

Ateneo de Manila University

Archium Ateneo

Economics Department Faculty Publications

Economics Department

2002

Philippine Development: A Research Journey Through the Philippine Journal of Development

Fernando T. Aldaba

Follow this and additional works at: <https://archium.ateneo.edu/economics-faculty-pubs>



Part of the [Development Studies Commons](#), and the [Economics Commons](#)

Philippine Development: A Research Journey Through the *Philippine Journal of Development*

FERNANDO T. ALDABA *

INTRODUCTION

After 27 years of existence, the Philippine Journal of Development (PJD) is considered one of the longest running journals in the country. First published in 1974, the PJD started as a semestral publication of the National Economic and Development Authority (NEDA) and was called the *NEDA Journal of Development*. The Journal aimed to serve as a vehicle to disseminate the important factors affecting the development process as well as a forum where development issues could be discussed from the larger perspectives of the social sciences. With the founding of the Philippine Institute for Development Studies (PIDS), the management of the Journal was transferred to it in 1981.

The PJD has tried to capture the key issues of every decade from the dictatorship of the 70s; the peaceful revolution and difficulties of a fledgling democracy in the 80s; the more politically stable 90s, which paved the way for more substantial economic reforms; to the globalization and information technology age of the twenty-first century, which was ushered in by another People Power revolution. The economic policy shifts and the associated adjustment costs that characterized every decade have made the Philippine development arena an exciting challenge to research

* Southeast Asia Research and Advocacy Officer of the Catholic Institute for International Relations and faculty member of the Economics Department, Ateneo de Manila University. The author wishes to acknowledge Ms. Jennifer P.T. Liguton, PIDS' Director for Research Information and PJD managing editor since its early years, for providing the background papers and the complete back issues of the PJD.

scholars and policymakers within and outside the country. The country's boom-and-bust cycles, unsustainable economic growth, economic reforms like liberalization, privatization and deregulation as well as our participation in multilateral and regional trading arrangements have catalyzed numerous studies and analyses. The PJD has adequately served as a venue for these studies alongside topics ranging from macroeconomic stabilization and international competitiveness to poverty reduction, community-based forest management and rural credit markets.

This paper embarks on a research journey as it reviews the various PJD articles that have been published through the years. Its main objective is to examine the Journal in terms of how it has contributed to the understanding of key developmental issues amid the changing international economic and political landscape, and how it has responded to the key policy issues and concerns that have emerged over time.

What role has the PJD played in the country's academic and policy research process? And did it attain its original goals? The paper will seek to answer these and other questions. It is divided into five sections. After an introduction in the first section, the second section gives an overall view of the economic and political events during the period 1972-2001 and the main objectives and thrusts of the PJD. This provides the overall context against which the PDJ is assessed. The third section presents the significant contributions of the PDJ in terms of three major areas: development issues and concerns, mathematical models and statistical techniques, and forward-looking articles. The fourth section looks at gaps and the research areas that could have been served by the PDJ while the fifth section summarizes the major findings and conclusions of the paper.

PJD AND THE PHILIPPINE DEVELOPMENTAL EXPERIENCE

The Context: Key Economic and Political Events During the Period 1972-2001

The '70s started with the declaration of martial law and was characterized by dictatorship under the Marcos administration. During this period, the country's debt increased tremendously as a result of two oil price shocks and the heavy borrowing from the easily available recycled petro dollars. To spearhead its economic development, the government attempted to encourage nontraditional exports and promulgated laws to streamline and rationalize investment incentives and encourage foreign investments in the country.

The early 1980s was characterized by a turbulent economic and political atmosphere, reminiscent of the situation during the late '60s. Insurgency heightened as the Marcos government began to lose its credibility and public support. Amid this economic and political chaos, the Marcos government initiated several economic reforms. In 1980, it launched a trade liberalization program under a World Bank structural adjustment loan. The government pursued some policy changes to liberalize the financial sector and to improve export and investment incentives. However, several of these reforms were not thoroughly implemented as an economic and political crisis was in the offing.

After the second oil price crisis, the Marcos government began to encounter serious economic problems arising from its increasing debt service burden, declining export receipts, and low economic growth rates. President Marcos lifted martial law in January 1981, but did not diminish his powers. Political unrest, expansionary demand policies, a worldwide debt crisis, and the structural inability of the economy to adjust quickly to the severe external shocks of the post-1979 period such as higher oil prices, an international recession, and declining export prices precipitated a dramatic loss of investor confidence and a foreign debt morato-

rium. The assassination of Benigno Aquino Jr., the opposition leader regarded as the most credible alternative to Marcos, in August 1983, and the resulting political disturbances triggered capital flight and another balance-of-payment (BOP) crisis.

In February 1986, an aborted military coup, which turned into a massive uprising by the people, overthrew Marcos. The new regime of Corazon Aquino succeeded in restoring democratic institutions in the political arena and posted improvements in the country's economic growth till 1989. However, the political stability of the country remained fragile owing to threats from right-wing military renegades and communist revolutionaries. Aquino's term saw a series of attempted coup attempts and rumored coups involving elements of the military. The almost successful coup of December 1989 severely damaged the government's standing.

The Aquino administration launched a series of macroeconomic and structural reforms to accelerate growth and reduce pov-

Box 1. Philippine milestones

1972:	Declaration of martial law
1973:	First oil shock
1979:	Second oil shock
1980:	Trade Liberalization Program under a World Bank structural adjustment loan
1981:	Lifting of martial law
1983:	Assassination of Benigno Aquino, Jr.; BOP crisis
1984:	Holding of massive demonstrations with the participation for the first time of the urban middle class and business community
1986:	EDSA 1 People Power Revolution, Corazon Aquino's assumption of power; July and November coup attempts
1987:	August coup attempt
1989:	Nearly successful December coup attempt
1990:	Gulf War and oil price increase
1991:	BOP crisis
1992:	Election of Fidel V. Ramos
1994:	RP joins the World Trade Organization
1997:	Asian currency crisis
1998:	Election of Joseph Estrada
2001:	EDSA 2; Gloria Macapagal-Arroyo's assumption into office

erty by enhancing economic efficiency and reducing government intervention in productive activities in favor of the private sector. The government implemented reforms to simplify the overall tax structure and improve collection performance, and introduced a value-added tax. It also moved, albeit more slowly, to liberalize trade. At the same time, the government introduced the privatization of state-owned banks and nonfinancial corporations.

In May 1992, the democratic transition process was completed with the election of Aquino's former defense secretary, Fidel V. Ramos, as President. His administration initiated peace negotiations with both right-wing military rebels and communist insurgents. This move was a major factor in the establishment of political stability during his term. The Ramos administration continued the economic agenda of Aquino, which revolved around deregulation and economic liberalization. Significant structural adjustment reforms were introduced in transportation, telecommunications, water and power. Fiscal and monetary reforms were pursued to liberalize trade, deregulate business activity, improve export competitiveness, promote foreign direct investments and privatize state enterprises. The Ramos administration also introduced build-operate-transfer schemes to increase private sector participation in infrastructure projects.

After the outbreak of the 1997 currency crisis, a popular movie actor, Joseph Estrada, won the May 1998 presidential elections. The succession of scandals and charges of corruption against Estrada greatly shook business confidence. Toward the middle of his term, the president faced an impeachment trial on accusations of bribery, graft and corrupt practices, and betrayal of public trust. The collapse of the impeachment process sparked public protests that culminated in People Power II. For the second time in 15 years, people power did it again and forced Estrada from office in January 2001. Then Vice-President Gloria Macapagal-Arroyo took over to serve out the remaining years of Estrada's term.

The PJD Over the Years: Key Objectives and Research Themes

The early years. The PJD was first published in 1974 under the National Economic and Development Authority (NEDA) and was called the *NEDA Journal of Development*. It aimed to “communicate to all those involved in and concerned about the development process the important factors to consider in such a process.” It also served as:

- a) a vehicle to disseminate technical information among professionals within and outside government; and
- b) a forum to air developmental issues through the interplay of professional views from the standpoint of economics and, in so far as they were relevant, from the larger perspectives of the social sciences.

The Journal’s 1974 maiden issue tackled mostly topics on the economy and highlighted economic methodologies and analyses. Mangahas and Tan (1974) delineated seasonal patterns for a selected number of indicators on the Philippine economy. Their results show such patterns in 58 of 158 variables assessed. Jurado and Encarnacion (1974) utilized the 1961 and 1965 input-output tables of the National Economic Council (NEC) but did not find much insight into the structural changes in the Philippine economy. Ferrer (1974) analyzed the NEC and Bureau of Census and Statistics (BCS) tables and concluded that both “may be untrustworthy tools for projection and planning purposes” because of conceptual differences and measurement errors. Alonzo (1974) estimated the shadow price or the social opportunity cost of labor while Noriega (1974) used five investment criteria to compare the Investment Priorities Plans and the Export Priorities Plans of the Board of Investments. Finally, Frianeza (1974) applied the benefit-cost analysis to the local grape industry.

The first issue published under PIDS management came out in 1981 and the name was changed to *Journal of Philippine Development* (JPD). PIDS was established in 1977 as the government’s economic think tank. The Journal’s editorial policies were set by an Advisory Board composed of prominent economists and social

scientists from government and the academe. Over the years, the key objectives of the Journal have included the following:

- a) To serve as an outlet of technical studies by PIDS research staff and researchers from other institutions focusing on various aspects of development and bearing implications for policy; and
- b) To present development issues not only from the perspective of economics but also from its interplay with various social science perspectives, with the objective of highlighting implications for policy decisions.

The focus of the JPD was not confined mainly to economic studies but also covered other aspects of development such as business, sociology, political dynamics, public administration and foreign relations.

Topics in this first issue of the *Journal of Philippine Development* included the estimation of effective protection in the manufacturing industry, 1981-1985 (Bautista 1981), an analysis of fertilizer policies (David and Balisacan 1981), an estimation the demand for gasoline (Young 1981), improvement of the export price index (Reyes and Cantillep 1981), estimation of the literacy rate (Alba 1981) and determination of the buoyancy and elasticity of revenue (de Perio and Trinidad 1981). What was noticeable, though, in this issue was the varied application of technical and economic analyses in areas covering fiscal, trade, industrial, agricultural and human resource policies. This has been a continuing contribution of the Journal to the community of development experts and practitioners.

PIDS Research Thrusts and PJD Themes

PIDS, as the government's leading economic and development institution, determines its research agenda every five years. This review tries to look at how the Journal reflects PIDS' research thrusts over the years. Table 1 shows the various themes that the PIDS chose to focus on during the various periods.

Meanwhile, Table 2 shows the coverage by the Journal for the various PIDS research themes across the years. The Journal

Table 1. PIDS research thrusts over the years

Major Research Area/Theme	1978 -1980 (NEDA)	1981 -1985	1986 -1990	1991 -1999	2000 -2004
Policy Analysis, Planning Tools and Monitoring Systems	Planning methodology				Policy analysis, Planning tools and monitoring systems
Macroeconomic Growth, Fiscal Policies and Public Debt	Government spending and fiscal policy, savings			Macroeconomic policies; public debt, fiscal and government spending, privatization, exchange rate, BOP and liberalization policies	Macroeconomic management in a globalized setting
International Trade and Investments, Competition and Competitiveness	Trade expansion and industrial policy; ASEAN economic cooperation	Trade expansion, agricultural and industrial development and energy	Trade expansion, agricultural and industrial development	Trade, industry, and international economic relations	Competitiveness and competition policies
Financial, Monetary, Banking and Credit Policy	Monetary, banking and credit policy	Resource mobilization; aspects of fiscal and monetary policies	Resource mobilization; aspects of fiscal and monetary policies		
Population, Human Resource and Social development	Population, social and human resource development	Employment, human resource development and technology	Employment, human resource development and technology	Human resources and social development	Social sector reform
Poverty and Income Distribution	Growth and income distribution	Poverty, income and wealth distribution	Poverty, income and wealth distribution		
Urban and Regional development, including Housing	Urban, rural and regional development	Regional, rural and urban development	Regional, rural and urban development		
Natural Resource and Environment Management	Natural resource development and management		Natural resources and environment management	Natural resources and environment management	Environment and natural resources management
Science and Technology				Science and technology policies	
Agricultural and Rural development	Agricultural development			Agricultural, rural and regional development	Modernizing Philippine agriculture
Infrastructure Development	Infrastructure development		Energy and electricity	Energy and infrastructure development	Infrastructure development
Governance					Governance

Table 2. *Philippine Journal of Development* thematic coverage by number of articles: 1974-2001^a

Themes/Topics	1974 - 1980 (NEDA)	1981 - 1985	1986 - 1990	1991 - 1995	1996 - 2001	1974 - 2001 (Total)
Policy Analysis, Planning Tools and Monitoring and Statistical Systems	21	23 ⁵	10	9	4	67
Economic Growth, Fiscal Policies, Public Debt and Government Spending	3	1	9	8	1	22
Monetary, Banking, Financial and Credit Policy (including rural and microcredit)	2	3	14 ⁶	10	5	34
International Trade and Relations; Competitiveness and Competition	15	13	11	8	22 ⁷	69
Infrastructure Development (including energy)	1	3	1	0	2	7
Population, Human Resources and Social Sector Development	10	1	5	5	8	29
Poverty, Income and Wealth Distribution	2	1	1	5	4	13
Natural Resource and Environmental Management	1	1	5	2	18 ⁸	27
Science and Technology Policies	0	1	5 ⁹	6 ¹⁰	2	14

continued on the next page^a Each journal article was classified into various themes or topics, if applicable.^b There was a special issue on system of national accounts, vol. 10, no. 2, 1983, and impact assessment of projects (vol. 11, no. 1, 1984).^c There was a special issue on rural financial markets, vol. 16, no. 1, 1989.^d There was a special issue on APEC, vol. 23, no. 1, 1996.^e There was special issue on watersheds, vol. 26, no. 1, 1999.^f There was a special issue on S&T, vol. 16, no. 2, 1989.^g There was a special issue on IPR, vol. 18, no. 2, 1991.

