100	100	100	100	100	100	100
1964	106	109	107	101	108	110	108	113	100	101	99	99
1965	110	116	104	102	115	117	132	127	108	109	100	102
1966	112	118	106	104	120	122	112	107 (P)	106	108	100	102
1967	115	120	112	100	130	131	140	-	111	113	105	105
1968	119	125	113	103	136	135	128	-	114	113	107	107
1969	119	123	117	107	144	139	120	-	116	117	104	108
1970	123	131	121	105	153	146	171	-	121	122	106	107
1971	125 (P)	137	121 (P)	107	157 (P)	146	138 (P)	-	120 (P)	125	114 (P)	116

[a]Food and Agriculture Organization (FAO) and U.S. Department of Agriculture (USDA) totals for all agricultural commodities (including food).

[b]For all data in total and per capita terms for all countries of Latin America, 1952-1971, see Chapter X.

[c]The USDA has not computed data for Cuba since 1968.

[d]FAO excludes El Salvador, Haiti, and Dominican Republic.

[e]USDA excludes Cuba.

Methods and Sources: See Table X:1 below, except data for U.S. are from U.S. Department of Agriculture, *Agricultural Statistics* (1971), p. 466, and U.S. Bureau of the Census, *Statistical Abstract* (1972), p. 603 (base recalculated).

that, although water, wind, coal, and oil are important for production, electricity is more economically stored and transmitted into homes as well as factories.[11] Also, electricity often is generated by gas, oil, and coal supplies. With regard to energy production two types are of special note: nonmodern and crude oil. Much production is developed through animal power or sheer human effort. These types of energy, as in the case of the grinding of cane sugar or pulling plows, are not included in the figures because such means of production are outside the modern sector. Production of crude oil is included to indicate Latin America's position to be affected by or to influence the world petroleum price problems beginning in the early 1970s.

Economic data in Chapters XII-XVII give indications of a country's internal and external financial position. Data on inflation in Chapter XII have been rounded because in most cases the carrying of figures out to several decimal places yields an impression of spurious accuracy. Figures on price changes (which can be used, for example, to deflate expenditures and obtain constant terms) generally fluctuate throughout the year; in cases where multiple exchange rates function, the price index can give only an approximation of the relationship of goods and services to prices. Moreover, when money is exchanged from one currency to another, bank discounts and dealer charges will alter official rates.

Price indexes are given only for the capital cities of Latin America but this is not a serious problem because capital cities are the financial and industrial centers that determine to a large extent what the prices will be throughout countries as a whole. Although for some purposes different kinds of price indexes could be offered to give data necessary for deflating such financial indicators as Gross Domestic Product, those indexes usually may be calculated to find the implicit deflator used in converting current prices to constant prices. Various series given for any country have been linked together and adjusted where necessary to obtain a common index base showing how prices have affected consumer and wholesale activities since 1929.

It has been argued in Mexico that the Bank of Mexico's price index is more accurate than that prepared by the Mexican Statistical Agency (Dirección General de Estadística). An examination of Table 4 largely belies that view. Whereas the Bank of Mexico index contains over four times as many items, the Statistical Agency index is remarkably close to it both at the beginning and end of the series. Divergence is noted between 1947 and the early 1950s as well as during the late 1950s and early 1960s, but the gap is not as great as might have been supposed. According to Leopoldo Solís, former director of the economic research department of the Bank of Mexico, both indexes show a downward bias as they exclude or deemphasize the price of services. Moreover, the Bank index is based upon production and import items as opposed to the Statistical Agency which emphasizes items of consumption – the latter index tending to be higher during the period of divergence. In spite of these differences, this comparison leads credibility to the Statistical Agency data presented in Chapter XII.

[11] David C. McClelland, *The Achieving Society* (New York: Free Press, 1961), pp. 85 ff. Cf. research by a physicist, Dr. Larry J. Williams, "Economic Growth and Energy Use," Los Angeles: M.A. thesis in economics, University of Southern California, 1974.

TABLE 4

MEXICAN WHOLESALE PRICE INDEXES COMPARED, 1939-1971

(1953 = 100)

Year	Dirección General de Estadística, 50 Items	Banco de México, 210 Items
1939	25	25
1940	25	26
1941	27	28
1942	29	31
1943	35	37
1944	45	46
1945	50	51
1946	58	58
1947	59	62
1948	63	66
1949	67	73
1950	74	79
1951	89	98
1952	98	102
1953	100	100
1954	108	109
1955	124	124
1956	132	130
1957	140	136
1958	146	142
1959	149	143
1960	157	150
1961	158	152
1962	161	155
1963	163	155
1964	169	162
1965	176	165
1966	177	167
1967	177	172
1968	180	175
1969	183	180
1970	191	191
1971	196	198

Source: The 50-item Mexico City index is from Table XII:1, below. The 210-item Mexico City index is from Roberto Santillán López and Aniceto Rosas Figueroa, *Teoría General de las Finanzas Públicas y el Caso de México* (México, D.F.: Universidad Nacional Autónoma de México, 1962), p. 247; and Banco de México, *Informe* (1971), pp. 84-85.

