

ABSTRACTS OF M.A. THESIS

✓ Dae-Whan Choi, *An Analysis of the Determinants of Married Women's Labor Force Participation in Korea*, School of Economics, University of the Philippines, 1979.

This study undertook an analysis of the determinants of married women's labor force participation in Korea using inter-city level data for the year 1974. The major source of data used was the Special National Labor Force Survey of 1974 which was conducted in November 1974. The study mainly tried to determine the quantitative relationship by multiple regression analysis between married women's labor force participation and such explanatory variables as other family income, educational attainment, unemployment, demand for female workers, and the presence of young children. The major findings of the study were as follows:

The demand for female workers was seen to be the strongest explanatory variable explaining married women's labor force participation in the model adopted. The coefficient of female industry mix which was used as the proxy for the demand for female workers was positive, and had the most statistically significant coefficient among the five explanatory variables.

The level of unemployment was found to be the second strongest factor explaining variations in married women's labor force participation. The regression coefficient of male unemployment rate was negative and statistically significant. Accordingly, we could deduce that in the Korean female labor market in 1974, the discouraged worker effect predominated over the additional worker effect. Only for the 20-24 age group at the earlier years of married life did the latter effect exceed the former.

The presence of young children was found to be a significantly influential factor in the married women's labor force participation. It was found that the increased percentage of married women with young children at home, irrespective of the number of these children, resulted in a decrease in their labor force participation rate.

The income effect of the husband's income, adopted as a proxy for other family income, on married women's labor force participation was negative as expected from theory. That is, married women whose husband's income levels were higher tended to participate less in the labor market.

Educational attainment, adopted as a proxy for married women's market wage rate, was negative, contrary to expectations. Moreover, the coefficient was statistically insignificant even at the 10 per cent level.

These findings suggested some directions for female manpower policy. First, the demand for the female worker may be increased through a shift of more jobs appropriate to female workers. Second, in order to induce women to participate in the labor market even under unfavorable labor market conditions, it would be wise to consider policies which narrow down the wage differentials between males and females, abolish the social and family systems unfavorable to women's labor force participation, and expand employment counselling system. Finally, an intensification of family planning programs and an expansion of nursery and kindergarten services would be essential.

✓ Ruby Roque-Villa, *Female Labor Force Participation and Fertility in the Philippines*, School of Economics, University of the Philippines, 1979.

This study principally tried to develop and validate a conceptual framework which could be used to isolate women experiencing incompatibility between the mother and worker roles. It also proposed to examine the fertility differences between working and non-working women as the first step to the role compatibility situation.

On the basis of data from the 1973 National Demographic Survey, fertility differentials for married Filipino women of different employment status were determined. Multiple classification analysis and dummy variable regression were employed to determine the effect of female labor force participation on fertility, singly or in combination with other variables.

Results showed that high fertility led to a withdrawal from the labor force and that female labor force participation led to lower fertility levels, thereby giving two dimensions to the role-incompatibility hypothesis. The analysis also substantiated that professionals and clerical workers had the lowest fertility levels; farm owners, farm and sales workers displayed the highest fertility levels, while skilled and service workers manifested intermediate rates. Moreover, the study verified that among class of worker status groups, employees and employers had the lowest number of children ever born while unpaid family workers and the self-employed exhibited the highest fertility levels.

Furthermore, the study upheld that duration of marriage is the highest single predictor variable for fertility examined in this study. Age of wife ranked second. Among the non-demographic variables, education accounted for the highest amount of variation in fertility, followed in turn by occupation and class of worker status. Residence accounted for the smallest amount of variation on fertility in this study.

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✓ Ma. Socorro L. Africa, *Participation of Offshore Banking Units (OBUs) in the Peso Market: Implications for Domestic Credit and the Money Supply*, School of Economics, University of the Philippines, 1980.

This study attempted to determine the impact of the establishment of offshore banking units (OBUs) on the volume of domestic credit and the money supply. It first presented an account of the operations, rationale, and institutional features of the international offshore banking system to provide the necessary conceptual preparation. Subsequently, a series of regressions which substantiated the effect of the onshore lending operations of OBUs on the volume of domestic credit, the monetary base, and the money supply was presented. Lastly, the institutional practices with regard to onshore lending were investigated and analyzed to support the quantitative findings.

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✓ Ramesh Narsingh Amatya, *An Economic Analysis of Supply of and Demand for Rice in Nepal*, School of Economics, University of the Philippines, 1980.

This study attempted to add to the understanding of the rice situation at the regional (hill and mountain, and Tarai) and national levels in Nepal. The analysis was primarily based on past trends in consumption, production, prices, procurement and distribution and on estimated supply and demand functions for rice.