Table 2 (continued)

Themes/Topics	1974 - 1980 (NEDA)	1981 - 1985	1986 - 1990	1991 - 1995	1996 - 2001	1974 - 2001 (Total)
(including IPR)						
Agricultural and Rural Development	8	13 ¹¹	19	15	6	61
Urban Development	31 ¹²	0	0	2	2	35

^h There was a special issue on small farm mechanization, vol. 12, no. 1, 1985

ⁱ There was a special issue on housing (1974-75, vol. 1 and 2, no. 2, 3, 4) with 30 articles.

has already published 293 articles and papers in a span of almost three decades. The top eight topics/themes over a 27-year period include:¹

- a) International trade and relations, competitiveness and competition 69/293
- b) Policy analysis, tools, models, statistical systems 67/293
- c) Agriculture and rural development 61/293
- d) Urban development and housing 35/293²
- e) Monetary, banking, financial and credit 34/293
- f) Population, human resources and social sector development 29/293
- g) Natural resource and environmental management 27/293
- h) Macroeconomic growth, fiscal policies, public debt 22/293
- i) Science and technology policies 14/293
- j) Poverty, income and wealth distribution 13/293

¹ The ratio is the number of articles written on the topic over the total number of articles published in the Journal.

² High percentage is due to the Housing special issue published in 1974-1975.

Box 2. Key themes in the Journal over the different periods**1974-1980**

1. Urban Development and Housing, 31/83
2. Policy Analysis, Tools, Monitoring and Statistical Systems 21/83
3. International Trade and Relations, Competitiveness 15/83
4. Population, Human Resource and Social Sector Development 10/83
5. Agriculture and Rural Development 8/83

1981-1985

1. Policy Analysis, Tools, Monitoring and Statistical Systems 23/47
2. Agriculture and Rural Development, 13/47
3. International Trade and Relations, Competitiveness 13/47

1986-1990

1. Agricultural and Rural Development 19/55
2. Monetary, Banking, Financial and Credit Policies 14/55
3. International trade and relations, Competitiveness 11/55
4. Policy Analysis, Tools, Monitoring and Statistical Systems 10/55

1991-1995

1. Agricultural and Rural Development 15/51
2. Monetary, Banking, Financial and Credit Policies 10/51
3. Policy Analysis, Tools, Models, Statistical Systems 9/51
4. International Trade and Relations, Competitiveness 8/51
5. Economic Growth, Fiscal Policies, Public Debt 8/51

1996-2001

1. International Trade and Relations, Competitiveness 22/57
2. Natural Resource and Environmental Management 18/57
3. Population, Human Resource and Sectoral Development 8/57
4. Agricultural and Rural Development 6/57

Key themes over the various research planning periods of PIDS have evolved to include urban development and housing; policy analysis tools and statistical systems; international trade and competitiveness; agriculture and rural development; monetary, banking, financial and credit policies; population and human resource; and natural resource and environmental management. Box 2 lists down the top three to five research areas for each period.³

³The ratio is the number of articles written on the research area over the number of articles for the period.

Between 1974 and 1980, the economy was characterized by an increasing export-orientation and openness to foreign investments. The following significant articles saw print in the PDJ: Sicat (1976) highlighted the dilemma between nationalism and economic interdependence the country experienced it during that time; Alburo (1979) pointed to a new approach of poverty definition and measurement as the then prevailing ways of defining and measuring poverty were flawed and insufficient; Tan (1978) re-estimated effective protection rates by showing the country's mood of rethinking the import substitution policy; Mijares (1978) outlined future directions toward the formation of a Philippine Statistical System, an important milestone in gathering relevant economic data for the country.

The period 1981-1985 was one of economic recession and political turmoil. Philippine Economic Society stalwarts assessed the country's chances amid a turbulent economic setting. Sicat (1982), Bautista (1982, 1985), Estanislao (1982) and Follosco (1982) highlighted the need to improve infrastructure, expand export markets, strengthen social institutions, encourage entrepreneurship, stimulate domestic demand and implement more market-oriented policies as the key strategies during the early '80s. Another important contribution, Oshima (1983) analyzed why the Philippines had lagged behind its ASEAN neighbors and warned of the coming of a serious debt crisis for the country.

The period 1986 to 1990 was one of transitions for a fledgling democracy that had just gone through almost 14 years of martial law and was experiencing renewed confidence in the economy. Significant contributions mirrored the urgent concerns of the period: Manasan (1987, 1988) and Habito (1987) highlighted the need and feasibility of tax reforms; Klein (1987) recommended options in dealing with the debt problem; Montes (1988) reviewed structural adjustment and debt conditionalities in the Philippines; Manasan and Buenaventura (1987) examined public enterprises and recommended the need for rationalization and enhancement of efficiency in the remaining state firms.

The period 1990 to 1995 was another phase of crisis and recovery for the economy. The early years saw both a military uprising and a volcanic eruption ushering in negative growth. From 1993 to 1995, however, recovery was in the offing. Politically, it was also the start of an era of decentralization and devolution. Relevant articles included Manasan (1992), which warned of the fiscal constraints of the Local Government Code; Intal (1995), which thoroughly discussed the “battlecry” of the Ramos administration during that time—economic restructuring toward Philippines 2000 and a Newly Industrialized Country (NIC) status; and Balisacan (1993), which explained why, despite agricultural growth in the last decade, rural poverty persisted. A 1994 special issue paying tribute to sociologist Gelia Castillo featured prominent economists and social scientists who examined agricultural development, human resource and population issues, and environmental concerns.

Another boom-and-bust period, 1996 to 2001, witnessed the economy’s relatively high growths in 1996 to 1997, only to be halted again by the financial crisis that hit the region. Globalization was the keyword and key contributions included Milo (1999), which looked at the crisis and its social implications, Intal and Austria (2000), Pineda (1997), Cororaton (1997), and the 1996 special issue on APEC, which underscored liberalization and regional integration as relevant strategies for Philippine competitiveness. Austria (2000) assessed the chances of our IT industry amid the prevailing environment.

SIGNIFICANT CONTRIBUTIONS OF THE *PHILIPPINE JOURNAL OF DEVELOPMENT*

Development Issues and Concerns

Over a span of 27 years, several key development problems of the Philippines were given ample coverage by the *Philippine Journal of Development*. Several of these key issues remain as important concerns of not only government but the other sectors of society. These issues were chosen on the basis of their continued

relevance to Philippine development in terms of analyses, insights and policy recommendations.

Agricultural and rural development. One of the major reasons cited for the slow development of the country is its failure to sustain and maintain growth in the agricultural sector over the last three decades. Growth in the sector can catalyze the whole economy through its backward and forward linkages. More importantly, increased productivity in its workforce reduces poverty incidence, as most poor people live in rural and agricultural areas. The PJD has extensively featured various articles and papers dissecting agricultural growth and performance in the rural areas. Balisacan (1993) observed that in the case of the Philippines, poverty reduction from the second half of the '60s to the early '80s was relatively small despite the impressive growth of the sector during this green revolution phase. He concluded that agricultural growth was a necessary but not sufficient condition for sustained decreases in poverty incidence. Hence the need for additional policy reforms and programs that would broaden the inter-sectoral employment linkages of agricultural income growth, and enhance productivity and build human capital for the impoverished. Today, rural poverty is still a major concern of the government as sustained growth in the rural areas remains elusive.

Bautista (1994) explained that the expansion of rural non-agricultural activities is a crucial component of Philippine rural development. Agricultural growth should be able to stimulate rural-based industrialization. From 1965 to 1980, despite the respectable agricultural growth, the number of rural non-agricultural enterprises did not grow, basically because of policy biases for the manufacturing sector in urban areas and the skewed income distribution in rural areas. Various agrarian reform programs were implemented but were mostly unsuccessful.

The current thrust of the Arroyo administration is to fully implement the Agricultural and Fisheries Modernization Act

(AFMA), which it hopes could sustain economic growth in the next few years despite the slowdown of the global economy after the September 11 terrorist attacks. It is noteworthy that the sector's growth was instrumental in higher-than-expected performance of the Philippine economy in 2001.

Rural credit markets. In the context of agricultural sector, the credit market is significant because access to inputs is highly contingent on the ability of the farmer to meet his cash flow requirements in the production cycle. In this respect, the Journal has featured various studies examining both the formal and informal lending markets in the rural areas. Over the past three decades, the formal sector (i.e., commercial and rural banks) has been documented to provide only a small portion of the credit needs of farmers, who have mostly depended on informal creditors. This was basically due to the ability and flexibility of such lenders to service borrowers in their areas of work and because of the quick processing of loan releases.

The government has consistently tried to remedy the situation through subsidized and directed credit policies. However as Tolentino (1988) asserted, government's good intentions are not enough and are often negated by the adverse effects of the programs. Teh (1991) noted that the massive failure of rural banks and the high default rates encountered in the supervised credit programs signified the inefficiency and unsustainability of such policies. Only a minor percentage of small farmers were reached by these programs. Such credit support was not sustained on a long-term basis. At the same time, a significant part of the subsidy implicit in these programs was captured by big rather than small farmers.

Tolentino (1988) specifically mentioned that "the critical elements which enable and attract finance to agriculture were often not found in the financial system but in the infrastructure, trade and monetary systems." Floro (1987) added that the failure and lagged growth of rural financial markets was the result of both

government policies and the prevailing economic environment. Farmers typically faced high input but low output prices, usually did not own the land they till, obtained poor and unstable yields, earned very low incomes and had limited access to government services and incomes. These were also exacerbated by bad infrastructure (roads, irrigation, post-harvest facilities) and declining terms of trade and thus made agricultural lending a costly and risky enterprise.

Floro (1987) suggested key policy reforms, which included less loan targeting, removal of credit subsidies and more lenient bank entry to improve the operations of rural financial markets. Government can also increase competition by enhancing the formation of credit cooperatives among farmers. In the long run, however, credit programs must be accompanied by policies that increase incomes and the economic viability of rural population, such as land reform, market-oriented pricing policy and focused infrastructure development.

The PJD has extensively examined the rural credit market with the following articles: Javier (1979) focused on the years 1960-1975; Llanto (1989) analyzed asymmetric information in rural credit markets; Geron (1989) expounded on farmer behavior in interlinked credit markets; Untalan and Cuevas (1989) estimated transaction costs and examined the viability of rural financial intermediaries (i.e., commercial and rural banks); Bautista (1991) focused on the impact of public policies on informal credit markets; and Teh (1991) reviewed the literature on credit markets and its links with labor arrangements, land use and marketing services as a response to market imperfections in an agrarian economy.

Rice and food security. One of the more interesting issues related to agricultural development is food security. It should be emphasized, though, that one of the major aspects of food security is the self-reliance and autonomy of a country, particularly in terms of decisionmaking on food production, importation, distribution and allocation. David and Balisacan (1995) observed that

the Philippine government and the public in general have increasingly accepted the fact that a more open economy would best serve the welfare of the Filipino people. Hence food security concerns may be better addressed by being self-reliant – capable of purchasing rice anywhere rather than being self-sufficient at lower levels of welfare. This was because of the decreasing real world price of rice (e.g., RP rice is priced at around P20 a kilo compared to Vietnam's P6.50 and Thailand's P7.00).

David and Balisacan added that the government must rethink the role of the National Food Authority (NFA) as the agency continues to lose millions of pesos and that it should correct the underinvestment in rice research. Today, the current administration's strategy to become competitive in the global rice market is the production of hybrid rice.

Another important issue to consider is the role of traders in the determination of rice prices in the market. It is a common perception that traders maintain a cartel to create market power in the rice market. However, a study by Reeder (2000) did not confirm this market power and found that high-end prices for consumers were due to the high cost of production. Trade policy is also crucial to food security. David (1997) asserted that the highly protectionist position regarding tariffs on sensitive agricultural commodities was not politically tenable at the current level of economic development. Excessive protection on selected importable food commodities would raise the degree of peso overvaluation (aside from increased prices), which hurts many poor farmers growing exportable commodities. Such a policy is anti-poor because the majority of the poor in urban and rural areas are net buyers of food and depend on employment in livestock and food processing, where corn and sugar are major inputs.

David (1999) enumerated further several constraints to food security. She explained that although public expenditure for agriculture recovered in the late '80s, much of the recovery was allocated for redistributive purposes (agrarian reform and market sub-

sidies like NFA) and the strengthening of natural resource and environmental management rather than for long-term productivity-enhancing investments to reverse the declining competitive advantage of the agricultural sector. She added that the problem transcends the level of public expenditure and its allocation. Equally significant are the inefficiencies caused by poor choices of programs, faulty budgetary processes and planning approach, weaknesses in the bureaucracy in terms of organizational structure, incentive problems, transitional difficulties with devolution and instability in leadership. Weak links between research and extension also failed to promote technological developments in key commodities. Moreover, institutional and political factors like weak planning, and excessive graft and corruption reduced the effectiveness of public investments in market and irrigation infrastructure. Finally, existing property rights policies like agrarian reform hindered land market transactions and lowered incentives for long-term investments, thus eroding the collateral value of land. All have accelerated land conversions from agricultural to nonagricultural uses.

Poverty: Definition, Measurement and Approaches

One of the most persistent problems in Philippine development is the high incidence of poverty. Past administrations had invariably pledged to focus their strategy on the alleviation of poverty and eventual lowering of the number of people living below the poverty thresholds. Yet the Philippine poverty problem has remained because of the failure of the economy to sustain growth over the last three decades, unchecked high population growth rates, high income inequality, inadequate and poor targeting and the lack of participation of the poor themselves in crafting policies and programs for them. Today, multilateral institutions like the World Bank, Asian Development Bank and the United Nations Development Program (UNDP) have increased their allocation of resources for such programs. There is also a growing consensus that poverty must be tackled from a multidimensional and

multistakeholder approach. More importantly, the poor must participate in any program aimed to help them rise above their situation. This has been largely verified by a big study of the World Bank “consulting” and “listening” to the “voices of the poor.”

Albuero (1979) early on already captured the real definition of poverty. Saying poverty is multifaceted, he characterized the various approaches to poverty definition (a) as measuring the extent of poverty and defining a base for target groups; (b) as indicating the relative magnitude of what needs to be accomplished and the needed resources available for poverty programs; and (c) where poor social groups can be identified, as promulgating various types of programs. However, he asserted that the definitional approach was fraught with several weaknesses: (a) poverty in such a context was defined in a normative sense (i.e., determination of the threshold); (b) the index construction for poverty was ambiguous because of the classic aggregation problem; (c) measurement problems were formidable (e.g., home-produced goods were not taken into account in consumption expenditures); (d) units of analysis were not consistent as some measures were macro while others capture individual or household states; and (e) areas for policy prescriptions following the definitions were limited, general and often misleading, since the poverty gap (absolute or relative) can imply a spectrum of general policy options within an economic milieu.

