

problem of unemployment.

C. Visible Underemployment

Twelve percent of the employed who were at work in May 1973 expressed the desire for more work. Of this group, 53.7 percent were working under 40 hours a week, and 51.3 percent in fact looked for more work. Table 10 reveals that visible underemployment, measured in terms of the desire for more work among part-time workers, does not vary much between sexes nor between those employed by others and those self-employed.

The underemployment picture was much bleaker in the past. In May 1968, visible underemployment was 13.7 percent of the employed at work. In May 1963 the ratio was 15.4 percent. Differences across population groups were also more evident in the past. Table 10 shows the substantial reductions in unemployment and underemployment between 1958 and 1973 across different labor force groupings.

Physical measures of unemployment and underemployment offer but one perspective, possibly a distorted one, of the Philippine employment problem. The growing concern with poverty and the lack of progress towards equity in income distribution, issues alluded to earlier, call for an analysis oriented towards the productivity and income dimensions of the problem. These issues cut across the conventional sectoral and occupational distinctions, but some basic patterns emerge: low earnings and low productivity per worker tend to be concentrated in "traditional" sectors where self-employment predominates, capital per worker is low, and the unit of enterprise is small.

TABLE 10

Part-Time Employed Persons Wanting Additional Work,
as a Proportion of All Employed Persons at Work,
by Class of Worker and Sex, May 1958 and May 1973^{a/}
 (in percent)

	May 1958		
	Both Sexes	Male	Female
Total Employed, at Work	12.7	11.7	14.6
Wage and Salary Workers	12.7	13.7	10.3
Self-Employed Workers	13.0	11.0	18.6
Unpaid Family Workers	12.2	10.2	14.1

	May 1973		
	Both Sexes	Male	Female
Total Employed, at Work	6.5	6.7	6.0
Wage and Salary Workers	6.9	8.0	4.7
Self-Employed Workers	6.2	5.9	7.1
Unpaid Family Workers	6.4	6.3	6.5

Note:

^{a/} Part-time employment is defined here as less than 40 hours of work during the survey week.

Source: Computed from the BCS, Survey of Households Bulletin, "Labor Force", May 1958 and May 1973.

III. EMPLOYMENT AND EARNINGS

A. Modern and Traditional Sectors

What commonly gets classified in output and employment statistics under "agriculture" is a set of distinctly heterogeneous activities when viewed within the context of productivity and labor absorption capacity. Domestic food crops differ significantly from export crops in terms of input-output relationships. Similarly, the other sectors, especially manufacturing, commerce and services, each contain enclaves of "organized" and "unorganized" sub-sectors.^{20/} Table 11 contains a decomposition of the conventional sectoral breakdowns, showing the direct labor-absorptive capacities of the different sub-sectors. The inverse of the direct labor absorption measure would be a gross labor productivity measure with gross output (instead of value-added) in the numerator. The industries with high absorptive potential are conversely, those with low labor productivity. The low employment generation coefficient for the modern consumer goods sector probably reflects the effects of the import-substituting strategy in the fifties which allowed heavy subsidies to the capital imports of these industries.^{21/}

More direct evidence on structural differences between organized and unorganized sub-sectors is available for manufacturing and the services sector. In manufacturing, there are differentials in productivity and wages across subsectors defined in terms of workers per establishment. Labor productivity in the unorganized sector (establishments with less than five workers) fell by almost 50 percent between 1956 and 1966, while the organized sector showed substantial gains (see Table 12). The traditional

TABLE 11

Sector Employment - Output Ratios and Direct Employment
Effects of ₱1 Million Increase in Sectoral Final Demand

S e c t o r	Employment requirements per 1 million pesos increase in output	Direct employment effects
1. Domestic food crops	1267	1298.5
2. Export-crops	506	519.7
3. Livestock and fishing	649	660.7
4. Forestry	311	312.8
5. Mining and fuel	59	60.4
6. Modern consumer goods	30	32.4
7. Traditional consumer goods	230	233.1
8. Other Manufacturing	48	63.2
9. Construction	152	154.3
10. Transportation and public utilities	213	232.0
11. Modern Services and wholesale trade	65	73.3
12. Traditional services and retail trade	444	460.0
13. Government	259	259.0

Source: ILO, Sharing in Development, 1974, vol. II, p. SP 19-15.

