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Employment Structure and Urban Growth

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INTRODUCTION

Employment generation in the Philippines is poor compared to newly industrializing economies (NIEs) of Asian and many other countries at similar income levels. This is significant considering that the lack of productive employment opportunities, together with the relatively rapid growth of the labor force, is at the core of the poverty problem. In large part, public policies have created distortions that have been inimical not only to sustainable economic growth but also to employment growth.

Given the limited scope for land redistribution in rural areas (see Chapter 5), nonfarm employment will increasingly become the main source of income for the rapidly growing landless rural workers. In a dynamically growing economy, this employment is expected to come mainly from urbanizing areas. Little is known, however, about the characteristics and structures of nonfarm employment and income growth, or the role that public policy can take to enhance this growth.

This chapter examines the constraints to employment growth, especially in urban centers and urbanizing areas as against rural areas. Specifically, the chapter examines the patterns of labor supply, the "migration" responses to labor market phenomena, the sources and dynamics of nonfarm employment, and the impact of government policies and programs on labor markets.

STRUCTURE OF OUTPUT AND EMPLOYMENT

The sectoral distributions of aggregate output (gross domestic product or GDP) and employment since the 1970s are shown in Figures 4.1 and 4.2. Agriculture produces the least output even as it employs the largest number of workers. Moreover, agriculture's shares of output and employment continue to decline, with the larger and more consistent contraction occurring in the latter. In the early 1970s, while agriculture employed 54%

Figure 4.1
Sectoral Output Shares
1970-1992

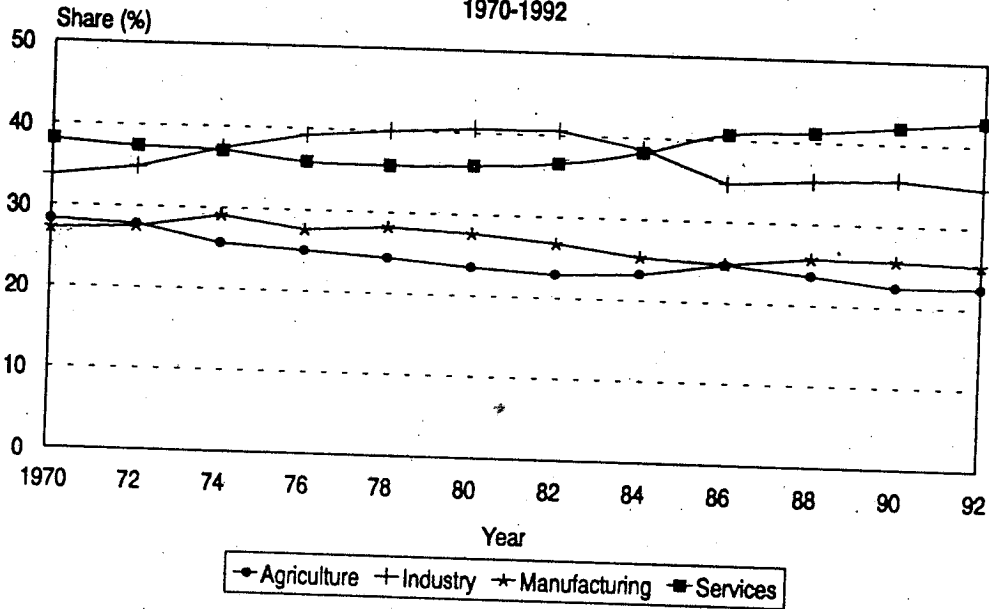
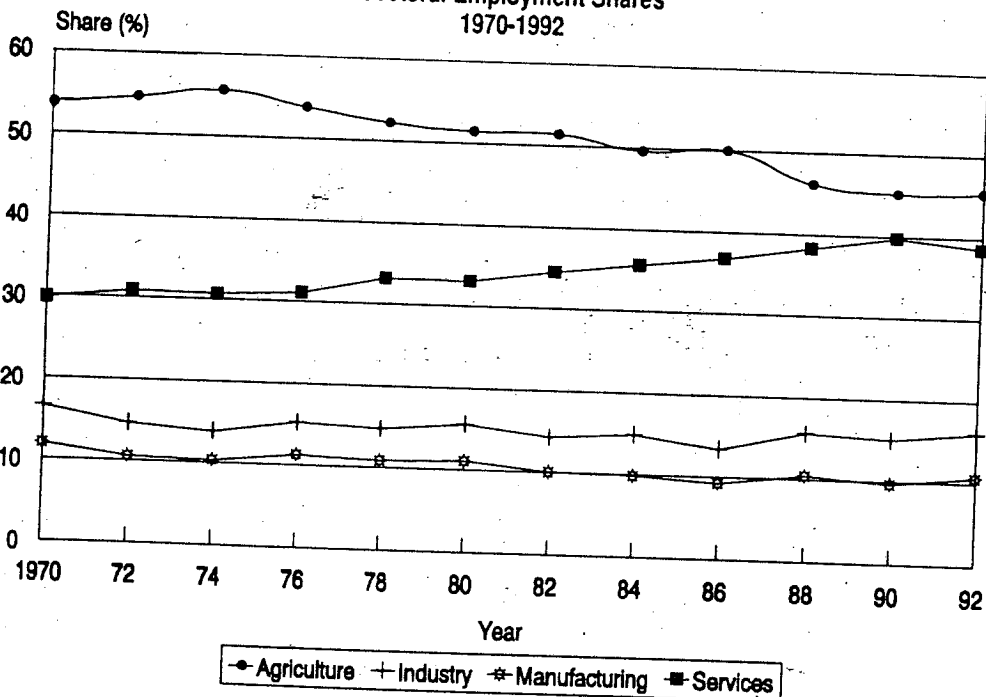