He concluded that poverty is relative and that the above definitions do not, in any rigorous way, indicate poverty as being experienced by those who suffer from it and for whom relevant programs are intended. Albuero (1979) recommended a track that assumes that poverty is an all-encompassing state, multidimensional and prone to many interpretations likely to be far removed from the behavior of those who are actually poor. The task therefore is to measure household perception of poverty and, with this variable, the various dimensions of poverty—economic, social cultural or political. The perception may be on the basis of scale or there

may be simply perception or nonperception of poverty. The measures of the dimensions then define commonalities of characteristics among those who consider themselves poor. Consequently, the method and analysis could discern the significance of the dimensions to the poverty scale of a common set of households.

Bantilan's (1992) empirical approach responded to Alburo's challenge of "measuring" poverty in its various dimensions. She utilized the fuzzy subset theory, which allowed for partial membership values of 0 and 1 for classified members of the set. The theory of fuzzy subset provided a new approach to the use of traditional economic variables such as income or expenditure to derive new measure of poverty. The approach can readily use the extensive information contained in the set of standard of living indicators. Instead of the all-or-nothing membership to the poor set, it allows for partial membership whereby one does away with the conventional definition of the poverty line and takes into account the gradual transition from poverty to the state of wealth. In the incorporation of the information from the set of categorical variables available from the household surveys, it takes into account the multidimensionality of poverty.

Balisacan (1992) also criticized current methods of measurement. According to the paper, threshold analysis (which is the typical method used) for the average size of households was deficient because it ignored differences in family size and composition as well as scale economies in producing and consuming household goods and services, thereby misrepresenting aggregate poverty. The use of properly constructed household equivalence scales was appropriate for aggregate poverty assessment. An equivalence scale indicates at reference prices the cost differential for a household due to demographic characteristics (e.g., family size, age, sex of members) and other relevant household attributes (e.g., occupation, education and region of residence) to reach welfare of reference household. Viewed as a true cost of living index, it represents in one summary measure the changing needs of a family as it expands or changes attributes.

The PJD's future issues must scrutinize current efforts at poverty alleviation and eradication, especially since the Macapagal-Arroyo administration recently embarked on important programs (e.g., the KALAHATI) targeting marginalized sectors in the urban and rural areas. Insightful articles, as exemplified by the above, can contribute greatly to the continuing fight against poverty. Then, too, current government efforts may well reflect the findings and reflections of the earlier studies.

Microfinance and cooperatives as means of poverty alleviation. Large financial institutions like commercial banks would not risk lending money to the poor. This is basically due to information problems, high credit risk perception, lack of acceptable collateral and high transaction costs in processing small loans. The government has responded by establishing a number of credit programs aimed at providing the poor with access to financial services. The National Credit Council reports as many as 111 credit programs, of which 13 are specifically designed for the extremely poor. Microfinance institutions (MFIs) such as credit NGOs, rural banks and credit unions/cooperatives are private sector initiatives to give credit to the poor.

Llanto et al. (1997) assessed the capacity and performance of these MFIs. Their study showed that MFIs had weak institutional capacity, lacked a viable and extensive delivery system, had a small financial base and huge investments in training clients that hampered their attempts to reach a greater number of the poor. In the short run, the MFIs may be able to expand their present reach but may find it difficult in the long term, since most of them are not viable and financially sustainable institutions. Their policy recommendation was to transform credit NGOs into full-fledged financial institutions or invest in or organize such institutions, externalize training costs, and for government to allocate funds for training and capacity building of existing MFIs.

Hossain and Diaz (1997) evaluated a specific MFI—a Grameen bank replication of the Center for Agriculture and Rural Development (CARD)—a nongovernment organization. They used

primary (through a survey) and secondary data to compare old and new borrowers and assess the impact of CARD's program on the poor clients. The basic features of the Grameen bank program include targeting specifically poor women, organizing borrowers into small homogeneous groups to develop solidarity and peer pressure to ensure effective utilization and recovery of loans, collecting the principal in small regular weekly installments so that repayment does not become a burden for low-income households, and developing collective funds with compulsory savings from borrowers for their mutual benefit.

As of March 1997, CARD had already mobilized 13 branches with over 7,000 members, and disbursed P82.3 million, of which 76 percent has been recovered. Savings accumulated by the poor women clients had already reached P11 million. The Hossain and Diaz survey of 133 borrowers showed that CARD was successful in reaching low-income households with credit. Seventy percent of its borrowers had no access to land and had very poor housing worth less than P25 thousand. The average labor productivity in enterprises financed with loan was P107 per day, 34 percent higher than the market wage of P80. The rate of return on capital was 117 percent compared to the 46 percent rate interest charged by CARD on the outstanding loan. These enterprises, mostly informal ones, added P2,240 per month to household income, which comprised 25 percent of the total income of borrowing households. Employment, income and labor productivity increased with the number of repeat loans taken from CARD.

However, despite the relatively high rate of interest charged by CARD, it was not able to recover its operating expenses because of the high costs of operation (i.e., various transactions costs, including social preparation). According to the study economies of scale in MFI operations could only be sustainable until a branch reached P3 million worth of outstanding loans. CARD eventually organized its own rural bank as was recommended in the Llanto study. Today, MFIs are proving to be alternative channels to aid

the poor in their quest for better lives. However, there are still very few MFIs like CARD that have reached a level of operation where economies of scale can be reaped. Government must continue to support and encourage institutions like CARD in their fight against poverty.

Human Capital and Resource Issues

Human capital is one of the key factors for sustained economic growth in the long run. Good health, proper nutrition, adequate training and the right incentives (i.e., wages) contribute to increased labor productivity, which in turn stimulates economic growth. It is no wonder that the PJD has devoted a considerable number of articles to human capital development and related issues.

Health and nutrition. Pante (1990) provided an overview of health policy research and development in the Philippines which includes an overview of health situation. Over a period of 20 years (i.e., 1970-1990), the Philippines achieved significant improvements in overall health status—crude death rate per 1000 declined from 11.8 in 1970 to 7.8 in 1986. Life expectancy rose from 58.1 to 63.4. Infant mortality rate went down from 75/1000 in 1975 to 55.3 in 1986. Pante pointed out that any program for health policy research must address the questions involving priority setting, research management and coordination, dissemination and utilization of results, capacity building, database for research funding and the role of donors.

Alba and Orbeta (1998) examined the micro impact on nutrition of macroeconomic policy change by estimating a system of food demand equations using nationally representative survey data. The estimates were then utilized to set up a model that used price and income changes to determine the impact of macro policy on the nutritional status of households. Using the tariff reform program implemented between 1988 and 1992 as policy change, the study was able to show a more pronounced impact on nutrition as

compared to income. According to the authors, their study enriched the results of computable general equilibrium (CGE) simulations, which typically ended at the impact of policy shifts on income distribution.

Labor and the minimum wage. Minimum wage increase has been the perennial advocacy issue of organized labor in the Philippines. However, economists have pointed out that mandated increases in the wage rates may cause unemployment in the labor market. Armas (1976 and 1978) examined the impact of minimum wages at the firm level (i.e., in Philpack, a pineapple cannery and the industry as a whole). Minimum wage increase had, *ceteris paribus*, caused wage disequilibrium, which in turn applied substantial pressure to affect endogenous factors in Philpack. He also found that it greatly reduced employment in the organized manufacturing industries. Moreover, based on the estimates of labor demand elasticities, he discovered that the higher the legal minimum wage, the greater the disemployment of industrial workers.

Brooks (2002) did the most recent study on the impact of minimum wages in the Philippines. His results showed that a 10 percent increase in the real minimum wage was correlated with a 5 to 6 percent decline in aggregate employment in the '90s. His analysis by sector, however, suggested a weaker relationship with employment in agriculture and services more sensitive to the minimum wage than employment in the industry sector. The usual data and measurement problems, however, persisted in estimating the impact of minimum wage on employment. To date, data on wages in the country over time remain incomplete and inconsistent.

While current government policy veers away from a national minimum wage, there is still regional wage fixing. Compliance with minimum wage orders is also low at 75 percent (2000 data from BLES). Further contributions on the viability of regional wage fixing enrich discussions in this area.

Education. Human capital investments through education are important for individuals to increase productivity and incomes. In terms of the whole economy, workforce skills determine the sustainability of economic growth. For example, a study showed that the initial conditions of Philippine and Korea were similar in the '60s, but the latter developed more rapidly than the former. The study noted that the major difference lay in human capital investments (Benabou 1996). In the Philippines, various studies have already been made examining the deterioration of the quality of education in the past several years and the misallocation of resources from primary and secondary education to tertiary education (i.e., the numerous state universities and colleges). In addition, systemic corruption in the Department of Education has further decreased resources for the provision of public education. What's more, the government's political will to fully implement reforms has been insufficient over the years.

The PJD has devoted articles to the analysis of tertiary education in the country. Tan (1976) looked at discrimination in public university admission. Her study illustrated that UP education was biased for students who came from a fairly select group of families (i.e., those in the upper-income brackets of urban centers). Children from poorer families who graduated from lower-quality high schools were excluded from the university. The author discussed the possibility of proper pricing of public tertiary education because of the uneven distribution of subsidies at this level among recipients. She suggested charging the market price for tuition but that the state should instead offer student loans and assistance.

Canlas (1987) studied the various issues in the economics of tertiary education, which included (a) the lack of capital markets due to the presence of imperfect/asymmetric information on the borrowers (risk type and future productivity and wages) and because acquired skills cannot be used as collateral; (b) equity consideration's legitimization of government intervention and improvement of repayment rates if credit subsidies are given to de-

serving students mainly due through its police power; and (c) proper pricing of higher education in state universities, as this has effects on the wages of professors who are lost to private universities or the business sector.

Population and demography. Current annual population growth rate of 2.2 percent remains high, putting pressure on the economy's ability to absorb an increasing labor force. Herrin and Costello (1998) analyzed the determinants of population growth and recommended key policy responses. Their analysis demonstrated that by 2020, out of the increase in population from the 1995 level of 37.1 million, 5.8 million will have been due to unwanted fertility, 6.7 million to high desired family size and 24.6 million to population momentum. By 2040, the increase in population from 1995 will have reached 57.8 million, 9.3 million of which is attributed to unwanted fertility, 10.9 million to family size persistence and 37.6 million to population momentum.

The policy implications are as follows: (a) efforts are required to assist couples to eliminate unwanted fertility and to achieve their fertility goals in ways that are safe, legal, affordable and consistent with their moral convictions and religious beliefs; (b) with regard to the desired high family size (i.e., wanted fertility greater than replacement rate), efforts are needed to modify fertility preferences of couples by creating socio-economic conditions that favor small family size and greater human capital investment per child; and (c) there is a need to reduce momentum by delaying marriage or child bearing and crafting a responsive and high-quality family planning program, which could make birth spacing effective.

Other important articles in the Journal were studies by Pante and Morales (1980), which provided an overview of Philippine population policy and development planning experience outlining past, current and planned efforts designed to strengthen linkages between development plans and policies. Earlier micro studies were those of Boullier (1977), which examined the effect of chil-

dren in Laguna on parent's allocation of time; Paqueo and Angeles (1979), which scrutinized labor force participation rates of married women and confirmed the finding of Encarnacion that there was a threshold education—marginal effect of education below elementary grade was negative while above elementary grade was positive; and Paqueo and Fernandez (1979), which tested a disequilibrium model of fertility behavior. Costello (1988) gave a general survey of mortality and health issues, which included the impact of social and economic variables (e.g., residence, social class, role of women) on infant and childhood mortality/morbidity and various analyses of proximate mortality factors (e.g., maternal factors—age, parity, environmental variables—water, sanitation, accidents and injuries, nutrition), which had more direct impact than the former. A 1996 second semester special issue of the PJD was devoted to the population, development and environment nexus. One of the key articles was Orbeta (1996), which reviewed various models that linked population, development and the environment.

Trade and Investments

Economic cooperation and interdependence. Increased globalization has made it imperative for developing nations like the Philippines to intensify their efforts toward trade expansion and to attract both local and foreign investors. Sicat (1976) early on observed that an independent country has to play a “continuous game of interaction” with foreign elements (traders, investors, donors) and that the willingness to play this strong game of interaction would eventually prepare a country for greater economic interdependence in the long run. This economic interdependence has necessitated greater regional cooperation.

Garcia (1983) foresaw that based on the available evidence during that time, regional cooperation taking place in the Asia-Pacific region may in fact be the strongest in the world. He even mentioned that then President Marcos suggested the creation of

an Asia-Pacific forum or an Asian and Pacific economic system, where national leaders may exchange ideas and approve regional policy initiatives toward development. Definitely this is what the present Asia-Pacific Economic Cooperation is. The PJD devoted its 1996 first semester special issue to APEC. Articles in this issue included an elaboration of an Asia-Pacific model of development cooperation (Foundation for Development Cooperation 1996), labor migration and APEC (Amjad 1996), macroeconomic coordination (Paderanga 1996), Asian and western values and implications on APEC community-building process (Estanislao 1996), US interests in APEC (Petri and Plummer 1996), cultural aspects of trade dispute resolution with China (Potter 1996) and the limitations of open regionalism (Oxley 1996).

Intal and Austria (2000) examined the current state of APEC and recommended measures to help make it move forward. The authors suggested that APEC must move beyond trade liberalization and enhance its trade facilitation and ECOTECH agenda. They also challenged APEC to build and deepen a sense of community and common purpose as the final push for trade and investment liberalization as well as for economic integration requires a deep sense of community among leaders and peoples in the region. They also recommended that APEC focus on strengthening capacity for improved governance and to provide more opportunities for direct, face-to-face interaction among people in the region such as joint cooperation in common fishing areas and oceans. Other studies which looked at regional cooperation included those of ASEAN (see discussion below), GATT-WTO (Cororaton 1997) and the European Community (Aldaba 1992).

Trade issues. Tan (1978) analyzed the structure of protection in the Philippines in 1974 using the effective protection rate (EPR) framework, which measured the joint effect of tariffs and similar instruments on both the outputs and inputs of an industrial activity. Her EPR results showed that the protective structure penalized a large number of export-oriented industries that con-

tinued to survive because they were efficient. Primary and agriculture sectors had the lowest EPRs while domestic-oriented manufacturing industries received the highest protection.

Yap (1997) determined the impact of tariff reduction on government deficit and trade balance using a three-gap model (i.e., savings, foreign exchange and fiscal gaps). A reduction in tariffs would lead to an increase in import demand; worsening the trade deficit and putting pressure on the exchange rate. The increase in import volume would not compensate for the decline in tariffs and would result in a deterioration of the fiscal balance. Yap cautioned policymakers about the impact of microeconomic reform on macroeconomic stability. He noted that measures such as increasing tax effort and improving tax administration would be necessary to compensate for the reduction in tariff revenue. He also pointed out the important role that exchange rate policy would play following tariff reduction as well as the need for a more coherent program to attract foreign direct investment flows.

