

Poverty in the Philippines Amidst the Asian Financial Crisis

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1. Introduction

In 1997, the Philippines faced both the Asian financial crisis and the El Niño phenomenon. It was initially believed that the financial crisis did not severely affect the Philippines. An examination of seasonally adjusted gross domestic product (c.f. Figure 1), however, shows that these crises significantly hit the economy, especially the industrial sector. Computations of a crises index (see Kakwani 2000) and the corresponding Wald T statistic using the bootstrap (see, e.g., Efron and Tibshirani, 1993) here and on labor statistics even suggest a prolonging of the impact. We consider here the impact of the crises on the poverty situation in the Philippines.

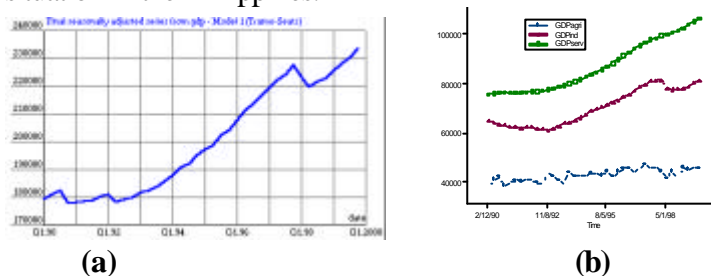


Figure 1. Seasonal adjusted values of Gross Domestic Product at constant prices (in million pesos) for the (a) national level, (b) for major sectors, i.e. agriculture (lower curve), industry (middle curve), services (upper curve).

2. Tracking Poverty with Panel Data

The latest official poverty statistics in the Philippines are obtained using the 1997 Family Income and Expenditure Survey (FIES), which covers a sample of 39,520 households. The official methodology consists of determining a regional poverty line from minimal food and non-food requirements of a household. While the 1997 FIES provides a wealth of information on income and expenditure of the households, on its own, no clues are given on the impact of the financial crisis and El Niño. In 1998, the National Statistics Office (NSO) conducted its first Annual Poverty Indicator Survey (APIS) on a sample of 38,709 households. Some households interviewed for the 1997 FIES were also included as respondents in the 1998 APIS, forming a panel.

Table 1 Income-based Poverty Statistics for 1997 and 1998.

Poverty Statistics	Official	Panel Data	
	1997	1997	1998
Household Poverty Incidence	31.8	33.3	39.1
Household Poverty Gap	10.0	10.6	14.0
Gini Index	0.487	0.538	0.570

We considered looking into the responses of 11630 households common to both surveys, which also form a panel with the four quarter rounds of the 1998 Labor Force Survey, also conducted by the NSO. Table 1 list our estimates of some poverty statistics using these panel data, 1997 official poverty thresholds, an adjusted set of threshold for 1998, and the design weights from the 1998 APIS. We see some evidence of a worsening of the poverty situation, which may be the effect of the crisis and El Niño. The panel households can be categorized into “improvements”, those that moved up from their income quintile group by two or more ranks; “deteriorations”, those that moved down from their income quintile group by two or more ranks; and the rest of the households. Practically all households (across these categories) felt price shocks and relatively few, about one in twenty, households experienced loss of migrant or overseas employment. In terms of proportions, the deteriorations appear to have experienced the greatest impact of the migrant and domestic labor market shock while the improvements felt the least impact for labor market shocks as well as the least impact for the shock due to a lessening of wages. The improvements report the greatest shock from El Niño although deteriorations outnumber them by a ratio of two to one.

3. Tree-based Analysis on Poverty Movements

The classification and regression tree in Figure 2 identifies important structural descriptions for the improvements, deteriorations and other households in the panel. The most important factor is the household’s ownership of a refrigerator in 1997. This interacts with other household variables, viz., family size in 1997 and occupation of the household head in 1997 ownership of a washing machine in 1998, the family size, and the primary class of worker the household head in 1998.

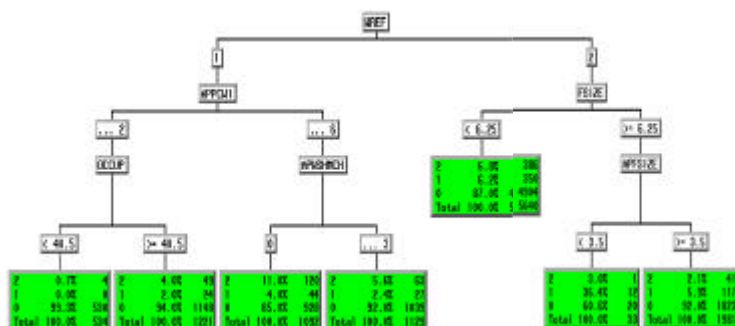


Figure 2 Classification and regression tree for improvements, deteriorations and others.

The importance of family size suggests the need for government to adopt an aggressive population program. Furthermore, since a natural correlate of the occupation of the household head is the educational attainment of the household head, programs in formal and non-formal education ought to be also vigorously supported as a form of safety net.

REFERENCES

Breiman, L., Friedman, J. H., Olshen, R. A., and Stone, C. J. (1984). Classification and Regression Trees. Monterey, CAL Wadsworth.

Efron, B. and Tibshirani, R. (1993). An Introduction to the Bootstrap. London: Chapman & Hall.

Kakwani, N. (2000a). “Impact of Economic Crisis on Poverty and Inequality in Korea, Thailand and the Philippines.” 2000 World Bank Institute and Philippine Institute of Development Studies Training Workshop on “The Impact of the East Asian Crisis: Poverty Analysis Using Panel Data.”