Exchange rates (Chapter XIII) tend to affect the life of the ordinary citizen much more in Latin America than in the United States. Given inflation problems (and also given the trips that many Latin Americans take abroad to make purchases), in many countries speculation in currency is commonplace. Because of the quick rise of black markets, no successful nonconvertible currency market has existed in Latin America to my knowledge, much to the frustration of governments that would control the exchange rate for "national benefit." For these reasons, and for the same reasons given above for price-index data, exchange rates are presented here in rounded figures. Where multiple exchange rates have existed, I have listed only one rate among many to develop as continuous a series as possible.[12] Sudden changes often indicate that the black market rate is accepted as the official rate.

The rate of exchange is given in dollars per Latin American currency unit. Series commence with the era of World War I when U.S. currency began to supplant the English pound sterling as the major international unit of currency. With the world depression of the 1930s, the real value of the dollar fell in relation to the nominal value; latter values are shown separately to point up both the impact of economic problems and the reason for shifting the method of presentation to Latin American currency units per U.S. dollar.[13] The shift in presentation is given for years since 1937, and for comparative purposes, the different series overlap in that year.

[12]Selection of one rate may greatly oversimplify a complex picture, as for Paraguay in the mid-1950s which had eight exchange rates. Also, it is necessary to reconcile name changes in the series source, as for Nicaragua in which the "selling rate with tax" is retitled "preferential rate."

[13]Given the importance of rates of exchange in international economic health, one can only hope that few national leaders take the narrow outlook of President Nixon in his White House tape recordings of June 23, 1972: *"Haldeman:* Did you get the report that the British floated the pound? *Nixon:* No, I don't think so. *Haldeman:* They [floated it]. *Nixon:* That's devaluation? *Haldeman:* Yeah. [Presidential Assistant Peter] Flanigan has got a report on it here. *Nixon:* I don't care about it. Nothing we can do about it. *Haldeman:* You want a rundown? *Nixon:* No, I don't. *Haldeman:* He argues it shows the wisdom of our refusal to consider convertibility until we get a new monetary system. *Nixon:* Good. I think he's right. It's too complicated for me to get into. *Haldeman:* [Federal Reserve Board Chairman Arthur F.] Burns expects a five per cent devaluation against the dollar. *Nixon:* Yeah. O.K. Fine. *Haldeman:* Burns is concerned about speculation about the lira. *Nixon:* Well, I don't give a [expletive deleted] about the lira." This conversation is quoted in *Time,* August 19, 1974, p. 62.

TABLE 5

SIZE AND IMPACT OF CUMULATIVE U.S. DIRECT INVESTMENTS IN MEXICO, SELECTED YEARS, 1897-1970

Year	Total Millions of Dollars Cumulative Value	Peso Exchange Rate	A. Millions of Pesos U.S. Investment	B. [a]Actual Federal Central Government Expenditure in Million Pesos	Ratio A/B	C. [a,b]Public and Private Mex. Investment Mill. Pesos	Ratio A/C
1897	200	2.137	427	53	8.1	–	–
1908	416	2.011	837	104	8.0	–	–
1914	587	[c]2.242	1 316	[d]111	11.9	–	–
1919	644	1.985	1 278	[e]109	11.7	–	–
1924	735	2.066	1 519	277	5.5	–	–
1929	682	2.151	1 469	276	5.3	–	–
1936	480	3.599	1 728	406	4.3	–	–
1940	358	5.504	1 970	604	3.3	793	2.5
1946	316	4.855	1 534	1 771	.9	3 287	.5
1952	481	8.629	4 151	6 464	.6	8 166	.5
1958	745	12.500	9 313	13 288	.7	18 926	.5
1965	1 182	12.500	14 775	36 716	.4	38 686	.4
1970	1 786	12.500	22 325	52 679	.4	80 742	.3

[a]Columns B & C are not directly comparable as "B" gives total expenditure (excluding decentralized and autonomous agencies) and "C" is limited to investment.

[b]Gross investment.

[c]June.

[d]1912-1913 used as data for 1913-1914 not available.

[e]1918 used as data for 1919 extraordinarily low.

General Notes: See Chapter XIV, Appendix A.