Figure 4.2
Sectoral Employment Shares
1970-1992



of all workers, it contributed only 27% of the domestic output. By the late 1980s and early 1990s, its shares of output and employment had fallen by about four and eight percentage points, respectively, from their levels in the early 1970s. These shares fell not because agricultural output and employment actually contracted; rather, agriculture lagged by wide margins behind industry or services, or both, in most of the periods, in terms of expanding output and employment (Table 4.1).

Table 4.1
Growth of Output and Employment by Major Sector *
1970-1992

	1970-1975	1976-1980	1981-1985	1986-1992
Gross Domestic Product				
Agriculture	2.6	5.1	-0.4	1.9
Industry	8.1	7.2	-3.7	3.1
Manufacturing ^b	7.0	5.5	-3.0	3.3
Services	5.0	5.5	1.1	4.1
Philippines	5.4	6.1	-1.1	3.2
Employment				
Agriculture	3.6	2.7	2.9	1.7
Industry	4.5	2.6	2.1	4.6
Manufacturing ^b	4.4	3.1	1.2	4.2
Services	6.6	5.1	6.2	3.4
Philippines	4.5	4.0	3.9	2.7

* Figures shown are average growth rates (%) during the indicated periods.

^b Manufacturing is a subsector of industry.

Sources of Basic Data: NSCB, Economic and Social Statistics Office.

NSO, *Integrated Survey of Households: Labor Force Survey*, various issues.

Agricultural output experienced its fastest growth during the 1976-1980 expansionary period, owing partly to favorable world prices of agricultural commodities. However, this remarkable growth was surpassed by the other two sectors. Ironically, it was a contracted agricultural output in 1984 and 1985 that translated into a rise in output share. This was because industrial output contracted even more sharply (Table 4.1). Agriculture's employment share, on the other hand, grew at rates consistently below the national levels, as it lagged behind the growth of employment in services.