TABLE 12

Productivity, and Wages in Manufacturing, 1956-1969

Year	20 or more workers		5 to 19 workers		Less than 5 workers
	Labor Productivity ^{a/}	Average Wage ^{b/}	Labor Productivity ^{a/}	Average Wage ^{b/}	
1956	6135	1865	2004	1125	485.2
1957	5952	1886	1980	1099	457.2
1958	6452	1964	2132	1207	504.8
1959	6944	2096	2262	1278	457.7
1960	6849	2135	2208	1161	401.1
1962	6897	2211	1555	1114	383.1
1963	7194	2309	1745	1233	283.4
1964	7042	2430	2208	1302	
1965	6711	2606	2237	1377	286.4
1966	7246	2869	2257	1422	246.7
1968	8252	3255	2292	1640	
1969	8618	3038	2220	1564	

Notes:

^{a/} In 1955 prices.^{b/} In current prices.

Source: Romeo M. Bautista, NEDA Journal of Development, "Employment and Labor Productivity in Small-Scale Manufacturing in the Philippines", Vol. I, No. 1, 1974, pp. 43 and 46.

sector accounts for the majority of manufacturing employment (69.2 percent in 1968), but its share has declined (from 73.7 percent in 1956). Even the organized enclave experiences a dualism: between the small and the large establishments, the gaps in both labor productivity and wages have been widening. By 1969 labor productivity in the large establishments was four times higher than that in small establishments, and earnings were twice as high.^{22/}

A very similar dualistic structure is found in the services sector. Employment in the unorganized sub-sector has been declining gradually from 64.2 percent of total sector employment in 1961 to 61.4 percent in 1971. The ILO Employment Mission's assessment of the developments in the services sector is worth quoting in full:

The gap in labor productivity and in wages between the two sub-sectors is striking. Output per person in organized commerce, for example, is about six times as high as in unorganized commerce. For retail trade alone, average wages in larger establishments are about twice those in smaller establishments. The wage difference between a general grocery store and a sari-sari store [a small neighborhood variety store] is even larger, about four to one. If the sari-sari store can be taken as representative of unorganized retail trade, then there is an obvious gap between the organized and unorganized commerce sectors. In wholesale trade, average wage earnings are again about twice those for smaller ones.^{23/}

B. The Employed and the Self-Employed

At the micro level, a recent cross-section study explored the relative effects of several factors on income inequality among household heads.^{24/} For both the employed and the self-employed, education was found to be the single most important variable explaining income variations.

Except for college graduates, the self-employed earn less at every level of education. Among the employed, occupation is the second most important determinant of income; among the self-employed, one's sector of employment ranks next to education. The class of worker variable (whether employed or self-employed) itself ranked only eighth out of eleven factors studied. This suggests that the distinction between employment and self-employment may simply stand for other, wider differences in characteristics among workers. Education is certainly one of those characteristics: in the sample, 21 percent of the employed finished at least high school, compared to only 10 per cent among the self-employed. Since the higher explanatory power of the occupation variable was greater than that of the sector variable, this suggests that definitions of "traditional" and "modern" or "organized" and "unorganized" sectors should be made with reference to particular occupation groups. Government employment, for example, seems to provide protected sector employment for the unskilled, as it pays minimum wages higher than unprotected sector wages. Yet the government behaves competitively in the market for the highly skilled.^{25/} Thus, the dichotomy between traditional and modern sectors could be exaggerated to the extent that an appreciation for the complexities of the labor market is lost.