Cabalu (1995) estimated the effects of the removal of the Multi-Fiber Arrangement (MFA) quota restrictions by developed countries on clothing exports of developing countries. Based on a static, partial equilibrium model of global clothing trade, the results showed that the phaseout of the MFA would lead to higher welfare gains for the industrial countries (MFA importing countries like the US and EC 12) than those for MFA exporting countries such as the NIEs, China and the Philippines. Among MFA exporting countries, Hong Kong, South Korea and Taiwan would have the highest gains along with China and other Asean countries. The Philippines would gain \$0.06 billion, contrary to the common notion that the country would lose its market share with the abolition of the MFA. Though the benefits are small relative to our competitors, the pressure from competition is expected to make Filipino exporters more competitive.

Austria (2001) stated that the policy reforms implemented in the last two decades promoted competition and resulted in a

better allocation of resources and improved competitiveness of Philippine industries. These reforms consisted of trade liberalization and deregulation/privatization in banking, insurance, telecommunications, maritime industry, civil aviation, energy, and water. With improved competitiveness, the country was able to participate in regional trading arrangements such as AFTA and APEC as well as in multilateral arrangements like the WTO. The major challenge facing the country is how to deepen its participation and reap the full benefits from economic integration. Austria identified competition policy as one important area that needs to be pursued to further improve our global competitiveness.

Medalla, de Dios and Aldaba (1993) showed that the home consumption value (HCV) as a customs valuation base distorted the country's protection structure and had a negative effect on foreign direct investment flow. Medalla et al. estimated the revenue impact of the HCV system and found that it did not generate large additional revenues. The authors urged the government to shift to the GATT transactions value (TV) system, as this would promote trade facilitation, remove uncertainties and arbitrariness, and reduce the transaction costs of importing. They found that the estimated revenue losses arising from the shift from HCV to TV were not huge as feared, but these were in fact small and would only be incurred in the short run.

Medalla and Castro (2000) updated the 1993 HCV study using more recent Societe Generale de Surveillance data for the years 1994 to 1999. Their results showed that trade liberalization lowered the incidence of underinvoicing. Like the 1993 study, Medalla and Castro's 2000 estimated the revenue impact of shifting from HCV to TV system and found that the decline in government revenues as a result of the valuation change would be minimal. The authors argued that the GATT valuation system would encourage trade facilitation, provide a clearer basis in determining dutiable base and increase government revenues in the long run, among others.

Foreign direct investment. With a very low savings rate vis-a-vis our ASEAN neighbors, the Philippines must be able to attract foreign direct investment (FDI) in its shores. The Journal has provided articles and papers adequately examining issues related to this. Young looked at the determinants of US FDI flows to Southeast Asian countries by applying ordinary least squares regression technique to a pooled data set for the years 1960 to 1976. He found that US FDI flows were motivated by profits, cheap labor and tariff protection but were negatively related to BOP problems. He found no statistical evidence to support the hypothesis that market size, growth reserves, or inflation was linked to FDI. He also did not find evidence proving that economic ties between host and investing countries would induce FDI flows. He concluded that to attract FDI, the following prerequisites were needed: adequate supply of trained labor at relatively low real wages, presence of necessary infrastructure, and other policies to enhance profit opportunities and liberal policies affecting profit remittances.

Herrin and Pernia (1987) examined the factors affecting the location decision of local and foreign firms through a sample survey of 100 companies. They showed that the most critical determinants were largely of the social overhead capital type such as access or transport, power, information and communication, and physical plant requirements. Cheap labor and direct government intervention were not among the critical considerations affecting firm location choice. The authors pointed out that the basic social overhead capital must be in place before direct government influences could work. They also noted that in designing policies to influence the location of firms, policymakers must consider not only the factors indicated above but also the relevant industrial structure.

Austria (1998) assessed the FDI trends in the Philippines as well as the effectiveness of the Philippine investment incentive system. While total FDI grew during the period 1990-1997, the Philippines continued to have the smallest share when compared with

other Asean countries. Austria pointed out the need to design a universal set of incentives to be applied to firms locating inside or outside export processing zones. She also noted the need to review (a) the 1987 Omnibus Investments Code, because it favored domestic-oriented industries and promoted capital intensity among these industries; and (b) duty and tax concessions under the bonded manufacturing warehouse scheme and duty drawback system, which were found to be generally ineffective due to their bureaucratic complexities and costly delays imposed on exporters.

Industry Competition and Competitiveness

Industrial development in the Philippines is often hampered by conditions that make firms uncompetitive in the market that they are engaged in. Some industries did not have adequate incentives to modernize and improve productivity, as profit margins were maintained only because of the high protection accorded them. In addition, industrialists and entrepreneurs often complained about the high costs of doing business in the Philippines vis-à-vis its competitor countries.

Philippine industrial development in the 80s. Follosco (1982) enumerated internal problems plaguing Philippine industry in the '80s: (a) inadequate capacity utilization; (b) financial inadequacy; (c) poor technology; (d) lack of managerial skills; and (e) poor productivity. External problems that affect growth and expansion of the various sectors include (a) tariff protection; (b) custom administration; (c) credit; (d) graft and corruption; (e) infrastructure such as power, communication and transportation; and f) government bureaucracy. Note that many of these problems remain today. During that time also, he proposed the review of the feasibility of three of 11 major industrial projects of Marcos (i.e., heavy engineering industries, integrated steel mill and the petrochemical complex). Today the survival of these last two industries is definitely in doubt.

Industry concentration. Philippine industries have been characterized by high concentration and market power. According to

the World Bank (2000), in a 1997 survey, 216 of the 1,000 largest corporations (ranked by sales) belonged to only 39 corporate groups and accounted for 51 percent of total sales of the largest Philippine-owned corporations (757 of the 1,000). Thus, while trade liberalization has been a strategy to increase competitiveness, it has not been relatively sufficient. Competition policy, a current priority research agenda of PIDS, is now viewed as a key mechanism to promote efficiency and competitiveness in Philippine industry.

Saldaña (1990) examined cartel-like behavior and rent seeking (lobbying for protection) in the flour milling industry. He observed systematic adverse effects on consumer welfare and certain observable patterns of cooperation, low production capacities and past industry pronouncements abetted by government interventions. Sanchez (1990) compared the textile industry in the Philippines and Thailand. Thailand's textile industry performed better in terms of output, export and TFP growth. Technological differences were the major contributory factors to the differential in productivity performance. Thailand achieved this through joint ventures with foreign inventors while the Philippine textile industry benefited little from the infusion of international expertise. In addition, the Philippine textile industry was protected very heavily in the past.

Digal (2001) examined the structure of the retail food industry and analyzed the supply and demand factors and government policy affecting the industry. He argued that while there was some evidence supporting allegation of market power in the retailing and manufacturing sectors, it appeared insufficient. The top four firms in food manufacturing accounted for 63 percent of total revenues in 1978 and about 72 percent in 1994.

Financial and Monetary Reforms

Financial and monetary reforms are crucial to the efficient functioning of the real sector. According to the World Bank (2000), the financial markets facilitate the pooling of savings and help cre-

ate a more efficient allocation of these savings to potential investments as banks and other financial players acquire specialized skills and information in evaluating the risks and returns of alternative instruments and reduce costs of intermediation. Intal and Llanto (1998) distilled the key lessons from the financial and monetary reforms implemented in the period 1980-1997:

- a) A stable macroeconomy in recent years with implicit low inflation expectations has encouraged the expansion of formal financial institutions deeper into the countryside and into the urban informal sector, thereby providing a stronger competitive pressure vis-à-vis informal financial intermediaries such as money lenders.
- b) Prudential regulation and supervision is central to the robust growth of financial sector.
- c) Capital flows can exacerbate weaknesses in the macroeconomic regime and in prudential regulations and supervision.
- d) Large capital flows and the attendant high current account deficits and/or fast rising level of international reserves in recipient countries under an open capital account create significant macroeconomic policy challenges and rising credit risks.
- e) Financial reforms during the past one and a half decades together with overall reforms in the economy and the strengthening of macroeconomic fundamentals in the country have helped strengthened the financial sector.

Key recommendations proposed by the paper include:

- a) Strengthening prudential regulation and supervision and the implementation of comprehensive risk-based assessment and supervision, which is not limited to credit risk;

- b) Strengthening regulatory institutions, especially the BSP;
- c) Reviewing the policy on capital accounts and foreign borrowing; and
- d) Greater contestability in the financial market.

Other important studies on the financial and monetary sector included Lamberte (1984), which examined the controllability of monetary aggregates and found that the aggregates that are not controllable (i.e., deposit liabilities of nondeposit money banks) were correlated with economic activity; Sicat (1984), which discussed the role of offshore banking in the Philippine economy; Lamberte (1985), which highlighted the lessons of financial liberalization; and Lamberte (1993), which examined the impact of interest rate liberalization on the bank's profit margin, given entry constraints and the ineffectiveness of the Central Bank. In 1993, the Central Bank was rehabilitated into the new *Bangko Sentral ng Pilipinas* through a new law, resulting in improved banking regulation.

As for management of capital flows, Lamberte (1995) called for a relaxation of monetary policy to accommodate additional demand for money arising from foreign exchange inflows, while Boyce and Zarsky (1988) estimated capital flight from the Philippines and found that in the eight years preceding the 1970 foreign exchange crisis, it amounted to \$776 million (\$4.7 billion using the 1986 exchange rate). However, it peaked in real terms in the 1975-1976 (\$4.3 billion) and again 1981-1982 (\$7.5 billion). Yap and Reyes (1993) performed a cointegration analysis of money and prices and found that there was no causality between money and prices in the Philippines during 1981-1992. According to them, this can be explained by the highly erratic political and economic environment during that time.

Science and Technology

In the second semester 1989, a special issue of *PJD* featured "Science and Technology Policies in the Philippines," a PIDS-De-

partment of Science and Science and Technology (DOST) workshop. Then DOST Secretary Follosco emphasized that science and technology (S&T) was required in three strategies to transform the Philippines into an NIC:

- a) the modernization of all productive sectors in the economy and to increase productivity levels;
- b) the enhancement of R&D capability of existing institutes and its contribution to economic productivity; and
- c) the build-up of the Philippine infrastructure for S&T accompanied by efforts to increase labor productivity

Padolina (1991) recommended that the country should veer away from looking at S&T merely as a sector and instead integrate the S&T component in each of the sectoral plans contained in the overall Philippine development plans. He added that academe is in the best position to undertake long-term strategic studies because of its inherent structure and opportunities available in the university which lend support to this type of activity. There must also be greater academe-private sector collaboration in promoting S&T.

The collaboration between the private sector and academe should catalyze the number of inventions and innovations in the country. Medalla, Mikkelsen and Evenson (1982) assessed inventions in RP industry from 1967 to 1980, which showed a similar pattern characterizing the advanced developing country or the "near NIC" country. It appeared to rank ahead of most other developing countries and probably ahead of most slow-growing semi-industrialized countries in terms of domestic inventions. The data on Philippine invention suggested a fair degree of success in stimulating indigenous invention. On the whole, according to the authors, the state of invention in Philippine industry seemed to be consistent with its state of development. Or put it another way, inventive activity did not appear to be a severe limiting factor preventing the Philippines from moving to an open export-based rapid growth phase. They noted that other policy changes would be re-

quired to achieve this growth, although a more aggressive program to stimulate invention would also contribute to this goal. It would be certainly interesting if an updated study could be made and published in the future issues of the PJD.

One important factor in the promotion of S&T is the protection of Intellectual Property Rights (IPR). The PJD dedicated one special issue to cover the workshop on Intellectual Property Rights Policy Issues and Perspectives in December 1991. In that workshop, it was asserted that the Philippine position on IPR was that not only should owners be remunerated for their contribution to S&T; the public should also benefit from such products. In biotechnology, the IPR code should be flexible enough so that the country can enjoy the scientific techniques and know-how of advanced nations in return for the Philippines' rich supply of genetic resources.

Ancog (1991) discussed how IPR can be a dividing factor between developing and developed nations. The correlation of IPR protection with trade-related matters continues to be one of the burning issues because developing countries need more concessions in developed nations' IPR system to gain access to the latter's technologies. She warned that developing countries like the Philippines should monitor developments in patenting, especially in the field of biotechnology in advanced nations, because these are the principal sources of high biotechnology R&D. According to Ancog (1991) sans a reasonable IPR protection, it was almost a foregone conclusion that these nations would not share the fruits of their R&D efforts. She added that the scope and coverage of the existing IPR laws must be redefined to keep pace with modern technological trends.

Technological progress is often measured by economists through what is called as total factor productivity (TFP). Cororaton and Associates (1995), using both the growth accounting method and stochastic frontier approach, attempted to measure TFP growth. Their results showed a drastic drop in the productivity performance

of the manufacturing sector. The number of industries with TFP negative growth increased especially in the 80s and 90s, which may be due to structural and economic adjustment policies implemented during those times. In addition, they think that FDI has not been contributing to technical progress and that technical progress, which in return may require a nonneutral policy because of the abundance of market failure in the technology market.

Technological changes are hastened through investments in R&D by both the public and private sectors. Cororaton (1999) observed that while rates of return on R&D investments are high, there are indications that the Philippines has been underinvesting in R&D. It ranked very low in two broad indicators of R&D—expenditure on R&D and number of scientists and engineers. Data from the United Nations Educational, Scientific and Cultural Organization showed that RP ranked 73/91 in terms of scientists and engineers with 152 per million, and in R&D expenditure at 60/91, spending only 2 percent of GNP. Based on his computation of a TFP regression of 99 countries, the R&D expenditure would have to increase by 5.778 percent for Philippine TFP to reach its frontier (or full potential) of a total of 7.445 percent of GNP, or about 18.8 billion pesos. A gap of 197 scientists per million must also be filled up.

Mathematical Models and Statistical Techniques

Effective development planning and policymaking are contingent on the availability and reliability of data and the soundness of analytical methodologies and techniques, including economic empirical models. The PJD as a technical journal has espoused among its contributors the utilization of such analytical tools in understanding development issues. At the same time, it has welcomed contributions that upgrade and refine current statistics and techniques and that try to apply mathematical models to Philippine developmental issues.