Between 1967/68 and 1978/79, the production of rice increased at an annual rate of 0.9 per cent whereas the consumption of rice has been increasing at 1.13 per cent per year mainly due to population growth. Area expansion was the more important factor contributing to rice output increase, whereas yield accounted for 31 per cent of the growth in output. Yields grew at 0.63 per cent per year for Nepal. Yields in Tarai grew at 0.9 per cent per year whereas yields declined in the hill and mountain regions at 1.16 per cent per year. Low growth rates of yield were due to slow growth in inputs used, availability of irrigated land, and a declining real rice price which was attributed to the government's frequent interference in the market.

Price elasticities of rice hectareage were +0.46, +0.10 and +0.13 for the hill and mountain regions, Tarai, and Nepal, respectively. Thus, price increases for rice did motivate farmers to plant more rice and thus stimulated rice production. Irrigation was also an important factor in increasing rice hectareage and production. Farmers in the hill and mountain regions were more responsive to irrigation than farmers in Tarai.

Relative rice price elasticities of consumption were -0.35 , -0.29 and -0.30 for the hill and mountain regions, Tarai, and Nepal, respectively. Changes in the relative price of rice significantly affected the demand for rice, resulting in the substitution of wheat and maize for rice. Income elasticities of rice demand were $+0.53$, $+0.20$ and $+0.32$ for the hill and mountain regions, Tarai and Nepal, respectively, suggesting that consumers in the hill and mountain regions spent higher proportions of their additional income for rice.

Rice output was projected to grow by 1.52 per cent per annum whereas the demand for rice was projected to increase by 2.52 per cent per annum. If those trends prevail, Nepal is expected to be an importer of rice before the year 1989-90.

However, it is still possible to stimulate rice production to meet the growing demand by providing a minimum guaranteed price to rice producers, increasing irrigated land and raising the level of other inputs as well as providing production loans. Also, the demand for rice can be curtailed to some extent by changing its price relative to that of wheat and maize, resulting in the substitution of wheat and maize for rice.

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Edwina R. Aquino, *Limited Dependent Variables in Economic Data Analysis: An Application to Fertility Behavior and Labor Force Participation of Married Women*, School of Economics, University of the Philippines, 1980.

Single equation models on the fertility and labor force participation of married women using ordinary least squares (OLS) as an estimation technique could be viewed as subject to some limitations due to the presence of limited dependent variables. This paper considered logit as an alternative technique in the reestimation of such models; the specifications were adopted from previous empirical studies.

The results revealed that the logit estimates obtained agreed with OLS estimates in terms of signs of the coefficients and significance of the variables. This conformed with the findings of some studies that there was virtually no difference between the two estimation techniques.

However, this paper extended the comparison between OLS and logit by examining impact multipliers and evaluating selected probabilities on decisions regarding fertility behavior and market participation. The findings were that, relative to logit, OLS tended to significantly overstate the effects of a number of

determinants of fertility and wife's employment. Moreover, OLS predicted probabilities were either under- or overstated. These results suggested the importance of taking into account not only the signs but also the magnitude of the estimated effects of the explanatory variables so as to arrive at more accurate predictions on decisions regarding fertility and market participation of married women.

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- ✓ Georgina P. Arboleda, *The Demand for International Reserves: The Philippine Case*, School of Economics, University of the Philippines, 1980.

A country's official reserves are used for precautionary purposes to maintain some degree of stability in the exchange rate when its balance of payments is in deficit. This study addressed itself to the problem of the Philippine monetary authorities in maintaining an adequate level of reserves. In relation to this, estimates of the reserves demand function were tested for its validity and stability during the period 1963-1978.

Two types of reserves demand formulations were estimated. The first used long-run explanatory variables such as money supply, net foreign exchange holdings of commercial banks, imports, and the opportunity cost of holding reserves. The second was called a stochastic formulation because it made use of a measure of the variability of the balance of payments as an explanatory variable. These demand formulations were used to assess the adequacy of the official reserves holdings of the Central Bank from 1962 to 1978.

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- ✓ Ma. Eugenia Bennagen, *A Study of Food Consumption and Expenditure Patterns of Philippine Households*, School of Economics, University of the Philippines, 1980.

Food accounts form the largest personal expenditure item in developing countries like the Philippines. A study of the food consumption patterns of Filipinos is therefore of prime importance.

Being an archipelagic country, patterns of food consumption within the Philippines may be expected to differ by region. Furthermore, being an economy where income is unequally distributed, food consumption patterns are likewise expected to vary among different income level groups.

In this paper, consumption patterns for 10 major food groups and 24 individual food stuffs were examined by region and by income level. Factors influencing food consumption habits of Filipino families were analyzed using regression analysis. Household income and household size were the explanatory variables included in the model to explain variation in food consumption levels and expenditures.

The study, based on a nationwide household food consumption survey, revealed that the proportion of income spent on food by an average Filipino household was very high—73 percent. Expenditure on cereals and seafood alone accounted for more than half of total food outlay (54 percent). Average per capita consumption levels showed that Filipino families adequately met the recommended allowance only for cereals and cereal products. All the rest fell short of the recommended allowance.