The declining shares of agriculture in the economy are expected, following the almost universal association of income level (GDP per capita)

and agriculture's shares in income and employment. Such is evidenced by the experiences of most developed economies (Syrquin, 1988) like Japan, Korea, and Taiwan, as well as newly industrializing economies like Turkey, Mexico, Yugoslavia, and Malaysia. This pattern applies to closed economies, as well as to open growing economies, including those able to retain a comparative advantage in agricultural products (Anderson, 1987).

Usually, the relative decline of agriculture is attributed to Engel effects (i.e., the bigger the family's income, the smaller the proportion spent for food) at low income levels, and to trade effects (i.e., the decline in the international relative price of food resulting from growth elsewhere in the world). The slower growth of demand for agricultural products as against nonagricultural products, and the resulting trade bias, lead to smaller agricultural, than nonagricultural earnings. Agriculture's shares of output and employment fall, as capital and labor seek higher returns in the faster-growing sectors of the economy.

However, as in many developing economies, agriculture's declining shares in aggregate output and employment in the Philippines are also influenced by the country's domestic policies. The industrialization program adopted from the 1950s to the 1980s favored the growth of large-scale import-substituting industries in urban areas through protectionist instruments (e.g., tariffs, quantitative restrictions, export taxes, and overvalued exchange rate). These instruments are linked together and have the common effect of reducing the prices of domestic agricultural products relative to the nonagricultural ones. Import tariffs, for example, increase the domestic prices of importables compared to home goods and exportables (Bautista and Valdes, 1993). Export taxes, on the other hand, reduce the domestic price of exportables relative to the domestic price of importables (Lerner, 1936).

Protectionist policies and persistent deficits in the external accounts have led to real exchange rate overvaluation. This is bad for agriculture because it artificially lowers the prices of agricultural commodities relative to those of nonagricultural commodities and home goods. For example, in the second half of the 1970s and early 1980s, the overvaluation effectively reduced the domestic price of agricultural products by 20% relative to that of nonagricultural products, and by 12% relative to that of home goods (Bautista, 1987). Moreover, the overvalued real exchange rate made exports less competitive in the world market.

Cementing this bias for import-substituting industries is the concentration of infrastructure (roads and bridges), economic support services (power, transportation, communication, credit), and social services (housing, education, health) in urban areas. Protectionist policies and imbalance in spatial development aggravate the dismal situation characterized by a largely reduced farm acreage, slow rates of capital accumulation, and low labor productivity in agriculture.

The industrialization program did produce big spurts of industrial output, as evidenced by the rise in industry's output share (Figure 4.1). Gaining from the international commodity price boom in the early 1970s and riding on the massive inflow of foreign loans in the second half of the same decade, industrial output grew annually at 8.1% and 7.2%, respectively (Table 4.1). The later period was characterized by a massive program of public investments (particularly in infrastructure).

The growth of industry during those years was driven by the fast growth of manufactures, which comprised around 78% of industrial output in 1970-1974 and 69% in 1976-1980. Manufactured export strategy shifted during these years to the nontraditional exports, particularly semi-conductors and garments.

Then, the easy financing in the 1970s was cut short by the second oil shock in 1979, the subsequent recession in industrialized countries, and the rise in world interest rates to unusually high levels. Foreign loans virtually stopped flowing into the country in 1983, partly an effect of the debt moratorium of Mexico and Brazil in 1982.

A major Balance of Payment (BOP) crisis finally occurred in 1983, lasting up to 1985. This, along with the restrictive fiscal and monetary measures adopted then, caused all sectors to contract (Table 4.1).¹ Hardest hit was industry, exposing the tenuity of an industrialization based on price distortions and foreign borrowing.

In the course of industrial output swings, industry's employment share remained quite stable, hovering around 15% (Figure 4.2). It closely followed the share of employment in manufacturing, which fluctuated from 10% to 11%. Hence, not only did industry fail to sustain expansion in output; more so, when it managed to expand, such expansion had little employment content. These patterns point to the poor labor-absorptive capacity of import-substituting industries.