Sources: Column A is from sources in Chapter XIV, Appendix A, except 1946 is from U.S., Office of Business Economics, *U.S. Investments in the Latin American Economy* (1957), p. 112; 1965 and 1970 data are from *idem* (now Bureau of Economic Analysis), *Survey of Current Business,* September 1967, p. 42 and November 1972, p. 30. Peso exchange rate is from Roberto Santillán López and Aniceto Rosas Figueroa, *Teoría General de las Finanzas Públicas y el Caso de México* (México, D.F.: Universidad Nacional Autónoma de México, 1962), pp. 254-256. Column B is from Wilkie, *The Mexican Revolution: Federal Expenditure and Social Change Since 1910,* pp. 22-23; Table VII:11, below; and México, Dirección General de Estadística, *Anuario Estadístico, 1940,* p. 741. Column C is from *ibid., 1961,* p. 628; *ibid.,* pp. *1964-1965* p. 596; Santillán López and Rosas Figueroa, *Teoría General de la Finanzas Públicas,* p. 219; and México, Dirección General de Estadística, *Agenda Estadística* (1972), p. 196.

Balance of payments data (Chapter XIV) are offered to show the flow of funds in and out of countries, funds needed for internal development. In order to present the balance since 1956 – the first year figures are available for all countries – data have been reorganized differently than presented in the International Monetary Fund's *International Financial Statistics* and other periodic publications.

Summary balance of payments data are shown in two major accounts. First, we are interested in the net income or loss recorded in fund flows involving goods, services, and private transfers. This account reveals the basic international economic health of a country and is the sector over which central governments have made most attempts to control: If imports exceed exports (and income from tourism does not redress an outflow of funds, for example), then a devaluation in currency may be implemented to make imports more expensive and exports cheaper on the international market. Second, the capital account here includes flows of governmental and international funds as well as private investments. On the one hand, if inflow from private investment, for example, does not offset losses from the first account, then a country may be forced to seek international aid, particularly in the form of loans. In either case such a country is "dependent" upon factors outside of its own control. Hence the strong desire to make the first account into a positive inflow and to reduce dependence on capital flows. On the other hand, a country like Brazil may officially welcome inflow of private foreign capital into most enterprises, presumably because it provides funds which have more to offer (through stimulation of economic development) than they cost (through expatriation of profits or interest).

Owning to the importance of distinguishing between public and private capital flows, the capital account subtotal is given for Direct Foreign Investment to indicate not only the flow of private funds (including in some cases flight of national and non-national investment) but also to indicate the amount of capital flows attributable to the public sector. Finally, the surplus or deficit for the two major accounts is presented separately. Minus balances indicate the change in level of a country's monetary reserves (e.g., the amount needed for compensatory financing of the international deficit); plus balances indicate gain in reserves (e.g., the amount available for repayment of compensatory financing, excluding debts that are forgiven or renegotiated downward).[14]

With regard to Direct Foreign Investment, it is pertinent to note that although the role of U.S. investments is not developed in this book, which concentrates on the role of U.S. aid rather than upon the role of the U.S. private sector, some time-series data on "direct investments" (defined as a controlling interest or ownership of 25 per cent of a Latin American company's stock) are given in Tables XIV:A, B, C, D. U.S. foreign investment plays an important role in Latin America, but I believe that it has been little investigated with relation to size and impact in changing times.

The case of Mexico yields an interesting example of how the past image of U.S. investment weighs heavily upon the present even though the situation has changed. In the first two decades of this century, cumulative U.S. direct investment exceeded the total actual federal expenditure of the Mexican central government by eight to twelve times (see Table 6). During the 1920s and 1930s this ratio declined to four to five times the amount spent by the central government. By 1940 when we also have data for Mexican total public and private investment, U.S. investment was "only" about three times greater than Mexican investment. A rather close correspondence may be noted since 1940 between (1) central government expenditure (including investment) and (2) total investment of the private and public sector (including central

[14] For basic discussion of meaning in the concept of balance of payments, especially as related to the importance of international reserves and inflation, see Chapter XIX, note 9.