Food consumption patterns showed diversity by region and by income level. Luzon households had higher consumption levels of meat, eggs and dairy products, while households in Mindanao consumed more fruits and vegetables. Households in the Visayas, where average income was lowest, had the highest consumption of rootcrops, bulbs and tubers. In terms of income level, high-income households enjoyed the highest per capita consumption levels of all the major food groups, except rootcrops.

With respect to the extent to which Filipino households responded to changes in income and household size, the food elasticities obtained were all less than unity indicating that demand for food was generally inelastic.

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Rachel Cabato, *Trends and Patterns of Job Advertising in Philippine Newspapers*, School of Economics, University of the Philippines, 1980.

This paper is a study on the utilization of job openings advertised in newspapers as a job vacancy measure indicating trends and patterns of unfilled demand for labor and as an information channel entailing search costs to employers.

The focus of the study revealed a bias of job advertising for certain occupations, and the sources of this bias. It further described the occupational composition of vacancies advertised in Philippine newspapers, its seasonal variations, and trends and patterns in search costs, eventually providing insight into the recruitment activity of employers using formal channels.

The primary data sources of this study were all Sunday issues of the Manila Times for 1959, 1965 and 1971 and of the Bulletin Today for 1977. There has been an increasing preference for Sunday issues in advertising job openings since 1959 as evidenced by the higher price paid per unit of space and the greater number of pages purchased since then.

The labor market reviewed pertained only to the Metro Manila area where the rate of newspapers circulated is high. Likewise, job advertising in newspaper is likely to be a biased indicator of total job openings because the advertisements represent a biased sample of total job vacancies. This was identified in the study as readership bias. Closely related to the readership bias of job advertising was the employer's expressed preference for experienced workers.

Another bias affecting the job vacancy measure using advertisements was the wage bias. Teachers for example had low-cost offers while other college-trained professions had high ones. The quality bias on the other hand, affected the advertisements for engineers and skilled industrial workers.

As a source of information on job opportunities for wage employment, job advertising more likely reflected employers' demand for the educated and skilled workers than for the less educated and unskilled.

Related to being a biased indicator of total job vacancies, job advertising may not likely reflect job applications for the experienced and unskilled but may well be a useful source of information on jobs for the educated, skilled workers, particularly professional, skilled and college-trained workers.

Seasonal patterns of job advertising for certain types of workers were also revealed, and cost trends and patterns of job advertising in newspapers were closely looked into.

This study provided a framework for examining the recruitment activity and identifying certain factors associated with the synthesized utilization of job advertising as a vacancy measure and an information channel.

Further areas of research suggested were the measurement of the importance of job advertising for occupations identified in this study relative to other information channels; the investigation of pressures or labor shortages relative to job advertising; and the seasonality of other occupations.

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✓ Suvat Chirapant, *The Determinants of Fertility and Labor Force Participation in Misamis Oriental, Philippines: Inferences from a Dynamic Model*, School of Economics, University of the Philippines, 1980.

The main focus of this study was the analysis within a dynamic framework, of the determinants of and the relationship between marital fertility and female labor force participation in Misamis Oriental, Philippines for the period 1977-1979. The source of data was the Survey of Female Work Participation and Fertility in Misamis Oriental which was conducted during the July-September 1977-79 period by the Research Institute for Mindanao Culture, Xavier University.

The tests, using a dynamic model for the determinants of marital fertility and wife's labor force participation, revealed several interesting results. Foremost among them was that current fertility negatively affected employment greater than vice versa, but only at high parities. This meant that women with current birth tended to work less in the current period, while those who were currently working tended to have less probability of having a child in the current period. However, this reciprocal effect held only for women with an already large family size.

In addition, the findings suggested that women with more work experience tended to lessen their current fertility to enable them to participate in paid employment. This relationship was found at the low and high parities.

Both the wife's and husband's potential earnings significantly explained the wife's current employment. The coefficient pattern indicated that women with high potential earnings valued their market activities greater than their household chores. As expected, the influence of the husband's potential earnings on the wife's employment, which represented a pure income effect, was negative at all parities.

These findings seemed to support the adoption of policies and programs providing women, especially those with high parities, with market employment as a means to encourage fertility reduction.

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✓ Arcadio L. Cruz, *An Evaluation of the Economic Planning, Appraisal, Implementation and Performance of Selected Irrigation Projects in the Philippines*, School of Economics, University of the Philippines, 1980.

There is a tendency among planners and leaders to attribute the present problems in development planning and difficulties in attaining development goals to a variety of reasons like unpredictable weather conditions, inadequate financial and technical assistance, and foreign influences. While there must be some truth under certain circumstances to such claim, it is generally believed that what actually leads to failures of projects/programs are: i) deficient decision-making process,

ii) poor project selection and preparation, and iii) poor implementation.

The paper was about a mid-term evaluation of two irrigation projects, which involved taking a snapshot of the two projects in 1979, inferring the developments between then and project initiation, and projecting trends between 1979 and end of project life on the conservative assumption of 1979 values as those of full development.