The reasons why these industries generate minimal employment are varied. First, apart from the protectionist policies mentioned earlier, other support instruments (e.g., tax- and duty-free importation) make capital artificially cheap relative to labor, thus inducing the substitution of capital for labor. Second, most industries producing capital-intensive manufactures (e.g., automobiles) cater to a very small market; this implies excess capacity, which is tapped when demand increases. Third, the import-substitution policy has favored a wide range of consumer goods at the finishing stages of production, thus requiring minimal value added from labor. Moreover, export promotion policies have favored manufactured exports (semiconductors and garments, as noted earlier) with large import content, thus also requiring minimal amount of labor.

¹ Services contracted in 1984 and 1985, but its high growth rates in 1982 and 1983 enabled it to register a positive average growth during the crisis period.

It is instructive, at this point, to look at how the manufacturing subsector of the now developed economies performed in output production and employment generation in the course of their economic development. The employment share of manufacturing in these countries did grow at low income levels, although at rates slower than the decline of agriculture's employment share (Syrquin, 1988). At the same time, manufacturing output grew at rates above the national level, not so much due to high income elasticities as to trade and productivity-enhancing technology or high rates of capital accumulation. More surprisingly, at higher income levels, the share of manufacturing in output and factor use declined, accounting for the so-called "de-industrialization." This is caused by the decline of income elasticities for manufacturing goods, whose share of domestic demand starts to fall at higher income levels.

In the Philippines, manufacturing output share increased from only 17% in the first half of the 1950s to 21% a decade after, and then suffered a decline in the last half of the 1960s up to the early 1990s. Its employment share, on the other hand, was around 12% towards the end of the 1950s, 11% in the 1960s, and then fluctuated from 10% to 11% in the succeeding decades. Hence, even at low income levels, the country might seem to have already reached its own stage of "de-industrialization."

The services sector was then pressed to absorb the growing labor surplus resulting from the lack of enough productive employment in agriculture and industry. Services employed labor faster than agriculture in all periods and faster than industry in the first three periods by wide margins (Table 4.1). Hence, it was the rise in service employment that compensated for the decline in agricultural employment share (Figure 4.2), taking over all the shares given up by agriculture between 1970-1975 and 1986-1992.

The growth of employment in services, in contrast to the decline of employment in agriculture and its virtual stagnation in industry, follows the pattern of employment growth observed among developed economies (Kuznets, 1957). However, this kind of employment growth in presently developing countries has spawned concern with over-urbanization. It is claimed that over-urbanization is caused by the low level of industrial employment relative to the urban population (Preston, 1979). This pushes both urban and migrant labor to services, a sector allegedly characterized by low income and low productivity. Hence, as the argument goes, the growth of employment in urban services signals the deterioration of employment quality and conditions in developing countries.

In the Philippines, the proportion of urban industrial employment to urban population fell slightly from 7% in 1980 to 6% in 1990. A similar measure involving urban service employment shows a more significant rise from 17% to 23% during the same period, with service employment growing fastest during the crisis years. Figure 4.3 illustrates this rise as it meets the declining rural agricultural share, while urban industrial share hardly stands out among the rest.

Growth of service output was also fastest during the crisis years (Table 4.2). From 1970-1975 to 1986-1992, only services managed to add to its output share. Hence, unlike in employment, the services sector was virtually "eating" into the output shares of both agriculture and industry.