Balance of payments data must be used with caution: Although categories are defined consistently here, they are subject to revision (for example, if book value of foreign investment should be revalued in any particular case). Moreover, data on balance of payments from national sources may not be comparable because of varying definitions. The U.S. concept of "basic balance of payments" (or "Balance on Current Account and Long Term Capital") is not used here owing to the fact that one of its categories – "long-term capital flows" – is not available for all of Latin America; and in any case, the distinction between long- and short-term capital may not always be possible. Moreover, the U.S. basic balance of payments (net goods, services, and *all* transfers – public and private) was recalculated by the U.S. Department of Commerce in mid-1974 to account for a revaluation of profits of foreign petroleum affiliates, the basic balance for 1973 being revised from a surplus of 1.2 billion to a deficit of 744 million dollars, the total yearly revisions back through 1966 amounting to six billion dollars. (According to the U.S. Assistant Secretary for Economic Affairs, Sidney L. Jones, the goal in the basic balance of payments is to achieve equilibrium, with a one billion deficit considered as meeting that goal – see *Los Angeles Times*, June 20, 1974). The revised U.S. balance of reserve transactions (total surplus or deficit) presented in Table XIV:3, however, was not affected by such revision.

TABLE 6

BALANCE OF TRADE IN LATIN AMERICA, [a]FIVE-YEAR AVERAGES, 1901-1915

(Millions of Dollars)

Country		1901-05	1906-10	1911-15
ARGENTINA	Exports	224	345	456
	Imports	143	300	386
	Balance	81	45	70
BOLIVIA	Exports	14	23	31
	Imports	7	15	16
	Balance	7	8	15
BRAZIL	Exports	195	270	293
	Imports	123	189	238
	Balance	72	81	55
CHILE	Exports	75	108	125
	Imports	55	98	105
	Balance	20	10	20
COLOMBIA	Exports	12	15	29
	Imports	12	13	21
	Balance	#	2	8
COSTA RICA	Exports	7	8	10
	Imports	5	7	8
	Balance	2	1	2
CUBA	Exports	81	115	176
	Imports	73	97	127
	Balance	8	18	49
DOMINICAN REPUBLIC	Exports	7	9	12
	Imports	3	5	8
	Balance	4	4	4
ECUADOR	Exports	9	12	14
	Imports	7	10	9
	Balance	2	2	5
EL SALVADOR	Exports	5	6	10
	Imports	3	10	5
	Balance	2	- 4	5
GUATEMALA	Exports	8	9	13
	Imports	5	6	8
	Balance	3	3	5
HAITI[b]	Exports	-	-	15
	Imports	-	-	8
	Balance	-	-	7
HONDURAS	Exports	2	2	3
	Imports	2	3	5
	Balance	#	- 1	- 2
MEXICO[c]	Exports	97	127	130
	Imports	83	101	68
	Balance	14	26	62
NICARAGUA	Exports	3	4	6
	Imports	3	3	5
	Balance	#	1	1
PANAMA	Exports	-	2	4
	Imports	-	9	10
	Balance	-	- 7	- 6
PARAGUAY	Exports	3	4	6
	Imports	3	5	5
	Balance	#	- 1	1
PERU	Exports	21	30	43
	Imports	18	24	23
	Balance	3	6	20
URUGUAY	Exports	35	41	60
	Imports	26	39	46
	Balance	9	2	14
VENEZUELA	Exports	-	16	24
	Imports	-	10	17
	Balance	-	6	7

[a]For yearly data 1916-1971, see Chapter XV, below.

[b]Haiti, 1910-1913

[c]Mexico, 1911-1913 (1913 for 9 months).

Source: U.S., Bureau of Foreign and Domestic Commerce, *Commerce Yearbook* (1930), vol. II.

government investment). Whereas data on the former may be indicative of the latter for years before 1940 when no data are available, the size and impact of Mexico's own investment since 1946 has exceeded the cumulative impact of U.S. direct investment, the latter falling to less than one-fifth of all investment (totaling over 103 billion pesos) in 1970.[15]

An important question troubling many Latin American commentators concerns possible sudden outflow of U.S. investment during a world depression or in the event of U.S. disfavor. Given the traditional heavy outflow of Latin American funds to import goods and services, the region is dependent for achieving a positive balance upon aid and investment funds, sources that tend to dry up in times of economic or political difficulty. Moreover, U.S. direct foreign investment is seen by many not only to dominate foreign economies but also to "decapitalize" Latin America, eventually taking out more money than is put into the various countries through investment.

The question of decapitalization is hard to resolve, but some observers have suggested that in the United States bank depositors who eventually earn more in interest than they originally deposit are involved in the process of decapitalization of their bank's resources – however, there is at least one major difference because U.S. banks usually pay a smaller return on investment than do Latin American investments. In either case, however, the bank or country involved has financial resources in circulation which otherwise would not be available, and these funds generate more funds than necessary to repay the "depositer."