Social accounting matrix. The use of the social accounting matrix (SAM) for development planning in the Philippines first saw print in the PJD. Bull (1977) explained the concept of SAM, why it might be useful, and how it might be constructed and used for projection purposes in the Philippines. A SAM is a framework where the disaggregated interrelationships in the economy can be recorded. It was originally developed to present the national accounts (i.e., the record of the sources and disposal of the national income) in a form which would permit the exploration of the implications for production, consumption, investment, balance of trade, prices, wages and employment of alternative growth possibilities over a given planning period. SAM can be used for development planning and policy analysis (evaluating alternative policies). It could be set up in any form considered appropriate by the decisionmakers, the planners and statisticians. Because of the potential size of SAM, it may be a great strain on a country's statistical resources to meet data requirements, but such limitation can be outweighed by the benefits it brings. Also, if the national accounts were built up using the SAM framework, they could be cross-checked against the conventional income, expenditure and output approaches to estimating national accounts.

SAMs were constructed for the Philippine economy for 1974, 1979 and 1987. The more aggregate nature of the accounts led to the application of the label "Macroeconomic SAM Framework (MSAF)." Vos (1991) reported the construction method of the MSAF in the Philippines for 1987 and its relation to existing data sources. He also used this to analyze the impact of policy changes on the economy from 1974 to 1987.

Ezaki (1976) clarified the various theoretical aspects in the existing system of national accounts and summarized and interpreted them with particular reference to the Philippines. His paper showed that Walras Law holds in the existing system of national accounts especially in the national income statistics. This means that the national income statistics itself could be interpreted

in terms of a general equilibrium framework. In his theoretical interpretation of the national income statistics, he attempted to make a special distinction between supply-demand equilibrium conditions, budget constraints and distributional equations in production. This was because the three different types of equalities are used in a mixed and entangled manner in the five basic accounts of existing national income statistics. He also showed that there existed some conceptual inconsistency between national income statistics and national wealth due to difficulties in treating general government properly and consistently.

Computable general equilibrium and macroeconomic models. Computable general equilibrium (CGE) tools had been extensively utilized for policy analysis in various parts of the world. The PJD had featured various articles that try to use such models in their analysis. Habito (1987) did simulations with a CGE model of the Philippine economy and successfully quantified the efficiency and equity impacts of alternative tax structures. Evenson (1986) used an impact multiplier or "partial" CGE model (treating nonagriculture exogenously) and a full CGE model (i.e., treating other sectors endogenously) for the Philippines (1986) for agricultural policy analysis. Other sectoral models (Evenson 1986 and Quisumbing 1986) specifying a producer and consumer core of typical multi-sectoral models were also featured in the 1986 special issue on mathematical methods for policy analysis in agriculture. In Kunkel, Gonzales and Hiwatig (1976), theoretical advances of modeling were amplified and applied to a simple linear programming problem to determine changes in the agricultural sector resulting from different supply-demand balances due to input scarcities and changes in productivity and consumer preferences.

Bautista (1988) examined the general equilibrium effects of productivity on manufacturing with special reference to food processing while Doroodian and Boyd (1995) assessed the effectiveness of export promotion policies (subsidies and real devaluation) in the Philippines. Cororaton (1997) used a CGE model of the Phil-

ippine economy called APEX to simulate the effects of GATT-UR/WTO. He concluded that based on two different world growth scenarios, the overall potential impact was positive, with real GDP increasing from 0.64 to 0.7 percent. However, under the different scenarios, certain sectors will be affected negatively (e.g., three under the agricultural sector and mining). In his review of population-development-environment models, Orbeta (1996) included CGE models by Cruz and Repetto (1992), which analyzed the environmental impact of adjustment programs.

A macroeconomic four-sector, 12-equation model was used by Phelan and Yoshno (1995) to assess the impact of overseas development assistance (ODA) on the Philippine economy. They found that in the short run, ODA had a cushioning effect on the cyclical fluctuation of income but created a chain of dependency in the long run. In the future, it is hoped that the CGE models will be utilized increasingly to assess various policy alternatives.

System of National Accounts. In the 1976 workshop proceedings on the development of PNSA (which came out in the 1977 first semester issue of the JPD), then NEDA Director-General Gerardo Sicat explained that the objective of the workshop was to improve the "production function" of national income accounts. He added that "if the national income accounts are the final end product of all statistical series the government compiles on production, prices, trade, etc., then we must strive to make that product as good as possible."

Mijares (1983) traced the development of the system of national accounts to the work of the Conference of European statisticians after the Second World War under the UN Economic Commission for Europe. In 1952, the UN published the system of national accounts for international data reporting, which was revised in 1968. This was considered the blueprint for the development of macroeconomic accounts, which included balance sheets, financial accounts, input-output distribution of income and wealth and employment. The Philippine accounts find its roots in what

was compiled by William Abraham in 1952 (1946-51) in his doctoral dissertation in NYU.

The PJD had featured the various workshops that tried to refine the Philippine National System of Accounts (PNSA). It specifically tackled the two workshops (1971 and 1977), methodologies and sources of data in production and income-originating sectors, and expenditures/financial and government accounts. In the 1983 PIDS-NEDA workshop on the PNSA, the focus was on financial and government accounts-government transactions (classification and valuation), foreign transactions (balance of payment) and other issues (export processing zones, base year, the informal sector, etc.).

Domingo (1992) explained the additional refinements in the system, which was characterized by the expansion in sectoral coverage and the changes in data and estimation methods in the items of certain accounts. Coverage expanded in varying degrees to include agriculture, construction, mining, electricity, gas, water, government services and consumption, fixed capital formation, increase in stocks and foreign trade. It also adopted recommendations of the 1968 and 1993 United Nations System of Accounts.

Data quality assessments. The PJD has also been the venue for various authors to assess the accuracy and quality of data gathered by statistical agencies. In particular, Bautista and Tecson (1977, 1978) examined the accuracy of trade recordings between RP and Japan and the US while David et al. (1990) evaluated Philippine corn statistics, and the quality of Philippine Coconut Statistics. Reyes and Cantillep (1981) assessed export data with a view to improving a related price index, while Ono (1982) reviewed income in kind underreporting in the Integrated Survey of Households.

Impact assessment and analyses. Development projects need to be assessed to determine if they actually promote the well-being of the target beneficiaries. Onate (1978) developed indicators for monitoring rural area development projects to measure the level,

pace, direction of the economic and social impact of project components on the rural poor. Reyes (1979) identified and analyzed the major issues and problems relating to the measurement of social development and the social impact of development projects, particularly those relating to identification and use of indicators for monitoring and evaluation. The PJD also featured in its 1984 first semester issue various project assessment reports which were outputs of a training program designed and implemented by the micro component of the Economic and Social Impact Analysis/Women in Development Project of the United States Agency for International Development. The reports were written by various staff members from NEDA, Ministry of Local Governments, Philippine Ports Authority and the Davao City Water District.

Contributions of Prominent Economists and Social Scientists

A journal's prestige can be gleaned from the personalities who contribute papers and articles to it. Prominent economists here and abroad have published their research outputs and reflections in the PJD.

Srinivasan (1992) examined conceptual and measurement issues in the linkage between income distribution and the macroeconomy. He noted that the primary sources of data for modeling the linkage (i.e., household surveys and national income account statistics) usually differ in their estimates of the same categories of income and expenditure. Thus, modeling exercises should attempt to reconcile these two sets of data at each point. However, measurement errors still affect most data to some extent and household income data to a large extent because they are affected by the life cycle, business cycle, weather and reporting biases. Empirically linking income distribution and the macroeconomy is also useful for predicting trends in inequality and poverty where macro data are more available than survey data. Lastly, Srinivasan noted that barring a few exceptions, macroeconomic variables are assumed to affect inequality and not vice versa.

Klein (1987) proposed various solutions to the international debt problem – interest paid in local currency, capitalization of interest, advance oil purchases for inventory, debt-equity swaps, recycling of surpluses, the Baker Plan, incomes and price policies and, best of all, a world conference. This should be attended by lenders, borrowers, governments on both sides and international bodies assessing responsibilities among participants. The aim of the conference is for the developing countries to have “scaled back debts” that can be fully serviced under growth conditions that are projected (i.e., debt restructuring of sovereign nations).

Hill (1985) analyzed the Australian-Philippine trade relations using his three main points:

- a) Bilateral trade grew rapidly over the period under investigation, 1962-1981.
- b) Although trade has not been large in the aggregate, it has generally been characterized by high levels of country bias.
- c) The prospects for continued modest growth are quite good.

Together with the University of the Philippines in Los Baños, Evenson (1986) organized a conference on agriculture policy analysis. He contributed three papers – first, an overview of the various methods for agricultural policy analysis (with Habito, Quisumbing and Bantilan); second, a discussion of infrastructure, output supply and input demand in Philippine agriculture (applying profit function methodology in agriculture to compute price elasticities); and third, a evaluation of the impact of multiplier policy models on the agricultural sector, specifically the population-development nexus.

Oshima (1980) predicted that Southeast Asian growth in the '80s, which averaged 7 to 8 percent, may slow down to 5 to 6 percent in the 1990s, as there will be greater competition from China, a slowing down of growth in export destinations (US, Europe), declining growth rates of tourism and the natural con-

straints of primary sector exports. His prediction was partially fulfilled as Southeast economies (except the Philippines) experienced 7 to 8 percent growth rates only to fall during the 1997 crisis. Oshima (1983) explained why Philippine growth lagged behind ASEAN neighbors and one major reason was the role of institutions. Today, China's entry to the World Trade Organization (WTO) and the adverse effects of the September 11 terrorist attacks will slow down recovery and growth in the next few years.

Other key contributors included several known Filipino economists like J. Encarnacion (Macroeconomic Theory), G. Sicat (Economic Policy), G. Jurado (International Trade and Policy), J. Estanislao (Economic Policy), R. Bautista (International Trade), E. Tan (Human Resource), M. Mangahas (Poverty and Agriculture), C. David (Agriculture), A. Armas (Labor), V. Paqueo (Labor and Population), R. Fabella (Microeconomic Theory), C. Paderanga (International Trade), C. Habito (Agriculture and Computable General Equilibrium Models), G. Tecson (International Trade), P. Intal (Agriculture and International Trade), S. Monsod (Gender and Human Development), D. Canlas (Labor and Human Resource), M. Lamberte (Financial and Monetary), M. Montes (Macroeconomics), A. Balisacan (Poverty), R. Manasan (Public Finance: Tax Evasion) and E. Medalla (International Trade). Key personalities from the social science community like Gelia Castillo (Sociology), Jose Abueva (Public Administration), Ledivina Carino (Public Administration), Sylvia Guerrero (Sociology), Cynthia Bautista (Sociology) and Mercedes Concepcion (Demography) also wrote articles for the Journal.

Dissertation of "Budding Economists." The PJD has also been a venue for new Ph.D.s in economics to share their dissertation with the general public. Several articles published in the Journal were taken from the dissertations of the thesis of then "budding economists."

Habito (1987)⁴ was a chapter from the author's dissertation entitled "Equity and Efficiency Trade-offs in Philippine Tax Policy Analysis," Harvard University, 1984. Through simulations done with a computable general equilibrium model of the Philippine economy, the author quantified the efficiency and equity impacts of alternative tax structures. Using an equity-efficiency trade-off frontier, he observed the following:

- a) The sales tax reforms of 1977 worsened the economy's position because of its efficiency losses (i.e., petroleum tax).
- b) The shift to gross income taxation was a positive reform, especially because of improved administrative efficiency and collection rates without substantially changing individual tax burdens.
- c) Direct income taxation in Philippine tax system can improve equity without a decline in overall welfare.

Llanto⁵ (1987) presented some empirical evidence that excess money which results from domestic credit expansion brings about a deterioration of the balance of payments. The direction of causality ran from domestic credit expansion to the balance of payments. Key policy implications included the need to manage domestic liquidity judiciously and a determined effort to mobilize resources through private savings and the efficient collection of tax revenues, thus enabling government to pursue programs without monetizing its budget deficit.

Tolentino⁶ (1987) is a chapter of the thesis entitled "Economies of Scale, Relative Efficiency and Banking Policy: An Application to the Philippines," University of Hawaii, 1986. The paper

⁴Dr. Habito was formerly director-general of the National Economic and Development Authority and is currently Professor of Economics Department at the Ateneo de Manila University.

⁵Dr. Llanto is currently the deputy-director general of the National Economic and Development Authority.

⁶Dr. Tolentino was formerly Undersecretary for the Department of Agriculture and is Professor at the Ateneo School of Government.

modeled a small less developed country bankers' profit-maximizing decision processes in response to a range of policy actions. Policies have been enacted to increase the level and flow of loans to producers, particularly farmers. The model showed that a profit-maximizing financial firm will find it more profitable to generate revenues from government support and not from its loan portfolio because of the virtually guaranteed, minimal-cost and low-risk revenue from loans provided by the Central Bank to these firms. The main culprit is the wrong subsidy and incentive structures for these small financial firms given by the Central Bank.

Lamberte⁷ (1983) is from the author's dissertation entitled "Behavior of Commercial Banks: A Multi-product Joint Cost Function Approach," University of the Philippines' School of Economics (UPSE), 1982. This 1983 article analyzed net rates of returns on the various elements of a bank portfolio. Empirical findings showed that banks earn negative rates of return on savings and time deposits and positive implicit return from demand deposits. Thus demand deposits can be considered as one of the bank's output in addition to the bank's earning assets and other income earning services such as trust funds, letters of credit, etc.

Bautista⁸ (1993) was taken from the thesis, "Rural Labor Market Adjustments to Differential Technical Change," UPSE, 1988. His analyses of micro-level data confirmed the effects of differential technical change on both the demand and supply side of rural labor markets. On the demand side, the effects were both quantitative and qualitative in nature. The former were in terms of substantial increases in total farm labor use, particularly of hired labor in areas with good irrigation and water control. The latter revolved around the structure and operation of rural labor markets, as reflected in the evolution of new arrangements such as *sagod*

⁷ Dr. Lamberte is currently the President of the Philippine Institute for Development Studies.

⁸ Dr. Bautista was formerly assistant director-general of NEDA and is currently a UNDP consultant.

and the increasing incidence of permanent labor. These arrangements embody exclusionary features, which restrict other labor market participants and the mobility of rural labor.