Figure 4.3
Distribution of Employment
by Major Sector and Location

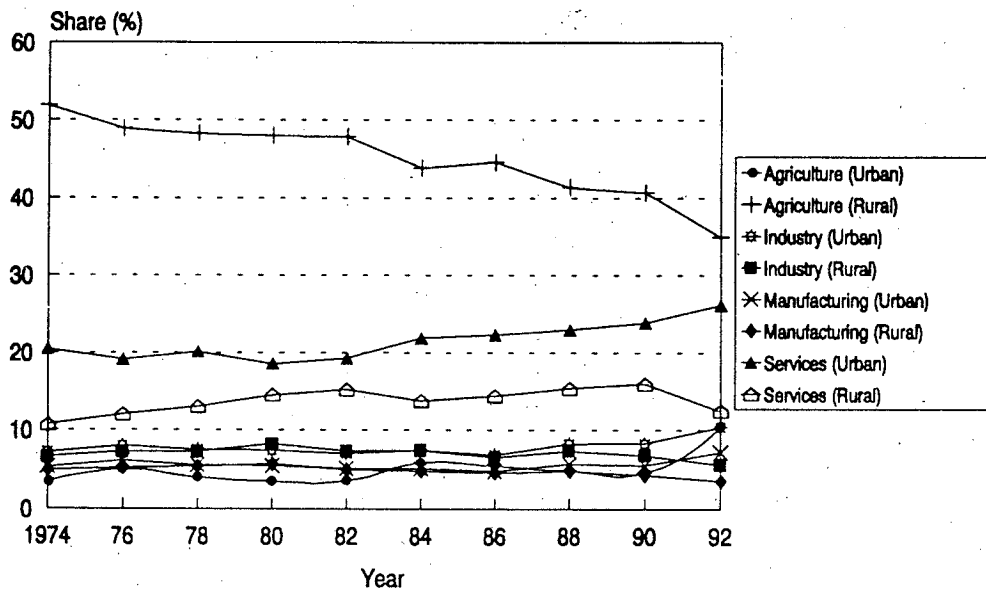


Table 4.2
Labor Force and Employment Growth
1970-1992

	1970-1975	1976-1980	1981-1985	1986-1992
Growth Rates^a				
Working-age population ^b	4.3	3.9	3.0	2.6
Labor force	4.0	3.7	4.3	3.0
Employment	4.5	4.0	3.9	2.7
Rates^c				
Labor force participation ^d	49.8	60.5	62.8	64.8
Unemployment	5.1	4.7	6.2	8.5
Underemployment A: ^e	n.a.	20.6	27.6	23.4
B: ^f	n.a.	10.7	16.7	13.0

^a Figures shown are average annual growth rates during the indicated periods.

^b For 1970-1975, working-age population refers to 10 years and above; for 1976-1992, it refers to 15 years and above.

^c Figures shown are average annual rates during the indicated periods.

^d Labor force participation rate is defined as the proportion of the labor force to working-age population.

^e Those who worked for the reference quarter but still wanted additional work, expressed as a proportion of the employed.

^f Those who worked less than 65 days in the quarter but still wanted additional work, expressed as a proportion of the employed.

Sources of Basic Data: NSO, *Integrated Survey of Households, Labor Force Survey*, various issues.
NEDA, *Philippine Statistical Yearbook*, various issues.

Unemployment and Underemployment

The rapidly growing population in the late 1950s to the 1970s, reinforced by a sizeable spread of crude birth rate over death rates, translated into the 1970s as a rapidly growing working-age population and labor force.² Nevertheless, the country's employment performance in the 1970s was commendable. Then, the growth of employment outpaced that of labor force (Table 4.2), owing partly to the commodity price boom in 1973 and the easy financing in the second half of the decade.

The major BOP crisis starting in 1983 and the precipitating factors occurring before and after resulted in expensive credit, postponements of investment projects, rampant bankruptcies, and massive layoffs. At the turn of the 1990s, the economy succumbed to another BOP crisis and macroeconomic instability precipitated by the series of coup attempts, the Middle East crisis, power shortage, and natural disasters. The contractionary policies adopted in 1990 reversed the recovery momentum established in 1986-1989. The 1980s and early 1990s, in contrast to the 1970s, were precarious years for labor with unemployment reaching its highest levels since World War II.