The objective was to see if project assumptions held at the time of inception remained valid, and how differences between assumptions and actual developments affected the profitability of the two projects based on their economic and financial viewpoints.

The results of the analysis showed that the projects remained feasible, in fact had higher feasibility measures in spite of cost overruns and construction delays. From the national viewpoint, the internal rates of return were 27.8 and 29.9 per cent for the Cotabato and the Davao projects, respectively. Net present values were large, amounting to P174,384 thousand for Cotabato and P404,794 thousand for Davao.

Farmers' profitability, measured by the financial rates of return, was very attractive. Values of 22.9 per cent and 17.4 per cent were obtained for the Cotabato and the Davao projects, respectively. Net present values were substantial, amounting to P103,893 thousand for Cotabato and P147,933 thousand for Davao.

While this study demonstrated the usefulness of benefit-cost analysis, the procedural and data requirements of the study could be a complicated and demanding task. The requirements were often compounded by constraints of the planning environment in various agencies, the absence of an adequate organization for planning, the limited number of planning staff with the required skills, the costly gathering of information, and sometimes the absence of national parameters.

It was therefore suggested that the present practices of monitoring, control and evaluation as tools of project management be upgraded greatly both at the project and at the sectoral levels. No management organization can perform effectively even if it is organized unless it is provided with information on project operation to enable it to compare current and past performances.

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Virginia Fe V. Holazo, *Measuring Regional Price Differences in the Philippines: 1965-1975*, School of Economics, University of the Philippines, 1980.

Applying Theil's index of relative price differences to regional price data for 1965, 1971 and 1975, this paper showed that differences in price levels existed between regions and were increasing over time.

Aside from measuring relative differences in price levels, Theil's index allowed a one-dimensional ranking of regional price level such that their relative differences could be measured as on a distance line.

It was clearly shown that Manila and Suburbs (Region I) had the highest price level and was responsible for 64 per cent of total regional price differences in 1965, 62 per cent in 1971 and 63 per cent in 1975.

Differences in price levels among the other regions, though significant and increasing over time, were small when compared to price level differences involving Manila and Suburbs (Region I).

Three main structural types were observed. Again, large structural price differences were measured between Manila and Suburbs (Region I) and the other regions, though these differences were found to decrease over time.

Regional price levels exhibited a uniform rate of change, stemming mainly from weighted food price increase, which accelerated from an average of 46 per cent for 1965-1971 to 56 per cent for 1971-1975. Structural changes within regions over time were small.

Average differences in expenditure shares, which are the weights used in Theil's index, were also looked into.

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Syed Nayeemul Huda, *Monetary Analysis of Import Structure of Bangladesh, 1962-78*, School of Economics, University of the Philippines, 1980.

This study used a simple monetary approach to determine the import structure of Bangladesh, based on time-series data ranging from 1962 to 1978. The results strongly indicated the usefulness of this approach in explaining the behavior of imports with respect to domestic monetary variables. Increases in domestic money supply significantly influenced imports of all categories (capital goods and consumer goods). It was evident from the results that increases in money supply and increase in imports were positively correlated.

It has been argued that increases in domestic credit to either the private or the public sector adversely affect the balance of payments through increased import demand. In many countries, especially in Bangladesh, increases in domestic credit by the commercial banks to the private sector are generally used to finance imports, often consumer goods. Thus there is an explicit relationship between changes in domestic credit and the balance of payments. Domestic credit has an adverse multiplier effect on trade balance. In the case of Bangladesh, the magnitude of credit multiplier on trade balance was quite high.

The policymakers concerned with achieving economic growth while minimizing pressures on the balance of payments were interested in the magnitude of the multiplier of domestic credit on the balance of payments and in the adequacy of the use of domestic credit (monetary policy) as a policy tool to bring about a change in the balance of payments position of the economy.

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Mamarinta P. Mababaya, *An Economic Analysis of Corn Production and Consumption in the Philippines*, School of Economics, University of the Philippines, 1980.

This research study attempted to analyze, from the economic standpoint, the corn supply and demand in the Philippines for the periods covering 1961 to 1978 and 1969/70 to 1978/79, respectively. The analysis of supply response relationship was made through the Nerlovian partial adjustment scheme while the demand aspect, through the derived and ordinary demand models.

For the supply aspect, the principle that, *ceteris paribus*, as the price of a product increases (decreases), its quantity supplied increases (decreases) per unit of time, was empirically tested. This was manifested, for instance, by the estimated elasticity of the production volume of corn with respect to its own market price of + 0.47. This elasticity value suggested that a 10 per cent increase (decrease) in the market price of corn was expected to bring about a 4.7 per cent increase

(decrease) in the quantity of corn output. Other empirical supports to the validity of the supply principle were discussed thoroughly in Chapter IV.