Since the whole matter of profits is open to question and only recently has begun to be investigated in a new light by Shane J. Hunt, I have decided to leave such data aside until analysis can be further developed. Suffice it to say here that if Hunt's discussion of profits as reported to the U.S. Department of Commerce for Colombia are indicative of official data for other countries, profits are understated by foreign parent companies which overprice materials and/or technology sold to their subsidiary agents who import into Latin American countries for final processing. Nevertheless, since Hunt notes that in the case of mineral petroleum sales this parent-subsidiary pricing policy seems to go in the opposite direction (allowing the subsidiary to show high profits in Latin America which can be registered against tax liabilities in the

[15]See also, Lyle C. Brown and James W. Wilkie, "Recent United States-Mexican Relations: Problems Old and New," in Robert H. Bremner, John Braeman, and David Brody (eds.), *Twentieth-Century American Foreign Policy* (Columbus: Ohio State University Press, 1971), pp. 378-419, especially pp. 412-413.

U.S.) we may speculate that it is difficult to draw any generalization except that actual profits may have nothing to do with stated profits.[16]

Mass withdrawals of investments from Latin America, of course, cause financial problems; and this has led to some ironic controversy. Whereas many Latin Americans claim that the decapitalization process is very steady with profits returning immediately to the United States, the U.S. government felt between 1963 and 1973 that investment funds might better remain at home after the total reached a certain level, otherwise the U.S. economy would suffer from a shortage of capital.[17] In the long run the "interest" from the investments theoretically should return to the U.S. in the form of profits, royalties, and patent income. This has not always occurred, raising the question of whether multinational corporations, with no real homeland identification or stake in one country's "national" interest, are able to juggle profits and losses among subsidiaries in various countries in order to avoid paying much tax anyplace. Examination of the balance of payments position of the U.S. and of Latin America in Chapter XIV shows that the U.S. has a net yearly outflow which is serious indeed, especially when compared with Latin America. A glance at the U.S. data (Table XIV:3) does tend to support contentions that the U.S. is a heavy loser in net direct investment flows, but this includes foreign de-investment in the United States as well as U.S. investment in foreign countries. In the U.S. data, however, military flows were greater than losses through direct investment except for 1964, 1966 and 1970-1971. In the latter year, the account for U.S. goods, services, and private transfers reached the highest outflow given, indicating along with capital outflows that the U.S. in the early 1970s faced the same kind of money flow problems faced by Latin America for years.

It is significant that recent Latin American trade deficits, shown in detail in Chapter XV, are compensated by capital flows from direct investment and aid which means dependency on infuential foreign income. Many Latin Americans want not only to avoid that dependency but also to escape from indebtedness to the International Monetary Fund (IMF). The IMF frequently advances reserve funds to offset a negative balance of payments and to provide a country with time to correct its financial problems, time without which economic panic and depression would create great political instability. The IMF, however, imposes strict provisos in return for funds: a troubled recipient country may have to revalue its exchange rate, for example, in order to encourage more exports than imports and/or must bring inflation under control. Thus the very sources of funds (be they U.S. direct investment, U.S. assistance, or IMF loans) which Latin America needs until a modern economy is structured are both feared and required.

The subject of trade balances (Chapter XV) is directly related to Latin America's need to develop its own pool of funds that are not tied to outside controls. Traditional exports are often the only immediate way of earning foreign funds which can then be channeled into national development, as Cuba discovered under Castro. Cuba attempted to escape from reliance on sugar exports, but by failing to diversify exports, it has had to rely on sugar more under Fidel than under the hated dictator Fulgencio Batista.

Data on balances of trade for the Latin American republics are listed on a yearly basis since 1916, essentially the post-World War I period. To place this trade into pre-1916 perspective, Table 6 shows trade balances in five-year averages between 1901 and 1915. As can be seen here and in Table XV:1, negative balances date mostly since the 1950s, except for Colombia, Costa Rica, Mexico, Nicaragua, and Panama. Trade balances, of course, may not only be related to internal affairs but to fluctuations in market price, data for which are shown in Table XV:A.

Diversification of exports is only one way to achieve "national economic independence." By diversifying reliance on one or two major trading partners, theoretically a country cannot only elude unfavorable spillover of economic effects from close trading partners but also develop bargaining power to sell its goods. Actually, however, spillover effects tend to be regional or global (rather than limited only to several countries) and the development of bargaining power is linked to the creation of regional trade blocs, discussed in the Afterword, below. Data in Table XV:3 show the extent to which Latin American countries have diversified since 1915 their economic relations among the "big four" major powers — the United States, Germany, United Kingdom, and Japan. Percentage trade with other partners in foreign commerce may be derived by subtracting from 100 per cent the big four's share of Latin American exports.

---

[16] Shane J. Hunt, "Evaluating Direct Foreign Investment in Latin America," in Luigi R. Einaudi, *Beyond Cuba: Latin America Takes Charge of Its Future* (New York: Crane, Russak, 1973).