IV. SPECIAL EMPLOYMENT PROBLEMS AND ISSUES

A. Education and Employment

Mean education levels vary significantly across sectors and across occupations. Variations within subgroups, however, are also very wide, especially in non-agriculture. The correlation between education and

occupation is thus very low. Some would view this "mismatch" as a misallocation of costly resources, while others see in it a rational and efficient response of the supply of educated labor to prevailing market conditions.^{26/}

Although education is found to be the most important determinant of earnings among household heads, education viewed as investment is not that profitable, from a private as well as a social accounting framework. Table 13 shows that the gap between private and social returns is widest at the elementary education level, as the government bears the bulk of direct schooling costs. The narrowing of the gap at higher schooling levels reflects increases in the share of schooling costs being borne by the students.

In higher education, it appears that the probability of landing a job in the organized sector is influenced by the type of institution the college student attends. Marginal rates of return are highest for public school graduates, followed by those from religious institutions, and followed lastly by graduates from proprietary schools.^{27/}

B. International Migration

The Philippine brain drain problem is an issue deeply linked with the problems in higher education. Since 1967, the outflow of highly skilled Filipinos has been alarming. In 1970, 8,881 professional, technical, and related workers migrated to the United States and 1,152 such workers migrated to Canada. These Filipinos accounted for 39 percent of all Asian skilled emigrants to the United States, or 19 percent of the world total.^{28/}

TABLE 13

Private and Social Internal Rates of Return to Different
Levels of Education, 1971
 (in percent)

	Social Rate	Private Rate
1. Elementary, 1-4 years over 0 schooling	5.0	9.0
2. Elementary, 5-6 years over 1-4 elementary	6.5	8.0
3. High School, 1-3 years over 5-6 elementary	4.0	4.0
4. High School, 4 years over 5-6 elementary	6.0	6.0
5. College, 1-3 years over 4 high school	5.0	5.5
6. College, 4 years over 4 high school	7.5	9.0
7. College, 5 or more years over 4 high school	7.0	8.0

Source: ILO, Sharing in Development, 1974, vol. I, p. X - 18.

The outflow of medical personnel is especially heavy in relation to the stock and to the replenishment of the stock: 3,365 of the 1970 migrants to the U.S. and Canada were in the medical field although the number of medical graduates in 1970 was less than 4,000. (These migration figures exclude the flow of the emigrants' dependents.)

Abstracting from "cosmopolitan" or "nationalistic" issues of whether world welfare or national welfare should be maximized, one could view the brain drain phenomenon as an outlet for the excess supply of educated labor. On the other hand, the opportunity to migrate may be an important determinant of the excess supply. The availability of higher educational opportunity in the Philippines has been elastic (at least before the institution of the National College Entrance Examinations in mid-1974) at relatively cheap prices. The opportunity cost of a fresh high school graduate is low if one allows for the high probability of unemployment. Overseas job prospects may easily raise the expected returns from college education as perceived by the student. The U.S. job market functions as an "organized sub-sector," attracting hordes of "migrants" to college, medical schools in particular.

C. Industrial Relations

Union membership counts may serve as an indicator of the size of employment in the organized sectors. The Bureau of Labor Relations reports 5,059 registered labor unions in 1973. Among the registrants, the 1,563 which reported their memberships had 244 members on the average. This implies a total of 382,173 union members, or 11.5 per cent of wage and salary workers excluding those in the government and domestic services sector. A sectoral breakdown shows that most union membership is in

manufacturing (Table 14). However, the services sector (excluding government and domestic services) is the most highly unionized, with 37.7 percent of its wage and salary workers organized. Next come construction with 37.3 percent and manufacturing with 20.5 percent. These statistics support the relevance of identifying sub-sectors within the broad sectoral groupings.

To the extent that unionized activities tend to be more prevalent in the modern sub-sectors of the economy, where labor costs as a proportion of total costs may be small, the scope for potentially distortive union wage demands may be minimal. In fact, real wage indices for both skilled and unskilled laborers have been declining over the past four or five years. As these indices are gathered from surveys of relatively large establishments, they may be reflective of relative wage levels in the unionized sectors.