As regards the demand aspect, the principle that, *ceteris paribus*, there exists a negative relationship between the quantity demanded of corn per unit of time and its own price, was likewise empirically tested. This was indicated by the estimated price elasticity of corn feed demand of -0.32 and corn food demand of -0.22 .

The study also provided some insights on the validity of the so-called "substitution effects" concept. In fact, the results of calculation showed that a 10 per cent decrease in the price of rice would bring about an 8.2 per cent decrease in the supply of corn based on the elasticity value of -0.82 as shown in Table 4. On the other hand, a 10 per cent decrease in the price of soybean, a proxy for high-protein meal, would yield a 4.8 per cent decrease in corn feed demand as indicated by the elasticity value of 0.48 in Table 5; and a 10 per cent decrease in the price of wheat would result to 3.9 per cent decrease in corn food demand. Finally, the income elasticity of food demand of -0.32 likely indicated that corn was an inferior good.

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Bharat Mainali, *Income Productivity and Labor Utilization on (MV and TV) Rice Farms in Chitwon District, Nepal*, School of Economics, University of the Philippines, 1980.

This study examined and analyzed (a) the relationship between output and inputs in the production of modern and traditional varieties (MV and TV) of rice, (b) the per hectare costs, revenues and labor utilization on MV and TV rice farms, and (c) the factors affecting demand for labor on these farms.

Analysis of the fitted Cobb-Douglas production function indicated positive coefficients for human labor, capital expenses, and nitrogen, and negative but insignificant coefficients for bullock labor in both MV and TV rice farms. Moreover MV farms were shown to operate on a higher level of technology as compared to TV farms.

Marginal analysis confirmed that human labor was the most productive and bullock labor was the least productive for both MV and TV cultivation. It also revealed that both farms inefficiently allocated inputs.

Income and expenditure analysis asserted that MV cultivation was much more profitable, wherein a 22 per cent increase in per hectare costs generated an increase in net income per hectare exceeding that on TV farms, by 84 per cent. The statistical t-test verified that per hectare yield, cost and income were significantly higher for MV than for TV rice farms.

Analysis of labor utilization showed that the shift from MV to TV rice cultivation implied a significant 16 per cent increase in per hectare labor use, a 74 per cent increase in use of hired labor and a 28 per cent decline in the use of family labor; labor use per ton of rice decreased however, indicating higher labor productivity on MV rice farms. Output share of hired labor was also greater on MV than on TV rice farms.

Finally, analysis of the factors affecting demand for labor showed working capital as having a significantly positive effect, while the wage rate was inversely related to demand for labor. The regression further revealed that the prices of output and tractors were positively related to labor demand while negative coefficients were related to family size.

Policy implications from the study indicated that the shift to MV rice cultivation should be actively supported by the government by way of a packaged program which includes credit facilities, extension services, and access to supply of modern inputs and technical knowhow. The success of this program would mean a better standard of living for the people, as incomes rise and employment opportunities are opened, and a much needed expansion in rice production.

✓ Khandaker Mainuddin, *Consumption Expenditure: An Econometric Analysis for Bangladesh*, School of Economics, University of the Philippines, 1980.

Aggregate consumption (or aggregate savings) as a function of aggregate income, generally termed as consumption (or saving) function, plays a central role in macroeconomic analysis after Keynes made it a keystone in the *General Theory*. This study aimed to explain consumption behavior in Bangladesh by utilizing time series data on aggregate income, consumption and other macroeconomic variables for the period 1959-60 to 1976-77. Besides the traditional Keynesian consumption function and two versions of Friedman's permanent income hypothesis, some other behavioral relationships were estimated and subjected to economic analysis.

The time period used in this study covered both pre- and post-independence years which were characterized by different socioeconomic and political situations. These changes were reflected by the observed loss of a secular trend in our time series. To capture the effects of such changes, pre- and post-independence patterns of consumption were examined. The stability of the estimated behavioral relationships and the concerned parameters were also tested.

✓ Razak Mohd, *Labor Force Participation of Married Women in Peninsular Malaysia: A Threshold Hypothesis*, School of Economics, University of the Philippines, 1980.

With West Malaysia as the empirical setting, this paper examined the effect of wife's education on her labor force participation, holding husband's income, age, race, and location of residence constant. Using cross-sectional data drawn from the 1970 Post Enumeration Survey, the results were not unlike those found in the Philippines where, below some income and education thresholds, the marginal effect of education was negative and was positive beyond. These observed results suggested that the conventional analysis of wife's labor force participation required modification in a setting where incomes were below subsistence levels. From a policy standpoint, the findings underscored the need to move majority of women to some education levels above the threshold in order that the desired positive effects of increased years of schooling on market participation could be achieved.

✓ Iswardono Sadjonopermono, *The Supply of Money and its Effect on Price Level: The Evidences from the Time Series in the Indonesian Economy, 1960-1969*, School of Economics, University of the Philippines, 1981.