[17] Regulations adopted in 1963 to restrict U.S. foreign investment was ended in January of 1974. The regulations were dropped because of the dollar's renewed strength on foreign exchange markets, an improved U.S. balance of payments situation, and desire of the Nixon administration to encourage funds to flow to "points of need" during a time when many nations face sharp deterioration in their balance of payments owing to the great increase in oil prices. See *Los Angeles Times,* January 30, 1974.

The role of trade in Latin American financial affairs is revealed in Tables XV:5 and XV:6. Latin America's share in non-Communist world trade[18] has been *halved* (along with a drastic drop in the U.S. export share) as Germany and Japan have expanded their markets. Table XV:7 which lists data on trade as a percentage of Gross Domestic Product, for selected countries, shows that percentages have tended to remain the same in Argentina, Bolivia, Colombia, Costa Rica, Guatemala, and Venezuela; Chile has shown significant increase in trade as a percentage of GDP; two countries, Mexico and Peru, have seen this relationship decrease.

Given the important role of the United States in Latin American trade, balances with the United States are presented on a yearly basis for each country in Chapter XVI. While often it is believed that Latin America exports agricultural products to the United States in return for finished goods. Table XVI:3 shows to what extent this view is not true on a country-by-country basis. Although there are problems in carrying a consistent series back in time very far, especially with regard to total Latin American trade of agricultural products, the available data are surprising. For example, during the 1960s the percentage of Brazilian agricultural imports ranged between 12 and 24 per cent, with Brazil's share of U.S. agricultural imports running between 10 and 36 per cent. Such data suggest that Latin America needs to strengthen attempts to become self-sufficient in agricultural production.

It is argued that U.S. projected and actual assistance to Latin America has been spent largely to pay for favorable U.S. trade balances with Latin America. Chapters XVI and XVII contribute statistics for analysis of this thesis. The data on projected U.S. assistance to Latin America (Chapter XVII) have been reorganized from categories prepared by AID for clearer presentation than given in government publications. For AID's method of presentation, see the Agency's *U.S. Overseas Loans and Grants and Assistance from International Organizations; Obligations and Loan Authorizations, July 1, 1945-June 30, 1972* (1973). Although it is an extremely useful volume in that it gives much detail, the subtotal components are not always clear; and year-by-year data before 1962 are not given for the series, which in the 1972 edition initiated revisions to present statistics in gross rather than net terms. This shift in reporting, which makes previously published series outdated, was ordered by the U.S. Congress which justifiably was concerned that fluctuations in published data every year made it impossible to know how much assistance had been promised, even if never delivered because of reasons arising either from U.S. or the recipient country policy. The revised series is intended to obviate much of this problem. Data presented here are based upon AID worksheets available in Washington, D.C. These worksheets not only permit reconceptualization but allow presentation of unpublished data on gross totals. (AID publishes *gross* yearly data but *net* totals.)

Actual expenditures for U.S. assistance since 1946 (in contrast to projected expenditures) are given in Tables XVII:5-8. Because no single U.S. agency is charged with overseeing expenditures, no agency records in detail and/or analyzes the total impact of long-term U.S. assistance. Ironically, U.S. Congressional confusion about the sum total of expenditures can only begin to be cleared up by the development of the type of series offered here. Thus, reorganization in presentation of projected expenditures is only a palliative solution.

Development of data offered here on actual expenditures involved long periods of frustration in the face of the fact that few officials in Washington recognize the value of comparing projected and actual amounts. Indeed, each agency wishes only to be responsible for its own programs perhaps because, in a situation where competition for funds is forceful, if the flow of international assistance funds were understood according to function some agencies might suffer reduced budgets – presumably if each agency leaves others alone, all will benefit. Although one might have expected the U.S. Department of State to lead the way in gathering full data, such has not been the case; for example, the External Research arm of the State Department has been confined by bureaucratic protocol to investigating non-U.S. affairs. And since the internal orientation of State involves assessing the activity of the Department itself, the arena of assessing the interaction of U.S. assistance with the policy of recipient countries falls between the lines of bureaucratic table of organization charts.[19] Policy, then, is evaluated on the basis of projected rather than actual expenditures.

Presentation of data in Chapter XVII involves the question: What is assistance? Concerning Tables XVII:1 and 5 the following arguments (among others)

[18]Not until 1973 did the USSR begin to release extensive trade information; and it began to do so only in response to pressure from foreign investors and traders with whom it seeks to do business.