Other dissertation chapters transformed into PJD articles included that of Geron⁹ (1989), which explained why the farmer-borrower engaged in interlink deals behaves according to the purpose for which he made the loan. Soriano¹⁰ (1990)'s "Money, Nontraded goods and Devaluation in a Small Open Economy: 1967-1986," University of California in Berkley, 1987, classified the economy through discriminant analysis into traded or nontraded sectors. Tongzon¹¹ (1985) examined the impact of Australian tariff preferences on ASEAN imports and its welfare implications.

Forward-Looking Articles

A good journal is able to foresee important and controversial issues that will leave lasting impacts on Philippine development. Being proactive, the PJD highlighted articles and papers that were ahead of its time and were able to anticipate problems that needed to be confronted in a latter period. In addition, several of these articles became key sources for policy discussions and debate, which eventually led to the formulation of specific laws and guidelines.

GMOs and biotechnology. Padolina (1991) warned that while IPR in biotechnology could stimulate private research in developed nations, this could be detrimental to poor nations because of the following consequences:

- a) Patent stacking—each gene could be owned by a different company and each could impose a royalty charge.

⁹ Dr. Geron is Chief of Party of a USAID Project at the National Credit Council.

¹⁰ Dr. Soriano was formerly Undersecretary of the Department of Finance and is now president of the Ateneo Center for Social Policy and Public Affairs.

¹¹ Dr. Tongzon is a Professor in the Economics Department of the National University of Singapore.

- b) Gene monopoly – patent holder could cut off access by others.
- c) Characteristic monopoly – patent holder could prevent others from completing research through the exclusion of one characteristic.
- d) Original sin – offspring of patented organisms could be subjected to royalty charges.
- e) Farmers’ right to save seed – schemes may be devised, that will prohibit farmers to save part of patented crop for seeds

He recommended the strengthening of national sovereignty over natural and genetic resources and to support the formulation of an International Code of Conduct in Biotechnology. It was no wonder that in the GATT-UR negotiations in the mid-1990s, the IPR provisions had been the most debated and until the recent Doha round, they were still “a hot issue” for developing countries. Ten years later, Padolina (2001) noted that the international Convention on Biological Diversity had declared that genetic resources were indeed owned by sovereign nations. However, in the Philippines, he talked about the need for greater political will to promote biotechnology, especially for agriculture. Ironically, according to him, the Philippines was one of the first in Asia to establish a biotechnology and research center in the ‘80s.

The ASEAN Free Trade Area. Sicat (1980) early on highlighted the need for economic interdependence in the ASEAN region. He observed that while the span of possible cooperation within ASEAN is wide, an important area is cooperation in trade. The signing of the Treaty of Amity and Cooperation and the Declaration of ASEAN Concord in 1976 laid down the basis for such regional economic cooperation. Over the years, the ASEAN has made great strides in trade, investment and technical cooperation.

The first initiative in trade cooperation was the Preferential Trading Arrangements (PTA) that began in 1977. The PTA represented the first major commitment of the members of ASEAN to

liberalize intra-regional trade. In 1979, the number of commodities brought to this arrangement had reached 2,327. However, the ASEAN PTA had dismal results. Caoyonan (1987) evaluated the PTA and concluded that overall, the various instruments of the arrangement had not been effective in increasing interdependence among ASEAN countries. While the number of the products exchanged for tariff concessions as well as the margin of preferences increased under the instrument of tariff preferences, such concessions were limited to a few products with minimal export value. Consequently, ASEAN members agreed in 1992 to set up the ASEAN Free Trade Area within 15 years, using the Common Effective Preferential Tariff (CEPT) as the main mechanism. Through AFTA, ASEAN primarily sought to secure market access within the region for its members and attract foreign direct investment.

Sicat (1980) also pointed out that ASEAN "will develop approaches that would be unified in cooperation with broader group of nations . . . such as the European Economic Community or in countries that have common frontier with the Pacific region." In 2003, the ASEAN Free Trade Area will come into fruition, 23 years since Sicat's article was published.¹² Today, we also have the Asia Europe Meeting, which is an ASEAN-European Union conference of leaders every two years, and the Asia Pacific Economic Forum, which includes most of the ASEAN members and the other countries in the Asia Pacific region.

Pineda (2001) examined the effects of the AFTA-CEPT on Philippine industries. She identified the following top five gainers in the regime of free trade: semiconductor devices, fertilizers, motor vehicle parts and accessories, fixed vegetable fats and oils, and copper. She also pointed out that the most vulnerable industries included hardboard and particleboard, glass containers, food products, nonmetallic mineral products and general hardware.

¹² This was a speech delivered in Bali, Indonesia.

Competitiveness of the information technology industries.

One of the most important developments in today's globalization is the upsurge in information and communications technology. The economics of information technology (IT) has very scant literature in the '90s in the Philippines. As such, one of the first few comprehensive reviews of IT and its related industries was that of Austria (2000). Her paper examined the competitiveness of the Philippine information technology industry vis-à-vis its emerging competitors and neighboring countries in the region. Austria warned that while the industry boasted of being one of the largest foreign exchange earners of the country, it suffered from structural weaknesses and unless addressed, may lose out to competitors. Infrastructural and institutional bottlenecks and the inadequacy of the educational system to meet the human resource requirements of the industry had remained severe constraints to its long-term growth. Thus, she recommended key strategies to upgrade its competitive position amid the accelerating global technology race: (a) the implementation of comprehensive IT policy, where the private sector identifies IT products and services for promotion and development and where policy gaps in IT are reviewed; (b) increased investments in R&D of the private sector, which should be focused on high value-added IT products, product design and processes; (c) the development of specialized skills for high value-added IT products and the incorporation of IT in all levels of education; (d) the development of a national information infrastructure; and (e) enhancing the role of government in IT diffusion by creating an enabling environment for IT diffusion and through its utilization local IT consultants

Fiscal constraints of decentralization. One of the most important policy reforms in the 1990s was the passage of the Local Government Code of 1991. Various functions of the national government were devolved (e.g., delivery of services related to health, social welfare, agriculture, environment, infrastructure and education) and additional regulatory and fiscal powers were given to

LGUs. However, one of the more important issues related to the law was the financial aspects of decentralization—on whether LGUs would have enough financial resources to adequately perform their new roles and responsibilities. Manasan (1992) foresaw these key fiscal implications and warned the national government on the problems that might arise because of the constraint among LGUs. Ten years later, Manasan's findings were confirmed by actual events and circumstances during the first decade of implementation of the Local Government Code.

Her study showed that the projected increase in Internal Revenue Allotments (IRA) might not translate into any significant augmentation of discretionary resources for provinces, cities and municipalities combined. She added:

If less than 35 percent of BIR tax receipts (are) appropriated for the IRA or if the true costs of the devolved functions is higher than what official estimates indicate, then nonbarangay LGUs as a group will encounter difficulties in funding their new and existing functions. Moreover, even if there is no financing shortfall in the aggregate, some LGUs—particularly those in the lower income classes—will find the increment in their IRAs insufficient to cover the cost of functions they must absorb. This indicates the need for an augmentation fund to help deficit LGUs. It also suggests that LGUs will have to depend on the growth in their locally generated revenues if they want to be financially autonomous.

Developing the municipal and local government bond market has also been studied and proposed to be an important option to solve the LGU's resource constraint (Saldana 1992; Laya 1995). However, constraints to the local government bond market include a small investor market base, a restrictive policy environment (the Code allows bond flotation only for self-liquidating projects), and the lack of awareness among LGU officials of bond financing and procedures.

Manasan, Gonzales and Gaffud (1999) constructed an indicator system of good governance at the local level called the Gov-

ernance quality index. The index was based on three aspects: capacity of LGUs to mobilize and utilize resources, efficiency and effectiveness in the delivery of social services, and the presence of mechanisms to ensure accountability. Today, many LGUs are more conscious of their role as social service agents. Manasan et al.'s indicator system can assist LGUs in the quest for better governance.

Forest and upland resource management. A 1988 special issue highlighted the importance of forest and upland resource management in the country. Philippine forests were being destroyed at a rate exceeding 84,000 hectares per year from 1970 to 1985. Extensive portions of forest lands were regularly being converted to other uses because of logging, fire and slash and burn agriculture. The disproportionate demands made on the forest and uplands are due to increased pressure from population growth and the unsuitable systems of upland resource management. To address this problem, an assessment of the general resource valuation issues as well as specific studies of the private and social impacts of transformations in upland environment were needed. Cruz and de los Angeles (1988) identified resource undervaluation as the key problem resulting in overexploitation, excessive rents and inequity. She provided the general directions for policy and the need for changes in the incentive structure:

- a) Price reform for the environmental services and commercial value of forest resources
- b) Property rights change for upland conservation and its potential impact on the land reform program

The following years saw the intense policy debate on total log ban in the Philippines. Until today, forest policy and upland resource management remain a thorny issue. Hyde et al. (1997), in a more recent article, examined the dilemma of foresters in the protection of the forest and upland resource. According to them, national concerns with deforestation biodiversity and the unique characteristics of the natural environment competed with the local importance of forests as sources of land for the agricultural

development of expanding upland populations. Two programs of the DENR—the Community Based Forest Management Program (CBFM)¹³ and the Industrial Forest Management Agreements (IFMA)¹⁴—are intended to ease the government's administrative responsibilities and increase private initiative while maintaining DENR oversight to protect the environment and generate public revenues. The study recommended that a clear distinction between the two programs be made.

CBFM is best designed for generally lower value areas that are important to local communities while the IFMA is best designed for larger and more valuable areas where large-scale private operations can successfully invest and obtain a commercial return on their investments (e.g., plantations, degraded forests or residual productive forests). The DENR then should focus its environmental monitoring and enforcement resources on areas that satisfy the combined criteria of great risk and potential impact of DENR monitoring, be it in areas under CBFM or IFMA.

Water and watershed. A special 1999 issue of the Journal focused on the conference entitled "Watershed Resources Pricing, Climate Change and Sustainable Watershed Management," sponsored by PIDS and Forestry Development Center. Watersheds are major sources of quality water for domestic, irrigation, hydropower, industrial, fishery and recreational uses. They are also vital to the health and well-being of all people. However, sustainability of watersheds rests heavily on the optimization of the utilization of its resources and minimization of the vulnerability to changes in environmental condition. And resource pricing is an essential element of this proper resource utilization.

De los Angeles (1999), in particular, asserted that transforming various bio-physical data into monetary values as done through economic valuation, enables the various stakeholders to assess both

¹³ Places forest land under local community management.

¹⁴ Takes land from cancelled TLAs and encourages its sustainable management by commercial timber enterprises

the magnitude and incidence of impacts—on who bears the costs and who enjoys the benefits. The application of such tools should also determine the direction for resolving long-standing unresolved issues such as the commercial log ban, lifting the ban in watershed areas, designating areas to be allocated to National Integrated Protected Areas System and the final forest line. She also proposed that the property rights regime be clarified at the national level and arbitration capacities be enhanced in the DENR and other agencies.

Housing. Early in 1974-75, the housing problem was highlighted in a special joint issue. The issue examined all aspects of housing from needs analysis (demand) to finance, design and production (supply), from policy environment (i.e., land policy, public housing, resettlement programs, government control and regulations) to its social implications (urban poor and squatter problem). It also proposed a comprehensive national housing policy.

De Vera (1975) estimated that total housing need from 1970 to 2000 would run up to 11.3 million dwelling units, which translated to a yearly requirement of about 304,000 to 463,000 units, which are equivalent to about 6.9 new dwellings for every 1000 population. In terms of finance he proposed to have housing investment of 4 percent of GNP at current prices. Today's housing backlog is estimated to be 3.72 million and the demand for housing in Metro Manila alone is already 102,000 per year (Gonzales and Ignacio 2002). One key finance issue today is the development of a secondary mortgage market, which was also discussed in the same special issue. However, the secondary mortgage market remains underdeveloped today basically because of persistent problems in land titling and the inability of government agencies to collect even in the primary markets (i.e., the failure of the National Home Mortgage and Finance Corporation).

Makanas (1975) utilized a 12-sector input-output table with analytical matrices to analyze the forward and backward linkages of the housing construction industry. The sector's multiple

linkage is sufficient argument for “pump-priming” through the housing industry although he did not measure the multiplier effects of the industry. In a recent study, Gonzales and Ignacio (2002) noted that the housing construction multiplier is 16.61 of the gross national product. Ramos and Hong (1975), Porio and Hollnsteiner (1975) and Ocampo (1975) examined various models of housing design—those of the Philippine Homesite and Housing Corporation, SSS housing project in Marikina and the Philippine Business for Social Progress Mandaluyong Social Condominium Project. The point is the necessity of participation by the beneficiaries in the determination of the appropriate design or model.

Hollnsteiner (1975) and Guerrero (1975) gave a sociological perspective on the urban poor’s struggle for decent housing in Metro Manila. Hollnsteiner’s conclusions and recommendations remain valid up to this day:

- a) Reconceptualize the pejorative definition of squatters into a more realistic (informal urban settlers) model of the striving poor in search of a better life.
- b) Improve sites and services right in the city wherever possible to avoid disruptive dislocation of thousands of families, many of whom are living in subsistence.
- c) Implement land turnovers as is being done in the rural areas. Consider the possibility of long-term leases, if outright sale is not advisable. Devise a housing finance scheme for low-income residents (a precursor of community mortgage programs).
- d) Try out a variety of housing types in urban renewal sites.
- e) Recognize the psychological and economic components of encouraging relatives and townmates to live near one another in a low-income area (probably the root of the concept of social network).

Sicat (1975) emphasized that housing policy must be in consonance with the objectives of national development. He rightfully noted that the “heart of the housing problem lies in solving the

problem of poverty . . . (and) to a significant extent, the Philippine housing shortage is reflective of an imbalance in the country's national development policies." He discussed the four key instruments of a national housing policy – finance, governmental reorganization to integrate various housing organizations, the participation of private and public sectors, and land policies. During the Marcos administration, the Ministry of Human Settlements and the Metro Manila Commission were organized. Today we have the Housing and Urban Development Coordinating Council (HUDCC) and the Metro Manila Development Authority. However, the institutional issue of creating one strong central housing agency – a Department of Housing and Urban Development remains until today. Advocates see the need for such an agency to spearhead the work on housing and urban issues. Congress is currently debating the need for the creation of such agency.

A more recent article, Strassmann and Blunt (1993) discussed the high cost of land in Metro Manila and its effects on the availability of housing to meet the ever increasing demand of a growing population. The paper was very timely as the housing issue was in the forefront of policy debate during that period. It was circulated in the executive and legislative branches of government and was frequently cited by people concerned during the deliberations on some of the key legislation on housing and land pricing.