Inflation has been a recurring feature of the Indonesian economy since its independence. The chief cause of inflation has been the rise in the money supply, which has been induced by growth in the monetary base. This is composed of Central Bank loans to commercial banks, the government debts and the international reserve. Control over money supply has been an important instrument of economic policy in Indonesia. The monetary authorities have attempted to steer a course between using money creation to meet urgent financing requirements on the one hand, and avoiding the inflation which accompanies excessive money creation on the other.

For much of the period 1950-1966, the monetary authorities controlled money supply directly, through the Central Bank's own credit operations and through directives to the state commercial banks. The commercial banks enjoyed little independence until the late 1960s, when a changing institutional framework gave new importance to the banks as creator of money.

The main focus of this study was on the analysis of the determinants of the movement in the money supply in the Indonesian economy. It also analyzed the relationship between the movement in the money supply and prices. In Indonesia the dominant explanation has tended to be monetarist in nature. This has been the explanation usually offered for the Indonesian inflation during the mid-sixties. More recently however, it has been argued that the initiating cause was not deficit financing but the rise in prices of imported goods, and the increase of domestic credit which indirectly led to the expansion in the total money supply.

The scope of the study was confined to the money supply model and to the inflation model, covering the period from 1960 up to the first quarter of 1979. The money supply model used in this study followed Encarnación's monetary sub-model of the Philippine economy as follows:

$$(1) M = a_0 + a_1 RM + a_2 R_r$$

where:

M : money supply

RM : reserves money

R_r : reserve requirement .

And the inflation model used in this study based on sources of the Indonesian inflation was:

$$(2) \% \Delta \text{CPI} = c_0 + c_1 \% \Delta M + c_2 \% \Delta S + c_3 \% \Delta P_m$$

where:

CPI : Jakarta cost of living index for 62 commodities

S : domestic supply = GDP + Import - Export

P_m : world price

M : money supply.

These equations were analyzed by using the ordinary least square.

The major source of data used for the study was the Bank Indonesia Report for the financial years 1960-1979. Because of the dearth of data, some analysis depended solely on qualitative aspects.

These findings suggested some restrictions for monetary authorities. First, the money supply depends solely on the movement in the monetary base. Thus, the monetary authorities can easily conduct the movement in the money supply through the monetary base, which is composed of the international reserve, government debts and Central Bank's loans to commercial banks. Second, the interest rate, discount rate and the reserve requirement were found not to have influenced credits and loans, and also total money supply. Finally, money supply should be determined in the appropriate amount to the economy, since excessive money supply would affect the general price level.

Maman Setiawan, *Demand for and Supply of Labor in Indonesia and the Philippines: An Evaluation and Projections in the Year 1983*, School of Economics, University of the Philippines, 1980.

The main focus of this study was to make projections of and evaluate manpower problems in the Philippines and Indonesia. The aim of the study was to estimate the manpower requirements based on the economic growth, and to estimate the availability of manpower based on demographic considerations. This study attempted to explore the projections of demand for and supply of labor by education categories in both countries, to the year 1983.

The Philippines and Indonesia have been chosen for comparison because of some similarities. 1983 has been chosen to be the target of the projections, being a crucial year to both countries. It is the first year of the Five-Year Philippine Development Plan, 1983-1988 and the last year of the Third Five-Year Development Plan 1979-1983 of Indonesia.

The results of the projections in both countries were compared and the major findings could be summarized as follows:

- a) The availabilities of manpower in the Philippines and Indonesia in 1983 will be lower than the manpower requirements but there are gaps between the demand for and supply of labor by education categories. For the relatively low-educated people, both countries show supply shortages, but for the relatively high educated people, both show supply surpluses.
- b) The projected demand for labor in 1983 for Indonesia would still be predominantly agricultural, wherein agriculture would absorb 68.9 per cent of the manpower while the corresponding figure for the Philippines would only be 36.8 per cent. By educational attainment, in the Philippines, three-fourths of the all the required manpower should have elementary education as the highest education attained while in Indonesia, nine-tenths should have had the same level; for the higher levels of schooling, the demand in the Philippines shows a higher percentage than in Indonesia.

This study recommended that, for both countries, the growth of the labor force should be controlled while the quality of labor force should be improved; and the possibilities of expanding employment in different industries by increasing their production should be explored.

✓ Siti Khairon Shariff, *The Determinants of Urban and Rural Fertility in West Malaysia: An Economic Analysis*, School of Economics, University of the Philippines, 1980.

This paper concerned itself with an analysis of the socioeconomic determinants of fertility in West Malaysia. It made a study of ever-married women within the age-group 15-49, embracing both the urban and rural sectors of the population. Based on the 1974 Malaysian Fertility and Family Survey, the demand for children was analyzed using a regression framework.

It was found that the demand for children was stronger in the rural sector for all the three communities of Malay, Chinese and Indian. From among the variables considered, education was influential in motivating parents towards smaller family size, especially so in the urban sector. The participation of married women in the labour force was likewise a deterrent for large family size.