[19]In spite of this disheartening state of events, a few government individuals have worked to assemble basic data, maintaining detailed time-series expenditures. (One such person is Ruth Clarke, of Funds Control and Program Statistics, Office of Development Programs, Bureau for Latin America, AID/Washington, who was of great assistance in presenting data here.) Cf. total data (1961-1970) for Latin America in Table 37 of the OAS book cited below in Note 21 – OAS data are based upon mixed fiscal and calendar years.

might be used *against* categories included: Military funds do not really involve assistance because they only have assisted in repression of the population. Peace Corps assistance has done more to assist U.S. citizens in learning about Latin America than to assist in the development of Latin America. Food for Peace has not only stunted the development of Latin American agriculture but lulled recipient nations into an easy solution for feeding a rapidly expanding population, thus making it possible for governments to avoid implementation of controversial but necessary birth-control programs. Since Export-Import Bank loans are granted for the purchase of U.S. produced goods, Latin Americans pay higher prices than might be obtainable elsewhere, U.S. exporters effectively receiving the assistance in the form of a subsidy. And AID funds, like Social Progress Trust Funds, result in a heavy debt burden for Latin America.

While there is some degree of truth in all of these statements, the following counter arguments are persuasive: Since military items and food will be imported anyway, low or subsidized prices provided by the United States free scarce funds for national development. Export-Import Bank loans have been made at such relatively low interest rates (generally five to six per cent) that the Bank is under fire from U.S. business leaders who note that it charges half the current U.S. rate of interest to finance competition for U.S. concerns.[20] Not only have AID funds involved grants as well as loans, but also the grants exceeded loans until 1962. Interest rate charged on loans by AID is generally much less than one third of the interest rate prevailing in Latin American countries, the AID rate averaging 2.3 per cent yearly between 1961 and 1970.[21] Social Progress Trust Fund loans were administered through the Inter-American Development Bank as part of multilateral instead of bilateral assistance at the same low rates of interest. And no doubt the Peace Corps has planted, at relatively low cost, some seeds of local initiative. In any case, should the reader not agree with any of these categories, they may be deducted from the full data given in Chapter XVII. (Other categories are discussed in relation to Table XIX:1.)

Because of problems in generating these series, it should be noted that projected expenditures may include some actual amounts and vice versa. All categories are not comparable, the subtotal for actual loans not being clear in the sources. Export-Import Bank data do not always include short-term loans (less than five years) and should be reconstructed for consistency, adding any loans that have been sold because such loans originally came from public funding. Tables XVII:2 and XVII:10 include methodological discussion of how Food for Peace has been handled differently by AID and USDA. And Table XVII:A notes methodological problems of classifying U.S. assistance by type of emphasis as has been done for national expenditures in Chapter VII. In spite of these shortcomings, the series offered here provide a basis for new research, research that hopefully will lead to refinement in the series.

Data on change in Gross National Product (GNP) and Gross Domestic Product (GDP) are presented in Chapter XVIII. Detailed breakdown for component parts are not presented because I am interested in showing total growth levels for comparative purposes, especially in relation to the U.S. and to the so-called "widening gap" between developed and underdeveloped countries. In Part III discussion of U.S. assistance under the Alliance for Progress also is examined (Chapter XIX) in relation to the Alliance's stated goal of achieving a 2.5 per cent increment in per capita product of Latin America.

Although theoretically GNP differs from GDP in that GDP includes the domestically produced wealth of goods and services and GNP includes adjustment of GDP to account for net foreign payments (subtracting factor income[22] earned by foreigners and adding foreign factor income earned by residents of the country), GNP[23] and GDP[24] are essentially the same

---

[20] Nevertheless, the bank helps to solve the U.S. balance of payments problem; for discussion of this dilemma, see *Newsweek*, July 1, 1974, pp. 48-49. See, however, Simon G. Hanson, "Developmental Financing for Latin America: The Failure of the Exim Bank," *Inter-American Economic Affairs* 11:4 (1958), pp. 71-87.

[21] For average interest rates, see OAS, Inter-American Economic and Social Council, *Latin America's Development and the Alliance for Progress* (Washington, D.C., 1973), p. 418. On proportion of grants to loans, see Table XVII:6.

[22] Factor income earned abroad includes investment income such as rent interest, dividends, branch profits, undistributed earnings of subsidiaries, earnings of residents working abroad and other income earned abroad by normal residents. See UCLA *Statistical Abstract of Latin America* (1964), pp. 108-109.

[23] GNP equals GDP adjusted to exclude value added by foreign suppliers of factor services and to include income of residents from factor services supplied abroad.