Government guidelines on labor relations are set forth in a new Labor Code decreed in May 1974. The promotion of free collective bargaining, including voluntary arbitration, to settle disputes is a stated objective in the Code. Provision is also made for the "rationalization" of union organizations, which means that no federation or national union shall be registered to engage in any organizational activity in more than one industry. (The implications of this provision on labor relations remain to be seen.) In the meantime, strikes and work stoppages have been prohibited since martial law was proclaimed in September 1972.

TABLE 14

Reported Union Memberships, by Sector, 1973

		Percent Distribution	Proportion to Sector Employees
All Industries	382,173	100.0	11.5
Agriculture, forestry and fishing	6,436	1.7	0.7
Mining and Quarrying	7,708	2.0	15.4
Manufacturing	169,761	44.4	20.5
Construction	6,939	1.8	37.3
Utilities	13,421	3.5	1.5
Commerce	47,632	12.5	10.6
Transport, Storage, and Communication	53,803	14.1	13.1
Services	69,470	18.2	38.8
Activities not adequately described	7,003	1.8	

Sources: Department of Labor, 1973 Yearbook of Labor Statistics, 1974.

BCS, Survey of Households Bulletin, "Labor Force", May 1973.

V. POLICY DIRECTIONS

A. Supply-Oriented Approaches

The Philippines is currently undertaking a massive family planning campaign. Left previously to the initiative of the private sector, the population control program has, since the start of this decade, caught the active support of the government. Thus, an official target is the reduction of the population growth rate to 2.5 per cent by the mid-seventies. By June 1973, public clinics accounted for 62 per cent of the total number of operating family planning clinics in the country, and the number of new acceptors had reached almost five times the 1970 level. However, the official target seems somewhat optimistic, given the three percent growth rate of the population in the sixties.

Fiscal policy is also being utilized for the population program. Personal income tax exemption is now limited to four dependents, and the dependency age has been reduced from 23 to 21. The effective tax rate on married couples is also higher than on single individuals, with couples required to file joint returns. This would tend to favor delayed nuptiality, though it may also have negative effects on labor force participation among married women and corresponding positive effects on fertility. While these fiscal measures do not apply to low-income families whose earnings are below taxable levels, the proportion of families whose incomes become taxable (₱1,800 or more per year) has grown quite substantially, with the high inflation rates in recent years. There are now over 4 million income tax filers against some 7 million households.

The new Labor Code also embodies regulations designed to encourage family planning among working women. Maternity leave with full pay is limited to six weeks, effective only for the first four deliveries. Employers are required to provide family planning services as well as incentives for family planning.

The current nutrition program likewise has strong productivity overtones. Emphasis of the program is not on adults but on children, for whom the pay-offs are expected to be larger, in terms of longer recovery periods as well as higher marginal biological gains from improved nutrition.

While the effects of family planning and nutrition programs would be felt mainly in the long run, more immediate corrections on the supply side are being applied in the form of manpower training and education policies. The National Manpower and Youth Council aims to establish ten regional manpower and development training centers, each with an annual capacity of 6,000 to 8,000 trainees. The utility of the present forms of vocational education in the country has been questioned,^{29/} and it is hoped that these proposed training centers would incorporate lessons from past experiences with vocational training.

Access to higher education is beginning 1974, limited to at most three-fourths of high school graduates by means of the National College Entrance Examinations. The results of the examinations for the school year 1974/75 bring into focus wide disparities in achievement levels across regions. In Greater Manila, 86 percent of the examinees qualified, but only two-thirds of the candidates from Eastern Visayas and Mindanao succeeded in passing the examinations.^{30/} The likelihood of qualifying bears a strong

correlation with income. Only 63 per cent of the students whose families earned below ¥100 per month qualified, while 88 per cent of the students in the higher income groups (¥1500-3500 a month) passed.^{13/} As a testing device, the examinations showed how incomes interacted with relative deprivations in achievement levels. As a rationing device, the examinations may have far-reaching consequences on the equality of educational opportunity across income classes. The probable impact of the rationing scheme is difficult to assess at this point. Prior to establishment of the NCEE as a requirement, less than 75 per cent of high school graduates even attempted to go to college. Given its potential, however, it is an issue which deserves a closer look.