GAPS IN DEVELOPMENT ISSUES

Development concerns encompass a myriad of multidimensional problems and issues that even a three decade-old journal cannot fully cover. This section outlines important gaps which may be eventually filled by future contributions to the Journal.

Multidisciplinary Perspectives

While the PJD espouses not only a purely economic viewpoint but a multidisciplinary one as well, the articles published in the Journal are still predominantly economic in perspective. Even

the 1994 special volume published in honor of prominent sociologist Gelia Castillo featured papers mostly from economists except for a select few (Bautista 1994; Carino 1994; Concepcion 1994). While economists have worn wider lenses by incorporating in their empirical analyses insights, frameworks and methodologies from the other social sciences and disciplines, they could still miss relevant angles of key development issues. Development for sure cannot be seen from a purely economic lens. In fact, it has already been a consensus that development is multidimensional and problems affecting development must be approached at a multidisciplinary and multistakeholder level. In addition, the Journal for sure will be benefited by contributions from political scientists (state-market-civil society interplay), sociologists and anthropologists (culture and underdevelopment) and even psychologists (peace, conflict and development issues).

Studies on Institutions, Regulation and Public Administration

The Journal has extensively covered the areas of fiscal and tax reforms (Manasan 1987, 1990, 1992; Yoingco 1978) but contributions have been scant on the areas of institutional, administrative and regulatory reforms (presumably an area of institutional economists but also political scientists and public administration experts), corruption¹⁵ and rentseeking, and political patronage, as they affect Philippine development. Governance nowadays refers to processes not only within government but also those external and yet strategic to the government—its relations vis-à-vis the private and civil society sectors. Many development issues cannot be solved without appropriate governance and institutional reforms, especially when the root of the problems lies in the capacity and the will of a concerned agency to effect changes. More so when institutions are “captured” by vested interests, thereby causing inefficiencies and loss of welfare in society. All these cannot be

¹⁵ Which is quite pervasive in Philippine society.

corrected by simply designing appropriate incentives or any market-oriented policies. For sure, some developmental concerns may be better understood using a political economy perspective or from an institutional or administrative approach. Current concerns like the high prices of electricity and water are borne out more of institutional and regulatory failure rather than the simple breakdown of markets.

Private Sector Issues and Entrepreneurship

Another key area in development studies which the Journal can further explore is related to private sector issues and entrepreneurship. Markets can only function with the development of a cadre of entrepreneurs. Such persons do not just crop up in the market but they are also usually trained and accorded the right environment to develop. Genuine economic development can only ensue when you have a critical mass of such entrepreneurs, who are also responsible leaders in the market. Thus, it will be of interest to the Journal to highlight contributions and articles that will delve deeper into private sector leadership modes, business social responsibility, corporate governance and new management strategies in an era of globalization. It will also be of great value if articles could propose concrete policy measures that will radically reduce the costs of doing business in the Philippines, specifically where infrastructure like ports, telecommunications and energy services are concerned.

Studies on Civil Society Sector and Development

Another important area to consider is the role of civil society sectors in pursuing genuine development (i.e., development NGOs, cooperatives, and even religious groups). While the Journal covered studies on cooperatives and microfinance institutions and NGOs, it still has not published papers that examine more deeply how these NGOs and other civil society organizations are able to respond to community needs, especially after both the market and

government failed to do so. In terms of cost efficiency and possibly reach, such sectors may have the comparative advantage in the delivery of certain social services (e.g., social preparation and community organizing), which are crucial to more participatory approaches to development.

Labor, Poverty and Globalization

Since labor and human resource issues will be crucial in an era of increased globalization, the PJD must continue featuring papers and articles that will examine the labor market, especially on how workers become more competitive and respond to current challenges. It may also highlight studies on the changing labor arrangements and changes in industrial relations, particularly those related to labor flexibility, subcontracting, child labor, etc. Also important are current studies that look at the continuing role of the informal sector in generating employment and output for many displaced and marginalized workers. Similarly important is the role overseas contract workers play in the economy as they are transformed from mere labor exports to "mechanisms and instruments" that would catalyze greater economic activities in the country (marketing for trade goods and enhancing tourism). Labor issues are important because poverty cannot be delinked from key labor market outcomes such as employment and wages.

Regional Development

Most of the published materials focused on the national level as a unit analysis (macro studies), though a few that tried to look at more sectoral and micro studies. However, in terms of regional focus, very few were devoted to areas outside Metro Manila especially Mindanao. Mindanao presents a very great economic potential for the country but it is presently under political conflict and uncertainty. Unequal development within the Philippines is a key issue, which, more often than not, is the cause of many civil strife. Understanding the persistence of regional underdevelopment

and policy responses to correct such imbalances can be key contributions of the Journal in the very near future.

Information and Communication Technology and Development

Finally, the economics of the information and communication technology is a broad area which will be crucial to the future development of our country. As services become a leading contributor to economic growth, Filipino human resources can lead in developing IT niches and other related services. IT is predicted to be our pathway to greater competitiveness in the global market.

SUMMARY AND CONCLUSIONS

The PJD has adequately covered the research themes and thrusts of the PIDS and contributed to the enrichment of the discourse and the literature on development concerns in the Philippines. Journal articles on key issues such as agriculture, poverty, human resource development, trade and investments, competitiveness and competition, science and technology, financial and monetary reform have remained relevant until today. The PJD has also served as venue where researchers and academics could share new statistical developments, mathematical models and techniques used in assessing development policy issues. It has also been host to the writings and reflections of prominent economists like T. N. Srinivasan, Lawrence Klein, Robert Evenson, Harry Oshima, Jose Encarnacion and social scientists like Gelia Castillo, Jose Abueva, Mercedes Concepcion and Ledivina Carino. The PJD has also been an outlet where new economists and social scientists could publish their dissertations' highlights and major findings. Pro-active topics and controversial issues foreseen ahead of time also saw print in the pages of the PJD. These include genetically modified organisms and biotechnology, fiscal constraints of decentralization, the housing backlog, information technology and competitiveness, and natural resource management. On the basis of these factors, the PJD has successfully fulfilled its objectives, which were set out 27 years ago.

Overall, the PJD has played the following roles in the development community:

- a) It has published and disseminated important information that covered wide ranging topics from agriculture and poverty to science and technology.
- b) It has been a venue for researchers in government, academe and other institutions, including prominent economists and social scientists, to disseminate findings, reflections and results of their important studies.
- c) It has also become a mechanism for dialogue and exchange of ideas among development thinkers and practitioners.
- d) It also has published proceedings and papers presented in special workshops and conferences that were strategic for government's policymaking
- e) It has insightfully featured forward-looking articles that anticipated controversial issues and concern and which were used in various policy discussions and deliberations.

The PJD may be further enriched by increased contributions from other social science disciplines like political science, sociology, and even psychology. Furthermore, research themes focused on institutional and governance reforms, private sector and entrepreneurial concerns, civil society participation in development, changing labor arrangements, and information and communication technology.

The PJD represents a collection of ideas and experiences in our country's quest for development. As one embarks on this research journey, there many important lessons that could be learned as one reads from one article to another over time. Development problems such as poverty have been thoroughly researched and, accordingly, strategies on how to deal with these issues have been designed. Nevertheless, the same problems have persisted. In this regard, a development journal such as the PJD exists as a vehicle

to put forward such strategies and policy reforms and advocate proper program implementation. The PJD will definitely continue to attract relevant studies and papers that will surely help the development community respond to the changing needs and pressing issues of the times.

REFERENCES

- Alba, M. 1981. Estimating Literacy Rate: A Study Relating Literacy Rate with Combined Gross Elementary and Secondary School Enrollment Rate. *Journal of Philippine Development* 8(1 & 2): 71-110.
- Alba, M. and A. Orbeta. 1998. Simulating the Impact of Macroeconomic Policy Changes on Macronutrient ion Availability of Households. *Journal of Philippine Development* 25(1):181-180.
- Aldaba, R.M. 1991. EC 1992: Its Implications on Trade and Investments in the Philippines. *Journal of Philippine Development* 18(1):51-72
- Alonzo, R. 1974. On Measuring the Shadow Wages of Philippine Labor. *NEDA Journal of Development* 1(1):126-141.
- Amjad, R. 1996. Labor Migration and Its Implications in the APEC Region. *Journal of Philippine Development* 23(1):45-78.
- Ancog, A. 1991. Macro Perspectives and Cross-country Comparison of Patenting Issues. *Journal of Philippine Development* 18(2):157-172.
- Armas, A. 1976. Impact of Minimum Wage Legislation: A Micro Study. *Journal of Philippine Development* 3(1):1-35.
- . 1978. Employment Effects of Minimum Wage in Philippine Industries. *Journal of Philippine Development* 5(2):159-184.
- Austria, M. 1998. The Emerging Philippine Investment Environment. *Journal of Philippine Development* 25(1):79-126.

- _____. 2000. Competitiveness of the Philippine IT Industry: What Lies Ahead. *Journal of Philippine Development* 27(2):105-148.
- _____. 2001. Liberalization and Regional Integration: The Philippines' Strategy for Global Competitiveness. *Journal of Philippine Development* 28(1):55-86.
- Bantilan, M., F. Bantilan and M. de Castro. 1992. Fuzzy Subset Theory in the Measurement of Poverty. *Journal of Philippine Development* 19(1):97-122.
- Bautista, E. 1991. Impact of Public Policies on Rural Informal Credit Markets in the Philippines: Synthesis of Survey Results and Lessons for Policy. *Journal of Philippine Development* 18(1):73-97.
- _____. 1993. The Impact of Technical Change on Rural Labor Markets in the Philippines. *Journal of Philippine Development* 10(1):31-55.
- Baustista, R. 1974. Employment and Labor Productivity in Small Scale Manufacturing in the Philippines. *NEDA Journal of Development* 1(1):41-54.
- _____. 1981. The 1981-1985 Tariff Changes and Effective Protection of Manufacturing Industries. *Journal of Philippine Development* 8(1&2): 1-20.
- _____. 1988. General Equilibrium Effects of Increasing Productivity in Philippine Manufacturing, with Special Reference to Food Processing. *Journal of Philippine Development* 15(2):223-244.
- _____. 1994. Reflections on Philippine Sociology in the 1990s. *Journal of Philippine Development* 21(1&2):3-26.
- Baustista, R. and G. Tecson. 1977. Philippine Export Trade with Japan and the US. *Journal of Philippine Development* 4(2):172-194.
- _____. 1977-1978. Philippine Export Trade with Japan and the United States, 1962-1971. *Journal of Philippine Development* 4(2):172-194.

- Benabou, R. 1996. Inequality and Growth. In NBER Macroeconomics Annual. Cambridge, Mass.: National Bureau of Economic Research.
- Boyce, J. and L. Zarsky. 1988. Capital Flight from the Philippines: 1962-1986. *Journal of Philippine Development* 15(2):191-222.
- Brooks, R. 2002. Why is Unemployment High in the Philippines? IMF Working Paper. February 2002.
- Boullier, B. 1977. Children and Household Economic Activity in Laguna, Philippines. *Journal of Philippine Development* 4(2):195-222.
- Bull, R. 1977. The Use of SAM for Development Planning in the Philippines. *Journal of Philippine Development* 4(2):223-256.
- Canlas, D. 1987. Some Issues in the Economics of Tertiary Education. *Journal of Philippine Development* 14(1):164-172.
- Cariño, L. 1994. A Retreat from the Idea: Reflections on a Frustrated Attempt to Study a Social Phenomenon the Natural Way. *Journal of Philippine Development* 21(1&2):27-62.
- Concepcion, M. 1994. Social Science Research on Reproductive Health in the Philippines. *Journal of Philippine Development* 21(1&2):311-340.
- Cororaton, C. 1997. Simulating the Effects of GATT-UR/WTO on the Philippine Economy. *Journal of Philippine Development* 24(2):191-222.
- . 1999. R&D Gaps in the Philippines. *Journal of Philippine Development* 26(2):47-65.
- Cororaton, C. and Associates. 1995. Total Factor Productivity of Philippine Manufacturing Industries. *Journal of Philippine Development* 22(2): 303-371.
- Costello, M. 1988. Infant and Child Mortality in the Philippines: Review and Agenda. *Journal of Philippine Development* 15(2):257-274.
- Cruz, W. and M. de los Angeles. 1988. Forest and Upland Resource Management: A Policy Framework. *Journal of Philippine Development* 14(1):1-13.

- David, C. 1995. Philippine Rice Supply and Demand Prospects and Policy Implication. *Journal of Philippine Development* 22(2):233-390.
- . 1997. Food Policy: Its Role in Price Stability and Food Security. *Journal of Philippine Development* 24(1):171-189.
- . 1999. Constraints to Food Security: the Philippine Case. *Journal of Philippine Development* 26(2):1-46.
- Davic, C. and A. Balisacan. 1981. An Analysis of fertilizer Policies in the Philippines. *Journal of Philippine Development* 8(1&2): 21-37.
- David, I., N. Mendoza and D. Besa. 1990. Evaluation of Philippine Corn Statistics. *Journal of Philippine Development* 17(1):33-66.
- David, I and N. Mendoza. 1990. The Quality of Philippine Coconut Statistics. *Journal of Philippine Development* 17(2):249-294.
- De los Angeles, M. 1999. Watershed Land Use Allocation: Potential Mechanisms for Addressing Societal Concerns. *Journal of Philippine Development* 26(1):51-57.
- De Perio, S. and E. Trinidad. 1981. Buoyancy and Elasticity of Revenue. *Journal of Philippine Development* 8(1&2):88-110.
- De Vera, R. 1974-75. Housing Needs Up to the Year 2000 and Its Financing Implications. *NEDA Journal of Development* 1&2(2,3,4):41-65.
- Digal, L. 2001. An Analysis of the Structure of the Philippine Retail Food Industry. *Journal of Philippine Development* 28(1):13-54.
- Domingo, E. 1992. Revised Philippine System of National Accounts. *Journal of Philippine Development* 19(1):59-80.
- Doroodian, K. and R. Boyd. 1995. The Effectiveness of Export Promotion Policies in a General Equilibrium Framework. *Journal of Philippine Development* 22(2):265-302.
- Estanislao, J. 1982. Philippine Economic Setting in a Turbulent World Economy. *Journal of Philippine Development* 9(1&2):22-34.