Clearly, the ever-growing problem of unemployment cannot be traced solely to the rapid population growth. Table 4.2 shows that not only was the labor force growing faster than employment since the 1980s; it also outran the working-age population. This implies that a number of those who were not actively searching for work during the relatively favorable periods joined the labor force during difficult times. To cushion the impact of falling household income, many women entered the labor market; their participation rate rose from 40% in the late 1970s to 47% in the early 1980s and then to 48% in the last half of the decade.

Underemployment is a better indicator of labor's economic condition. As shown in Table 4.2, underemployment rose from about 20% in the second half of the 1970s to 28% in the first half of the 1980s and then fell slightly to about 23% in the second half of the 1980s and early 1990s. At the turn of the 1990s, one in every five employed laborers desired longer working hours and was classified underemployed.

Labor Productivity

One of the more interesting patterns of economic development is the timely reversal of lagging labor productivity in agriculture. In most developed economies, agriculture has become the sector with the highest growth of labor productivity (Syrquin, 1988). This catching-up process is facilitated by migration and capital accumulation in agriculture, whose combined effects effectively reduce labor surplus and improve labor productivity. In the earlier stages of development, the productivity differential between agriculture and nonagriculture is due to differences in the nature of

² For example, population growth rate in the late 1950s and 1960s were 2.8% and 3.3%, respectively.

production function, rate of technological change, and mobility of resources. In the succeeding stages when industry experiences accelerated growth, the productivity gap further widens. The reversal of this pattern, thus, indicates that agriculture's having the lowest labor productivity, although a well-established feature of economies, is not a static aspect of economic development.

For the Philippines, Figure 4.4 shows labor productivity in agriculture coasting at the bottom, indicating the lack of impetus to improve. Even in the late 1970s to 1980, when agriculture attained its fastest growth owing to favorable world prices, labor productivity only inched up (Table 4.3).

Following the trend in earlier decades, the productivity gap between agriculture, on the one hand, and industry and services, on the other, further widened in the 1970s. The widening is more pronounced between that of agriculture and industry, owing to the remarkably fast growth of the latter. Then, in the 1980s, the gap significantly narrowed down, as if to duplicate the turn-around in developed economies. However, this was due to other reasons: a sharp drop for industry and a slight drop for services, with that for agriculture remaining virtually constant.

Labor productivity in industry, although very high relative to those in the other sectors, continued to drop since 1983. Its growth path is the most serrated, indicating the wide divergence between output expansion and employment generation in industry, as discussed earlier.