B. Demand-Oriented Approaches

The main strategy adopted by the government for productive employment expansion remains that of accelerating economic growth. The Four-Year Development Plan for Fiscal Years 1973-1976 envisioned mining, manufacturing, and construction as leading sectors. The recommendations of the 1973 ILO Employment Mission, coupled with the oil crisis and the recent slump in world prices of major mining commodities, may have changed the sectoral emphases of the National Economic and Development Authority.

The ILO mission's recommendations run along two main strands--the mobilization of the rural sector, and the diversification of exports to non-traditional, labor-intensive commodities.^{32/} More specific recommendations are suggested on the implementation of the "two-pronged strategy", the underlying principles being the diffusion of incomes and opportunities to underprivileged groups and the convergence of resource prices to their

true social opportunity costs. One major suggestion of the mission which is having trouble being heard is in the area of interest rate policy. Maximum savings and borrowing rates set by law are far below the prevailing rate of inflation, in effect making real interest rates negative.

In agriculture, the government has been pursuing the land reform program somewhat more seriously than before. The impact of land reform on productivity, however, appears to be nil. There is no difference in productivity among sharecroppers, lessees, and owners, as confirmed by similar patterns of use of various inputs such as fertilizer and new varieties. The real difference among the tenures is in the rentals paid. The potential effect of the land reform program, therefore, will be solely in the area of equity.^{33/} But the actual equity effect may not be very large, as the compensation rate for the landowners appears to be very high. On the positive side, the land reform program has afforded the tenant greater security of tenure than in previous years.

Efforts to raise farm productivity are also stressed. The government has engaged in pilot projects in road-building and flood control to determine the scope for employing labor-intensive techniques in public works activities.^{34/} Rural public works, fragmented in the past, are now being integrated into area development programs such as the Upper Pampanga River Project and the Bicol River Basin Development Project. At the farm level, the government is more keenly aware of production responses to price incentives. Thus, while food prices were held back by price control in 1973/1974 to stem inflation, "counter-distortions" have been introduced by way of subsidized

fertilizer for food crops (but not for export crops) and massive farm

From the viewpoint of mass welfare, the most immediate problem confronting the Philippine economy in the 1970's is inflation. (In 1973, the consumer price index rose by 30 percent between June 1973 and June 1974 it rose by 56 percent.) Unemployment per se has lost its importance. The national unemployment rate fell from 4.8 per cent in November 1973 to 4.1 per cent in February 1974, but the sustained rise in prices has so eroded earnings that the real wage rate is now at its lowest in the entire history of the Republic. Thus, even as a few thousand more people find employment, millions of the masses find their real earnings eroded by inflation. More families are pushed below the poverty threshold, and those already there suffer further deprivation.^{35/} Relative inequality also worsens, as different groups suffer according to different degrees. Property owners, for example, find the value of their assets roughly keeping up with the price level, while fixed-income recipients suffer most.

The government seems fully aware of the problem, but attempts to curb inflation have centered on controls on prices of basic commodities, particularly food prices. To negate the depressing effects of price control on incentives to food producers, a subsidy on fertilizer for food crops and massive farm credit have been introduced. The present structure of the credit program, however, is itself inflationary, since it has been dispersed into the rice economy through rediscounts of loan paper at the Central Bank. From an initial loan of ₱77.5

million in 1973 from the United States Agency for International Development to the Central Bank, a total of ₱503 million had been lent out by April 1974.^{36/}

Although Philippine experience with double-digit inflation began only in 1970, the problem started forming much earlier. Money supply has been rising at double-digit rates since the early sixties, and may only have been prevented from pulling up domestic prices earlier by developments in the trade sector. But the pressures stayed, and found an outlet in the 1970 devaluation. It is clear that to the extent that the Philippines is a very open economy, its price level is sensitive to world price movements. World inflation, however, is not the primary explanation for Philippine inflation.