- . 1996. Asian and Western Values and Implications on the APEC Community-Building Process. *Journal of Philippine Development* 23(1):115-122.
- Evenson, R., C. Habito, A. Quisumbing and C. Bantilan. 1986. Methods for Agricultural Policy Analysis: An Overview. *Journal of Philippine Development* 13(1&2):39.
- Ezaki, M. 1976. Economic Theory and Social Accounting System. *Journal of Philippine Development* 4(2):238-263.
- Ferrer, R. 1974. Implications of the BCS Input-Output Tables. *Journal of Philippine Development* 1(1):80-113.
- Follosco, C. 1982. Philippine Industrial Development: Strategies in the Eighties. *Journal of Philippine Development* 9(1&2):35-45.
- Foundation for Development Cooperation. 1996. An Asia Pacific Model of Development Cooperation. *Journal of Philippine Development* 23(1):1-44.
- Frianeza, L. 1974. Prospects of the Local Grape Industry: A Benefit-Cost Approach Analysis. *Journal of Philippine Development* 1(1):142-162.
- Garcia, A. 1983. Toward a New Regional Economic Order. *Journal of Philippine Development* 10(1):45-58.
- Gonzales, A. and M. Ignacio. 2002. Housing: A Perennial Problem. In *Economic Reforms and Governance in the Philippines: Eight Case Studies*. Quezon City, Philippines: Ateneo School of Government.
- Guerrero, S. 1974-1975. Housing the Urban Poor: A Sociological Perspective. *NEDA Journal of Development* 1&2(2,3,4):261-276.
- Geron, P. 1989. Microeconomic Behavior of Agents in a Credit-Output Market in an Agricultural Setting. *Journal of Philippine Development* 16(1):1-36.
- Habito, C. 1987. Equity and Efficiency Trade-Offs in Philippine Tax Returns. *Journal of Philippine Development* 14(1):57-88.
- Herrin, A. and E. Pernia. 1987. Factors Affecting Choice of Location: Survey of Foreign and Local Firms in the Philippines. *Journal of Philippine Development* 14(1):89-140.

- Herrin, A. and M. Costello. 1998. Policy Responses to Future Population Growth. *Journal of Philippine Development* 25(1):127-146.
- Hill, H. 1985. Australia-Philippine Trade Relations. *Journal of Philippine Development* 12(1):253-273.
- Hossain, M. and C. Diaz. 1997. Reaching the Poor with Effective Microcredit: Evaluation of a Grameen Bank Replication in the Philippines. *Journal of Philippine Development* 24(2):275-308.
- Hyde, W., B. Harker, M. Dalmacio and E. Guiang. 1997. Forest Charges and Trusts: Shared Benefits with Clear Responsibilities. *Journal of Philippine Development* 24(2): 223-256.
- Intal, P. and G. Llanto. 1998. Financial Reform and Development in the Philippines: 1980-1997: Imperatives, Performance and Challenges. *Journal of Philippine Development* 25(1):1-78.
- Intal, P. and M. Austria. 2000. APEC: A Review and Way Forward. *Journal of Philippine Development* 27(1):1-26.
- Javier, E. 1979. Rural Financial Markets in the Philippines: A Case Study. *Journal of Philippine Development* 6(1):39-54.
- Jurado, G. and J. Encarnacion. 1974. Some Exercises with the National Economic Council Input Output Tables. *NEDA Journal of Development* 1(1):55-79.
- Klein, L.R. 1987. International Debt of Developing Countries-Any Step Towards Solution? *Journal of Philippine Development*, 14(1):1-11.
- Kunkel, D., L. Gonzales and M. Hiwatig. 1976. Application of Mathematical Programming Models Simulating Competitive Market Equilibrium for Agricultural Policy and Planning Analysis. *Journal of Philippine Development* 3(2):264-280.
- Lamberte, M. 1983. Outputs and Inputs of Philippine Commercial Banks. *Journal of Philippine Development* 10(1):129-145.
- . 1984. Controllability of Various Monetary Aggregates. *Journal of Philippine Development* 11(2):230-256.
- . 1985. Financial Liberalization: What Have We Learnt. *Journal of Philippine Development* 12(2):274-289.

- . 1993. Assessment of the Financial Market Reforms in the Philippines, 1980-1992. *Journal of Philippine Development* 20(2):231-262.
- . 1995. Managing Surges in Capital Inflows. *Journal of Philippine Development* 2(1):43-88.
- Laya, J. 1995. Developing a Philippine Local Government Bond Market. *Journal of Philippine Development* 22(1):135-150.
- Llanto, G. 1987. Domestic Credit and the Balance of Payments: Some Empirical Results. *Journal of Philippine Development* 14(1):219-231.
- . 1989. Asymmetric Information in Rural Financial Markets and Interlinking of Transactions Through the Self-Help Groups. *Journal of Philippine Development* 16(1):147-163.
- Llanto, G., E. Garcia and R. Callanta. 1997. An Assessment of the Capacity and Performance of Microfinance Institutions: the Philippine Case. *Journal of Philippine Development* 24(1):1-66.
- Makanas, E. 1974-1975. Inter-industry Analysis of the Housing and Construction Industry. *NEDA Journal of Development* 1&2(2,3,4):150-173.
- Manasan, R. 1987. Indirect Tax Reform in the Philippines: A Complementary Measure to the Tariff Reform Program, 1979-1985. *Journal of Philippine Development* 14(1):29-56.
- . 1988. Tax Evasion in the Philippines: 1981-1985. *Journal of Philippine Development* 15(2):167-190.
- . 1990. A Review of Fiscal Incentives for Exports in the Philippines. *Journal of Philippine Development* 17(2):199-230.
- . 1992. Fiscal Implications of the Local Government Code of 1991. *Journal of Philippine Development* 19(1):1-58.
- Manasan, R., E. Gonzales and R. Gaffud. 1999. Indicators of Good Governance: Developing An Index of Governance Quality at the LGU Level. *Journal of Philippine Development* 26(2):149-212.
- Mangahas, M. and V. Tan. 1974. Seasonality Among Economic Indicators. *NEDA Journal of Development* 1(1):1-40.

- Medalla, E. and L. Castro. 2000. The Effects of Shifting to Transaction Value and Other Issues. *Journal of Philippine Development* 27(2):199-234.
- Medalla, E., L. de Dios and R. Aldaba. 1993. An Evaluation of the Home Consumption Value System. *Journal of Philippine Development* 20(2):117-182.
- Medalla, E., K. Mikkelsen and R. Evenson. 1982. Inventions in RP Industry. *Journal of Philippine Development* 9(1&2):46-79.
- Mijares, R. 1978. Towards the Development of the Philippine Statistical System. *Journal of Philippine Development* 5(1):1-31.
- . 1983. Welcome Address. *Journal of Philippine Development* 10(2):1-6.
- Milo, M. 1999. Contagion Effects of the Asian Crisis, Policy Responses and their Social Implications. *Journal of Philippine Development* 26(2):67-148.
- Noriega, B. 1974. An Analysis of Investment Priorities Plans and Export Promotion Plans of the Board of Investments. *NEDA Journal of Development* 1(1):114-125.
- Ocampo, L. 1974-1975. Sambahayan: The PBSP Mandaluyong Social Condominium Project. *Journal of Philippine Development* 1&2(2,3,4):241-248.
- Onate, B. 1978. Indicators for Monitoring Rural Area Development Projects. *Journal of Philippine Development* 5(2).
- Ono, M. 1982. A Preliminary Study of Income-in-Kind Underreporting in the Integrated Survey of Households. *Journal of Philippine Development* 9(1&2):80-98.
- Orbeta, A. 1996. Population-Development-Environment Modeling in the Philippines: A Review. *Journal of Philippine Development* 23(2):283-314.
- Orbeta, A. and M. Alba. 1998. Simulating the Impact of Macroeconomic Policy Changes on Macronutrient Availability in Households. *Journal of Philippine Development* 25(1):181-226.
- Oshima, H. 1980. Perspectives on the Prospects of Southeast Asian Growth in the 1980s. *Journal of Philippine Development* 7(2): 89-116.

- , 1983. Sector Sources of Philippine Postwar Economic Growth: The Over-all Record in Comparative Perspective. *Journal of Philippine Development* 10(1):1-44.
- Oxley, A. 1996. Achieving Effective Trade Liberalization in APEC: The Limitations of "Open Regionalism." *Journal of Philippine Development* 23(1):79-114.
- Paderanga, C. 1996. Economic Interdependence and Macroeconomic Coordination. *Journal of Philippine Development* 23(1):179-185.
- Padolina, W. 1991. Intellectual Property Rights: What's in Store for Scientists? *Journal of Philippine Development* 18(2):149-156.
- , 2001. Agricultural Biotechnology: Opportunity and Challenges for the Philippines. *Philippine Journal of Development* 28(1):1-11.
- Pante, F. 1990. Health Policy Research and Development in the Philippines. *Journal of Philippine Development* 17(1):1-32.
- Pante, F. and E. Morales. 1980. Population Policy and Philippine Development Planning. *Journal of Philippine Development* 7(1).
- Paqueo, V. and E. Angeles. 1979. An Analysis of Wives' Labor Force Participation in the Philippines and the Threshold Hypothesis. *Journal of Philippine Development* 6(1):1-27.
- Paqueo, V. and J. Fernandez. 1979. An Empirical Analysis of a Disequilibrium Model of Fertility Behavior and the Threshold Hypothesis. *Journal of Philippine Development* 6(2):79-101.
- Petri, P. and M. Plummer. 1996. US Interests and Asia Pacific Cooperation. *Journal of Philippine Development* 23(1):123-148.
- Phelan, B. and N. Yoshino. 1995. A Simulation of the the Macroeconomic Impact of ODA with the Debt Factor: The Philippine Experience. *Journal of Philippine Development* 22(2):199-263.
- Porio, E. and M. Hollnsteiner. 1974-1975. Adaptation and Renovation: Family Adjustment to Housing Design in a Marikina Low-Cost Private Suburban Subdivision. *Journal of Philippine Development* 1&2(2,3,4):230-240.

- Potter, P. 1996. Cultural Aspects of Trade Dispute Resolution in China. *Journal of Philippine Development* 23(1):149-178.
- Ramos, J. and F. Hong. 1974-1975. Public Housing in the Philippines: Its Design and Development. *NEDA Journal of Development* 1&2(2,3,4):197-229.
- Reeder, M. 2000. Asymmetric Prices: Implications on Trader's Market Power in Philippine Rice. *Journal of Philippine Development* 27(1):59-69.
- Reyes, C. and A. Cantillep. 1981. Towards Improving the Export Price Index. *Journal of Philippine Development* 8(1&2):50-70.
- Reyes, C. and J. Yap. 1993. Money and Prices in the Philippines, 1981-1992: A Cointegration Analysis. *Journal of Philippine Development* 20(1):57-78.
- Reyes, R. 1979. Social Development and the Impact of Development Projects: Some Aspects Relating to Measurement. *Journal of Philippine Development* 6(1)28-38.
- Saldaña, C. 1990. Rent-Seeking Public Policies and Corporate Conduct in the Flour Milling Industry. *Journal of Philippine Development* 17(1):89-132.
- . 1992. The Impact of Regulations on Municipal Bond Performance and Prospects in the Philippines. In *Journal of Philippine Development* 19(2):49-98.
- Sanchez, A. 1990. The Textile Industry in the Philippines and Thailand: A Comparison. *Journal of Philippine Development* 17(1):67-88.
- Sicat, G. 1974-1975. Towards the Formation of a National Housing Policy. *NEDA Journal of Development* 1&(2,34):463-479.
- . 1976. Economic Interdependence: The Dilemma of the Third World. *Journal of Philippine Development* 3(2):181-194.
- . 1984. Off-shore Banking & the Philippine Economy. *Journal of Philippine Development* 11(2):203-227.
- Soriano, C. 1990. Classifying the Economy into Traded or Non-Traded Sectors. *Journal of Philippine Development* 17(2):231-248.

- Srinivasan, T.N. 1992. Income Distribution and the Macroeconomy: Some Conceptual and Measurement Measures. *Journal of Philippine Development* 19(2):1-28.
- Strassmann, P. and A. Blunt. 1993. Land, Income, Mobility and Housing: the Case of Metro Manila. *Journal of Philippine Development* 20(1):79-115.
- Tan, E. 1976. The Public University A and Tuition Policy. *Journal of Philippine Development* 3(2):216-237.
- Teh, R. 1991. Interlinked Credit Arrangements. *Journal of Philippine Development* 18(1):99-130.
- Tolentino, B. 1987. Credit Policy and Rent-Seeking Among Small Banks in Developing Economies. *Journal of Philippine Development* 14(1):12-28.
- . 1988. Thirty-Three Facts About Philippine Agricultural Credit. *Journal of Philippine Development* 15(2):245-256.
- Tongzon, J. 1985. The Australian System of Tariff Preferences: An Evaluation of Its Employment Effects in the Context of ASEAN-Australia Trade Relations. *Journal of Philippine Development* 12(2):290-323.
- Untalan, T. and C. Cuevas. 1989. Transaction Cost and the Viability of Rural Financial Intermediaries. *Journal of Philippine Development* 16(1):37-87.
- Vos, R. 1991. A Macroeconomic Social Accounting Framework for the Philippines. *Journal of Philippine Development* 18(1):1-50.
- World Bank. 2000. Philippines Growth with Equity: The Remaining Agenda.
- Yoingco, A. 1978. Tax Structure and Fiscal Policy in the Philippines. *Journal of Philippine Development* 5(2):213-232.
- Young, A. 1981. Demand for Gasoline: Effects of a Durable Good. *Journal of Philippine Development* 8(1&2):38-49.

Special Issues

- Housing in the Philippines. 1974-1975. *NEDA Journal of Development* 1&2(2,3,4).

- Workshop Proceedings on the Development of Philippine National and Regional Income Accounts. 1997. *Journal of Philippine Development* 4(1).
- NEDA-PIDS Seminar-Workshop on Philippine National System of Accounts. 1983. *Journal of Philippine Development* 10(2).
- Project Assessment Reports. 1984. *Journal of Philippine Development* 11(1).
- Mathematical Methods for Policy Analysis in Agriculture. 1986. *Journal of Philippine Development* 13(1&2).
- Importance of Forest and Upland Resources. 1988. *Journal of Philippine Development* 15(1).
- Science and Technology. 1989. *Journal of Philippine Development* 16(2).
- Intellectual Property Rights. 1991. *Journal of Philippine Development* 18(2).
- Special Volume in Honor of Gelia Castillo. 1994. *Journal of Philippine Development* 21(1&2).
- Watershed Resources Valuation and Management. 1999. *Journal of Philippine Development* 26(1).