Figure 4.4
Labor Productivity by Major Sector
1970-1992

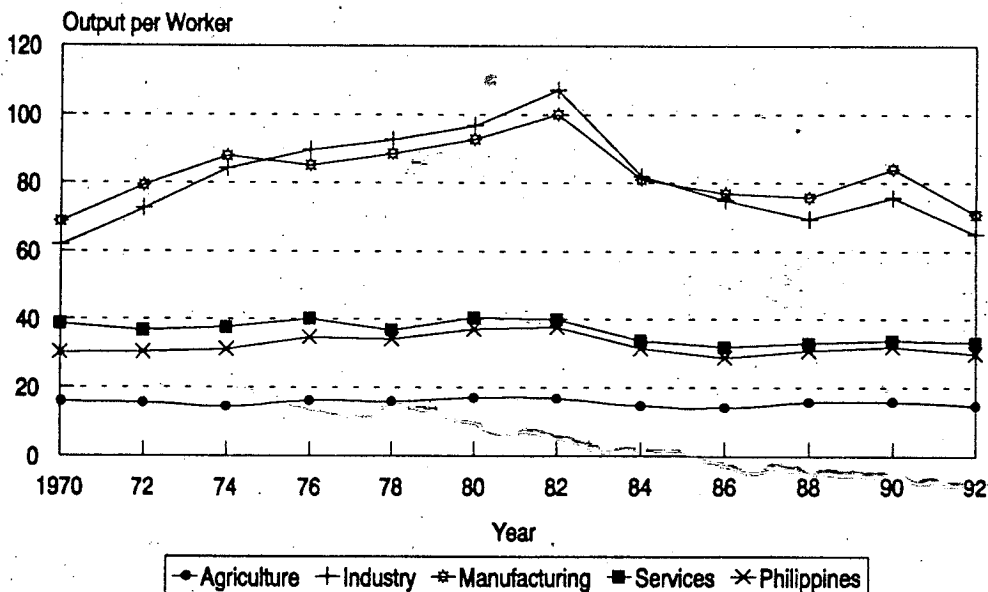


Table 4.3
Growth of Labor Productivity by Major Sector
1970-1992

	1970-1975	1976-1980	1981-1985	1986-1992
Philippines	1.1	3.6	-4.8	0.5
Agriculture	-0.8	3.5	-2.9	0.3
Industry	4.0	4.4	-5.5	-1.2
Manufacturing ^a	3.0	3.8	-4.0	-0.6
Services	-0.5	2.0	-4.6	0.6

^a Manufacturing is a subsector of industry.

Sources of Basic Data: NSO, *Integrated Survey of Households, Labor Force Survey*, various issues.
NSCB, Economic and Social Statistics Office.

Income

Without improved labor productivity, the economy lacked the basis for improved earnings. As shown in Figure 4.5, earnings across sectors in the country have certain peculiar patterns.

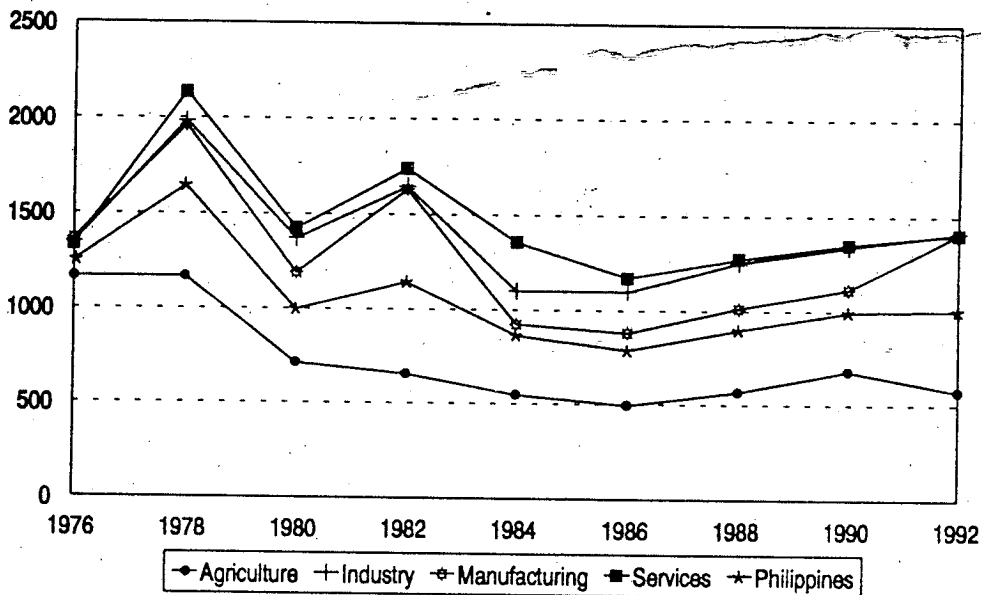
First, the stagnant growth of labor productivity in agriculture translated into a substantial drop in real farm earnings. The average annual earnings of farm workers in 1981-1985 were almost only half of what they received in 1976-1980. These remained virtually constant in 1986-1992. These patterns indicate how far behind agriculture in the country has lagged compared to the newly industrializing and developed economies, where improved labor productivity translated into a catching-up growth for farm earnings.

Second, industrial workers did not receive the highest earnings among all sectors, although they had the highest labor productivity in all the years. There were also years when labor productivity in industry was improving, but earnings were ironically declining. This suggests that factors other than labor productivity determine the returns to labor. Indeed, the combination of protectionist policies biased in favor of labor-saving techniques and the large and growing labor surplus brought about spurts of rapid industrial output growth and declining returns to labor.

