

# A NOTE ON THE TEACHING OF INTERRELATIONSHIPS BETWEEN POPULATION, EMPLOYMENT AND ECONOMIC DEVELOPMENT IN DEVELOPING NATIONS\*

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Development Economics has been the fastest growing field and one of the most "glamorous" fields in graduate programs since the mid-1950's for students both from developed and developing nations. It is also a field subject to the most rapid change in its concepts, models, empirical findings and applications. Some of the "truths" we learned in development economics a decade ago, e.g.; e.g., the "industrialization first" criterion, have already become obsolete; some, e.g., the "demonstration effect" and disguised unemployment, have become less important; and others, e.g., the "backward-sloping supply curve" and the "take-off" theory, have been seriously challenged. Moreover, students specializing in economic development are today no longer satisfied with the mere eloquence of theory or model. They demand that the theory and/or the model be *relevant* and *useful* to the LDCs. Our discussion topic today is an urgent one: How can the teaching of the interrelationships between population, employment and economic development be made more *relevant* to students from LDCs and the United States in their graduate programs?

My response to those three questions spelled out in the Council's invitation letter is briefly summarized below. Because I was educated in Taiwan and the U.S., and because Taiwan is a rapidly developing County, I shall use it frequently as a reference.

Question 1: What are dimensions of the three concepts: population, employment, and economic growth?

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(A) Population: The traditional treatment of population regarding its size, composition, occupational distribution, marital status, economic status, geographic distribution, still remains useful but is not sufficient. To those densely populated countries and countries suffering from brain drain like The Republic of China, emphases should be given to *internal and international migration* and *population control*. Also, occupational and geographical distribution should be given more attention. A study of the interrelationships among these four aspects can largely show the country's economic achievements and problems.

(B) Employment: Population, labor force and employment are interrelated, What is mostly needed at the present time for LDCs is neither the "sophisticated" distinctions among structural, technological, and frictional unemployment, nor the "sophisticated" measurement of disguised or visible unemployment. These distinctions and measurements are nice to have but policy decisions cannot be delayed until data collection and research studies are completed. The immediate effort should be directed to the development of policies to create more job opportunities, improve the imperfections in the labor market, and increase labor productivity.

Narrowly defined, our concern for LDC's population and employment can be viewed as essentially a concern for manpower problems. They are twofold: how to improve the quality of human resources and how to fully utilize them. Any theory or policy related to these two aspects should not be ignored.

(C) Economic Development: We all recognize that GNP or Real GNP per capita, etc. is not an ideal yardstick for measuring economic development. I fully agree that income distribution and quality of life indicators (e.g., number of doctors per 10,000 people, literacy rate, air pollution) should be added for a better interpretation of economic achievement.

It seems to me that the costs of economic growth in the course of academic and public discussion have not been given adequate attention in the past. As E. J. Mishan puts it ".....the continued pursuit of economic growth by Western Societies is more likely on balance to reduce rather than increase social

welfare”<sup>(1)</sup> It is worth reminding ourselves that we should be equally concerned with “how to grow” and “why grow.”

Question 2: What theory or conceptual framework is useful in identifying the important links between the three concepts?

Modern income and employment theories taught in typical macroeconomics can be used as the initial framework. But their limitations and modifications to LDCs should be clearly pointed out because of different social, economic and financial structures, and many other factors. It is not an easy task to spell out these limitations and modifications.<sup>(2)</sup>

Other frameworks such as the Lewis model, Nurske’ “vicious circle,” the Ranis-Fei model, and its variants might be useful to those countries with “unlimited labor supply,” but is less relevant to more rapidly developing economics like Taiwan, South Korea, and Singapore.