Age at marriage exerted a negative impact on the number of children ever born: the older the age at marriage, the smaller the family size. Respondents' age, on the other hand, was positively related to fertility (within the 15-49 age group).

There was an indication of a threshold: a non-linear relationship between income and fertility was apparent in the urban sector. In the rural sector, income appeared to be positively and monotonically related to fertility, suggesting that the rural sector may still be below the threshold.

✓ Marilou Jane Uy, *Contractual Choice and Internal Organization in Philippine Sugarcane Production*, School of Economics, University of the Philippines, 1980.

The main objective of this paper was to study some contractual arrangements which arose in sugarcane production in certain areas of the country. The method

involved the documenting of patterns and explaining them based on the efficiency principles formulated in the "new institutional economics" approach. The study concentrated on certain modes of organization within the farm like input decisions, tenure choice and arrangements for hired labor. The study of these contracts was extended to a comparative study across places with differences in land quality, wage levels and farm size.

The following findings were reported:

A. *On Input Intensity*

Input intensity was directly related to land quality. The direct relationship between mandays/hectare and land quality was viewed as an adjustment mechanism for labor to earn its opportunity wage. The same competitive principle was used to explain the positive relationship of fertilizer and chemical inputs to land quality.

Farm size varied directly with land quality for non-household farms due to the presence of scale economies. The inverse relationship for household farms was viewed as an additional adjustment mechanism for labor to receive its opportunity wage subject to the constraint of some fixed family labor on each farm.

B. *On Tenure Choice*

Land quality was found to affect tenure choice. Tenure choices were also analyzed in terms of their specialization in three general activities of farm organization, namely, farm labor, management and ownership. As higher input intensities were expected of higher land quality and farm sizes tended to be bigger, the degree of specialization rose. Share contracts constituted the transition from rent contracts to owner-managed farms in the spectrum of contracts based on land quality. It was shown that specialization was an important determinant of contractual choice.

Implicit wages of the tenants were positively related to land quality since the management duties of the tenant increased for high quality land where input intensities were higher. Since these duties required some remuneration, cost sharing was the primary mechanism used to adjust factor payments. These adjustments were made in lieu of output shares due to the lower cost burden associated with changing cost shares.

C. *On Hiring of Labor*

Several patterns in labor hiring arrangements were documented and explained. Explanations for the incidence of certain arrangements were based on their associated cost burdens.

Generally, piecework/*pakyaw* (on area basis) was chosen for high wage areas, and the daily wage system for low wage areas. The *pakyaw* system tended to be practiced also where labor was attached to a piece of equipment with high implicit rent. *Pakyaw* could also be preferable for cases where information about the worker was limited. On the other hand, the daily wage system tended to be practiced in high quality farms and piecework in low quality farms especially where the quality of the work was hard to monitor.

After presenting the foregoing findings, the study suggested further research in some areas, namely: (a) the measurement of overall input intensities and the indicators like prices of labor and capital; (b) the relationship of actual contractual choice to input intensity; (c) the various areas of specialization such as management and financing, and their implications on each contractual choice; and (d) the generation of cross-crop patterns among the contractual arrangements.

Finally, direct policy implications were drawn from the patterns documented in the study. The positive relationship between input intensity and land quality suggested that input intensity could not be substituted for land quality. Furthermore, the knowledge that tenure choice was determined also by certain exogenous factors like land quality could provide a better understanding of the persistence of these institutions and hence give way to better land policy designs. Lastly, the finding that implicit or actual returns to the tenants adjust to the land quality of the place through variations in cost-sharing implied that actual manipulation of output-sharing by agrarian authorities cannot insure that actual returns to tenants are changed.

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Mindanilla B. Barlis, *Growth, Income Distribution and Poverty in the Year 2000*, School of Economics, University of the Philippines, 1981.

This study presented an approach whereby income distribution of the Philippines could be projected in the year 2000 and the magnitude of poverty estimated, so that policy recommendations addressing poverty reduction may be stated in quantifiable objectives.

In the absence of a model that would predict income distribution from given changes in production structure, this study drew from Simon Kuznets' hypothesis that income distribution gets worse before it gets better in the course of development. One of the several cross-country studies quantifying Kuznets' hypothesis was taken to be indicative of the general relationship associating a level of development (as measured by per capita GNP) with a level of income inequality. This general trendline has an inverted U-shape.

Although there were several countries which deviated from this trendline, the Philippine case was shown not to have deviated much from this line for the five years when income distribution data for the country were available—1957, 1961, 1965, 1971, and 1975. Up to 1975, the Philippine case was found at that point wherein income inequality was still on the uptrend.

GNP per capita levels were then projected to the year 2000 using alternative growth rates so that these alternative levels of development could be traced against the general trendline and the corresponding income inequality levels could be read off from the chart. Assuming that the size distribution of income follows a lognormal distribution, Philippine income distributions were projected corresponding to each alternative GNP growth rate assumption. The underlying assumption in this study was that the resulting income distributions were attributable mainly to growth in GNP per capita and implied that there were no drastic changes in the production structure of the present to the year 2000.