The scope for immediate positive action is very broad, within a present policy structure characterized by fluidity and "dynamic flexibility." However, perhaps because the inflation problem is relatively new, its roots have not been thoroughly explored. Monetary restraint is an avenue which, the government seems to feel, has its own unfavorable consequences on the objectives of growth and employment. Meanwhile, something must be done to counteract the adverse distributive effects of inflation.

NOTES:

1. See Sicat (1964).
2. Strictly speaking, average weekly hours worked is an input measure rather than an output measure. But then, so is employment. From the income viewpoint, more hours worked also means high earnings, at a given wage rate.
3. One model shows the implicit price index for GNP as significantly explained by money supply (lagged three months) and real output for the period 1950-1969. See Encarnacion et. al. (1972).
4. See Lampman (1967) and Hooley (1968).
5. Lampman (1967).
6. The residual even became negative. See Williamson (1967, 1969).
7. Power and Sicat (1971).
8. Power and Sicat (1971); ILO (1974).
9. For a more detailed analysis of the political economy of rice, see Mangahas (1972a, 1974).
10. Mangahas (1968, 1972b).
11. Mangahas (1972a).
12. The production problems in this period are discussed in detail in Mangahas and Librero (1973).
13. Abrera (1974).
14. These control values were initially understated; they were revised upwards in 1965 and again in 1971 to approach the census and projection figures, until by 1973 they correspond almost exactly to the population census projections. The initial understatement of the control values lent an upward bias to labor force growth rates computed from the survey estimates. See Ruprecht (1966).
15. ILO (1974).

16. See Table 3 for an idea of how much school participation rates, at all educational levels, have increased.
17. Mangahas (1972c).
18. This was the latest year for which the BCS labor force survey published educational attainment data.
19. Abrera (1974)
20. See ILO (1974).
21. Power and Sicat (1971); ILO (1974). The employment-output values in Table 11 may be already outdated, since the study was based mainly on the National Economic Council's 1965 input-output table. Agricultural productivity and prices have improved significantly since 1965. In fact, time series studies (using conventional sectoral breakdown) show that the value-added elasticity of employment is lower for agriculture than for most of the other sectors. See Mangahas, Meyers, and Barker (1972).
22. Bautista (1974).
23. ILO (1974).
24. Encarnacion (1974).
25. Alonzo (1974).
26. Domingo (1974; Blaug (1972).
27. Miao (1971).
28. Cortez (1972).
29. See, for example, Alba and Magno (1972) and ILO (1974).
30. Fund for Assistance to Private Education (1974a).
31. Fund for Assistance to Private Education (1974b).
32. ILO (1974).
33. Mangahas, Miralao, and de los Reyes (1974).
34. Alonzo (1973).
35. Abrera (1974).
36. Mangahas (1974).