I would suggest that techniques such as the manpower requirements approach used in educational planning can serve as useful links between these three concepts. Needless to say, many different approaches or models are available in educational planning: the Tinberger-Bos model, the Bowles linear-programming model, the rate of return approach, to name a few.<sup>(3)</sup> By estimating the supply of and the demand for manpower with different levels of education in various occupations, industries and sectors, the manpower requirements approach, in pursuing a given development target, helps reduce the fluctuations in surplus or shortage of labor force and employment opportunities.<sup>(4)</sup> Manpower planning, often treated merely as a part of the economics of education, deserves more attention and graduate students should be required to take the courses(s). Furthermore, economic analysis alone is not sufficient to tackle the complexity of population and employment problems in LDCs. The political, sociological and cultural factors, such as political system, social norms, family structure, traditional values and motivations, are all deeply involved. The need for an interdisciplinary approach is long overdue.

Question 3: What empirical work is available regarding the interrelationships that may be useful as teaching material?

We would all agree that an individual specialized in a particular aspect of economic development or in a particular region of LDCs cannot hope to keep up with the vast outpouring of publications in other fields of development economics. A quick of the *Journal of Economic Literature*, UNESCO, OECD publications and others will show many listed articles and books dealing with various aspects of population, employment and economic growth.

I shall limit my discussion to Taiwan's empirical work in this area. Witnessing one of the fastest economic growth in the past decade, Taiwan's development efforts are worth studying. One of these efforts lies in its manpower planning. Many interesting studies have been published by the Manpower Development Committee in Taiwan since 1964. A very recent one, *The Third Manpower Plan* (Oct., 1970) contains 16 ambitious forecasts, and presents a detailed analysis of the relations between population and employment.<sup>(5)</sup> The long range (1970—1980) and intermediate range (1970—74) forecasts were made for population (by sex, age), labor force, unemployment and employment (by occupation and industry), student enrollment and number of graduates (by educational level and academic field). A manpower balance sheet was also drawn up to show the change of demand for and supply of manpower by occupational and educational level for 1971 and 1974. Unfortunately, this along with 30 other studies were written only in Chinese.<sup>(6)</sup> It is a common sad fact that good empirical studies are few and of these few, some are written in native language and become unaccessible to others.

Finally, what are the implications for future Agricultural Development Council's Research and Training Network?

Without further elaboration, I suggest

1. In dealing with these interrelationships, an interdisciplinary approach should be encouraged.
2. Field research in collaboration with local scholars and graduate students should be given priority. Whenever and wherever possible, study of a LDC should be a joint effort of American scholars and students with local scholars and students. For instance, a study of Taiwan's economic develop

ment can be a fruitful joint venture for both American and Chinese scholars and students.

3. Foreign language training for American students specialized in development should be strengthened.
4. Initiate a program of translating some important foreign research findings into English. A survey of the empirical studies in LDCs for every two or three years is also useful.

## FOOTNOTES

(1) See his book, *The Costs of Economic Growth*, Praeger, New York, 1967, p. 171

(2) See D. Seers' warning, which appeared in *The Teaching of Development Economics*, Aldine, 1967, p. 157. A different view advanced by H. Myint who is more sympathetic to the orthodox theory can be found in his book, *Economic Theory and the Underdeveloped Countries*, Oxford, 1971, pp. 3—46.

(3) For a good collection of essays dealing with various aspects of educational planning, see M. Blaug (ed.), *Economics of Education*, Vols. 1 and 2. Penguin, 1968 and 1969.

(4) For a lucid discussion on this subject, see M. Blaug, "Approaches to Educational Planning," *Economic Journal*, June, 1967, pp. 262—287.

(5) For a brief review of these forecasts, see Charles Kao and Jae w. Lee, "Projected Demand for Higher Education in Taiwan: 1970 —1980," pp. 1—26. *Tung-Wu Journal*, Taipei, Vol. 1, No. 1, forthcoming.

(6) Of course, articles dealing with manpower and written in English were occasionally available. For example, Tracy Cheng and P.C. Chang, "population and Manpower Policy in the Republic of China," *Industry of Free China*, Feb., 1971, pp.2—6.

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