[24] GDP equals resident-produced goods and services, including value of foreign factor services and excluding income of residents from factor services supplied abroad.

for Latin American countries.[25] Not only are minor differences well within the margin of error for calculating such data, but in any case the numerical difference in the rates of GNP and GDP growth tends to be small.[26]

Data on GNP are not given here for Cuba and Haiti, because since Castro's revolution, Cuban data are reported in noncomparable Gross Material Product. And given the general lack of reliable statistics for Haiti along with the specific lack of economic growth, apparently there has been little motivation to develop a meaningful gauge for measuring minor economic change.

Comparison of data on GNP is made possible in standard terms of U.S. dollars of 1970 by splicing together several time series published by AID/Washington. Needless to say, the usefulness of the AID series would be greatly enhanced if the reference year for calculating constant dollars were not shifted by AID with each successive publication.

Some lessons for official agencies that gather and publish data seem to emerge from my own attempts to develop continuous data series: The same base years for indexes should be maintained instead of continually being changed. When a new official seeks to reorganize a particular agency, the existing time series should be maintained — this is not expensive if one considers the accumulated cost of the series and the fact that such series are necessary for planning with historical perspective. Perhaps planning agencies should be incorporated into official statistical agencies instead of vice-versa so that "old series" are not discarded because, at one moment, they appear to be irrelevant. Statistical agencies in the Latin American nations should be encouraged to publish time-series data as a regular practice: historical series are presented in different volumes of statistical abstracts and this necessitates painstaking searches for data in order to construct necessary series. Planners often do not have the time to make such investigations. If publication of time-series data were integrated into statistical agency activity, not only would research be facilitated for policymakers, but problems in the data could be identified in yearly comparisons. Finally, if data are to be improved, analysis of the way in which series are constructed is of major importance. The research of authors such as Carmelo Mesa-Lago, Laurence Whitehead, and Jerry L. Weaver should be encouraged.[27] Without such work, the development of statistical models seems premature.[28]

A major theme running through the methodological discussion in the tables that follow is how little is known about the development of society. UNESCO's attempts to create comparable conceptual categories have made some progress over the years, but other series have confusing internal definitions, as in the case of U.S. aid wherein "supporting assistance" for political or military ends is classified as economic support instead of military. While it is true that the development of roads, for example, could serve both ends, a greater attempt should be made by the AID officials to make more precise distinctions. Otherwise, the making of state policy tends to be based upon clichés as is the analysis by scholars who would attempt to understand that policy. But as we have seen in relation to Mexican budgets, perhaps a goal of some officials is obfuscation of policy input and output.

The data offered in Chapters VII-XVIII do not represent all of the important topics that need development. It could be argued that they are oriented toward economics. Perhaps they reflect more the past interest of generating data necessary for expanding U.S. markets than the stated thrust of Alliance for Progress which theoretically sets out to change social as well as economic relationships. But social indicators often are difficult to obtain on a yearly basis. Social "transactions" are not registered in the same way as economic transactions; this would indicate a need to

---

[25] See Table XVIII:8; exceptions are Bolivia, Brazil, Chile, and Nicaragua in recent years, however, the difference is less than an average of 2 per cent.

[26] Harvey S. Perloff, *Alliance for Progress; A Social Invention in the Making* (Baltimore: John Hopkins Press, 1969), p. 22.

[27] Carmelo Mesa-Lago, "Availability and Reliability of Statistics in Socialist Cuba," *Latin American Research Review* 4:1 and 4:2 (1969), pp. 53-59 and 47-81; Laurence Whitehead, "Basic Data in Poor Countries: The Bolivian Case," *Bulletin of the Oxford University Institute of Economics and Statistics* 31 (1969), pp. 205-227; and Jerry L. Weaver, "Assessing the Impact of Military Rule: Alternative Approaches," in Phillippe C. Schmitter (ed.), *Military Rule in Latin America* (Beverly Hills, Calif.: Sage Publications, 1973), pp. 58-116. Weaver offers a particularly interesting evaluation of the statistical problems of Schmitter's "Military Intervention, Political Competitiveness, and Public Policy in Latin America," in Morris Janowitz and J. van Doorn (eds.), *On Military Intervention* (Rotterdam: Rotterdam University Press, 1971), pp. 425-506.

[28] See, for example, Frederic Carl Wien, "The Generalization of a Latin American Development Model," Ithaca: Ph.D. thesis in sociology, Cornell University, 1971).

develop a new social accounting framework. Although the concept of registering social transactions may sound complicated, what we are interested in involves knowing, for example, how many physicians are actually practicing their profession (in contrast with being licensed to practice) and where they were educated. As available social data now stand, year-to-year changes are not always meaningful;[29] and much research is needed to quantify social factors for time-series presentation.

---

[29]For problems in time-series data, see figures as reported in the U.N. *Compendium of Social Statistics: 1967.*