The resulting income distribution projections were used to demonstrate how the magnitude of poverty could be quantified (and associated directly with economic growth) by using several poverty threshold lines or norms.

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Jose Angelito B. Bulao Jrto., *The Growth of the Government Service Sector in the Philippines*, School of Economics, University of the Philippines, 1981.

In view of present inadequacies in the estimation of output and employment in government services within the framework of our national accounting system, this study attempted to construct estimates of employment in government services by level of operation and corresponding alternative estimates of net value added at constant prices. Considered were changes in the composition of government employment by salary ranges reflective of educational attainment and work experience. Using these estimates in comparison with existing estimates of real

output, the study analyzed the growth of the government service sector. Specifically, it analyzed growth of output, employment and productivity and examined whether the growth of the government service sector in relation to other sectors of the economy followed general established patterns.

Findings on growth of output and productivity in government services using alternative estimates of real output generally seemed more reasonable and close to expectations. Specifically, in contrast to findings using existing estimates of real output, we observed an improvement in government productivity (though less in degree compared to that of the national economy) beginning in mid-1960s. This conformed with the development of training programs in the government and the growing proportion of higher skilled employment groups.

The study showed that the growth of output in government services in all levels of operation was mainly due to growth of employment rather than productivity. However, the per cent contributions of productivity growth in all levels of operation were following an upward trend. The average growth of total output in government services was mainly due to growth of output in the national government, and the average growth of output in the local government services was mainly due to the growth of output in the city government. Sectors with lower output growth and productivity levels tended to follow a "catching-up process." Using alternative estimates of real output, the contributions of government services to the average growth of net domestic product and total net value added in services were only 8 per cent and 19 per cent, respectively but such contributions were following an increasing trend.

The growing importance of the government service sector in the process of development as established in studies on other countries was evidenced in this study by its increasing share in output and employment, both in the service sector and in the national economy. The higher rate of output growth in government services and its lower rate of productivity growth vis-à-vis agriculture, industry and services implied an increasing concentration of less productive workers as confirmed also by the relation between growth of government employment and unemployment.

Lastly, the study recommended future research work towards improving the alternative estimates of output.

Lorelei T. Crisologo, *The Distributive Effects of Consumer Price Control Policies*, School of Economics, University of the Philippines, 1981.

The concern to obtain a more equitable income distribution has been present in Philippine public policy. The adoption of consumer price control measures since 1939 to the present has been made with this intention.

Consumer price control policies affect favorably the condition of equity through a control of the prices of basic goods which therefore, redistributes consumption in favor of low-income consumers. This is possible since a larger portion of the expenditures out of income by these low-income consumers goes to expenditures for basic commodities.

The study was concerned, thus, with evaluating the extent to which consumer price control policies redistributed consumption to low-income consumers. Were consumer price control measures implemented during the period 1971 to 1979 successful in obtaining a more equitable distribution of effective purchasing power?

The findings of the study which were based on the analysis of selected consumer price control measures for rice, corn, cooking oil and electricity showed that indeed, consumers benefitted from such measures. The distribution of benefits among the consumers reflected a progressive pattern. Hence, low-income con-

sumers captured more of the benefits in comparison to the benefits which reached the middle-income and the high-income consumers.

However, the study could not completely affirm the favorable effect on equity of these measures since its preliminary findings also showed that the distribution of the burden of the costs of consumer price control policies was regressive.

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Apiradee Dhamaraksa, *The Effects of Rural-Urban Migration on Industrial Wage Differentials in Thailand*, School of Economics, University of the Philippines, 1981.

This study proposed a macro analysis to investigate and quantify the socio-economic and demographic factors that affect the wage levels and wage differentials of low-migrant composition industries and high-migrant composition industries in the Bangkok Metropolis. Since there were only a few studies concerning the effects of rural-urban migration, this study was therefore supposed to update some past studies and reconfirm that rural-urban migration creates wage differentials among the industries with different numbers of migrant workers.

In this study, three wage determination regression models were set up: one for the low-migrant composition industries, the second for the high-migrant composition industries and the third for both low and high migrant composition industries. In addition, the existence of wage differentials between low and high migrant composition industries was shown by introducing the dummy variable as an additional explanatory variable into the wage determination model. The dummy variable indicated whether a particular industry was low- or high-migrant composition. The hypothesis that the mean wage rate of low-migrant composition industries is significantly higher in a statistical sense than those of the high-migrant composition industries was also tested by the use of t-statistics.

The empirical findings of this study should be interpreted as a means of understanding the effects of rural-urban migration or industrial wage differentials and determinants of industrial wage in Thailand within an econometric framework. This analysis of census materials did suggest, however, that the underlying models of wage determination and wage differentials were consistent with these cross-sectional aggregate data and that further research based on longitudinal industrial survey data is warranted.