R E F E R E N C E S

- Abarrera, Ma. Alcestis, "Philippine Poverty Thresholds," Development Academy of the Philippines, unpublished paper, 1974.
- Alba, Manuel and Magno, Thelma, "Manpower Development Strategy and Investment in Education," in Papers and Proceedings of the Workshop on Manpower and Human Resources, Philippine Economic Journal, vol. XII, nos. 1 & 2, 1973.
- Alonzo, Ruperto P., "On Measuring Shadow Wages of Philippine Labor," NEDA Journal of Development, vol. 1, no. 1, March 1974.
- _____, "Short-Term Employment Creation Projects in the Philippine Setting: Problems and Prospects," SEADAG Papers on Problems of Development in Southeast Asia (73-10), New York: The Asia Society, 1973.
- Bautista, Romeo M., "Employment and Labor Productivity in Small-Scale Manufacturing in the Philippines," NEDA Journal of Development, vol. 1, no. 1, March 1974.
- Blaug, Mark, "Educated Unemployment in Asia: A Contrast between India and the Philippines," Philippine Economic Journal, vol. XI, no. 1, 1972.
- Cortes, Josefina R., "Brain Drain and Counter-Brain Drain in the Philippines," paper presented at the Workshop on Manpower and Human Resources, Philippine Economic Journal, vol. XII, nos. 1 & 2, 1973.
- Domingo, Lita, "Measurement of Inadequate Labor Utilization among Filipino Male Household Heads," paper presented at the annual conference of the Philippine Statistical Association, 1974.
- Encarnación, José Jr., "Income Distribution in the Philippines: The Employed and the Self-Employed," I.E.D.R., University of the Philippines, Discussion Paper No. 74-11, August 1974.
- Encarnación, José Jr., Roberto Mariano and Romeo Bautista, "A Macroeconomic Model of the Philippines, 1950-1969," Philippine Economic Journal, vol. XI, no. 2, 1972.
- Fund for Assistance to Private Education, "Income Distribution of Qualified and Disqualified Examinees in the 1973 NCEE," R & D Report, No. 5, September 1974a.
- _____, "Percentage Distribution of Passing and Failing Examinees by Sex per Region in the 1973-1974 NCEE," R & D Report, No. 6, September 1974b.

- Hooley, Richard W., "Long-Term Growth of the Philippine Economy, 1902-1961," Philippine Economic Journal, vol. VII, no. 1, 1968.
- International Labour Organization, Sharing in Development: A Programme of Employment, Equity and Growth in the Philippines, International Labour Office, Geneva, 1974.
- Lampman, Robert J., "The Sources of Postwar Economic Growth in the Philippines," Philippine Economic Journal, vol. VI, no. 2, 1967.
- Mangahas, Mahar, "The Political Economy of Rice in the New Society," I.E.D.R. Discussion Paper No. 74-10, July 1974.
- _____, "Philippine Rice Policy Reconsidered in Terms of Urban Bias," Philippine Review of Business and Economics, vol. IX, no. 1, 1972a.
- Mangahas, Mahar, "Rice Policy Problems in the 1970's," in The Philippine Economy in the 1970's, 1972b.
- _____, "A Broad View of the Philippine Employment Problem," Philippine Economic Journal, vol. XII, nos. 1 & 2, 1973.
- _____, "The Effects of Importation on the Price of Rice," Philippine Review of Business and Economics, vol. V, no. 2, 1968.
- Mangahas, Mahar and Librero, Aida R., "The High-Yielding Varieties of Rice in the Philippines: A Perspective," I.E.D.R., Discussion Paper No. 73-11, June 1973.
- Mangahas, Mahar, Miralao, Virginia A., and de los Reyes, Romana P., Tenants, Lessees, Owners: Welfare Implications of Tenure Change, Ateneo de Manila University, Institute of Philippine Culture: Quezon City, 1974.
- Mangahas, Mahar, William Meyers and Randolph Barker, Labor Absorption in Philippine Agriculture, OECD Development Centre Studies, Employment Series: No. 8, Paris, 1972.
- Miao, Evelyn, "The Structure and Performance of the Proprietary Institutions of Higher Learning in the Philippines," University of Wisconsin, unpublished Ph.D. dissertation, 1971.
- Power, John H., and Sicat, Gerardo P., The Philippines: Industrialization and Trade Policies, OECD: Paris, 1971.
- Ruprecht, Theodore K., "Labor Absorption Problems and Economic Development in the Philippines," Philippine Economic Journal, vol. V, no. 2, 1966.

Sicat, Gerardo P., "The Philippine Economy," in The Philippine Economy in the 1960's, I.E.D.R., University of the Philippines Press, Quezon City, 1964.

Williamson, Jeffrey G., "Dimensions of Postwar Philippine Economic Progress," Quarterly Journal of Economics, vol. 83, 1969.

Williamson, Jeffrey G., and Devoretz, Don, "Education as an Asset in the Philippine Economy," I.E.D.R. Discussion Paper No. 67-5, November 1967.