Third, service workers received the highest earnings in almost all the years, in spite of a sluggish growth of labor productivity in this sector. Hence, the growth of employment in services is not a straightforward evidence of employment deterioration. What the pattern of their earnings suggests is the wide diversity of employment activities and income opportunities in services.

Fourth, much concern is focused on narrowing the gap between agricultural and nonagricultural earnings. Such narrowing occurred in the

Figure 4.5
Average Earnings from Primary Job
by Major Sector, 1976-1992



country in the mid-1980s, but this was due to the sharp contraction of nonagricultural earnings. Hence, the picture presented is one of generally worsening levels of earnings in the entire economy.

CHARACTERISTICS OF URBAN LABOR MARKETS

The share of the urban sector in total employment increased considerably from only 30% in the early 1970s to 36% in the late 1980s and 56% in 1992 (Figure 4.6).³ The increase was due partly to rural-urban migration and partly to the reclassification of geographical areas from rural to urban as population and/or economic activity expanded.⁴

As in most developing countries, the most striking difference between the urban and the rural labor market in the Philippines is the extent of urban unemployment. Visible and measurable unemployment in urban areas is about twice that in rural areas (Figure 4.7). Urban unemployment hovered at around 8% in the 1970s, then rose to 12% during most of the 1980s. The

³ This section has drawn largely from Balisacan (1994).

⁴ The reclassification of physical areas takes place only after each decadal census of population, not everytime a labor force survey is conducted. For example, the rural-urban classification of physical areas used in the labor force survey from 1981 to 1990 was based on the 1990 Census of Population. The Labor Force Survey in 1991, on the other hand, used the urban-rural classification based on the 1990 Census of Population.

Figure 4.6
Employment in Urban Areas

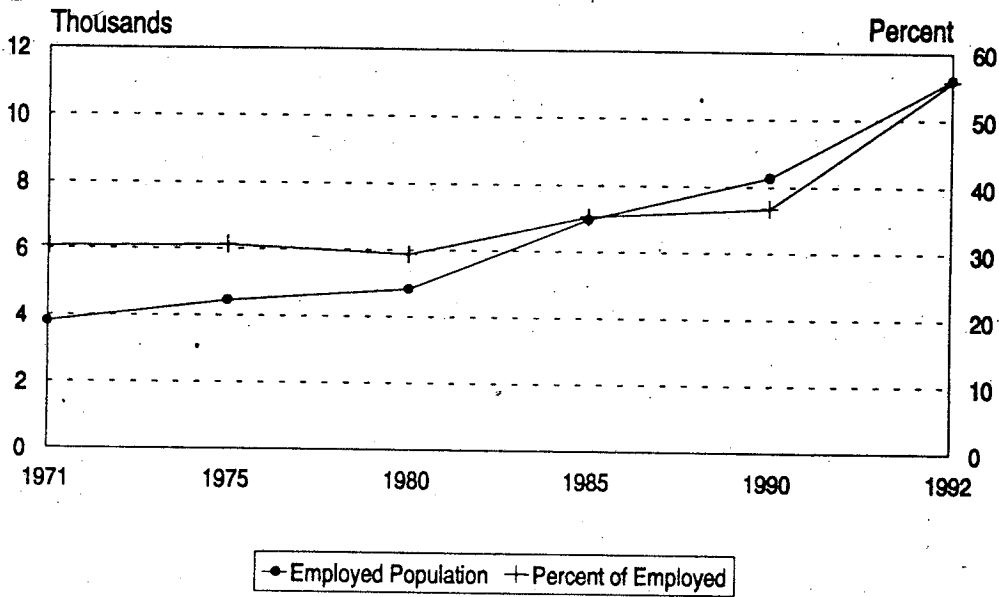
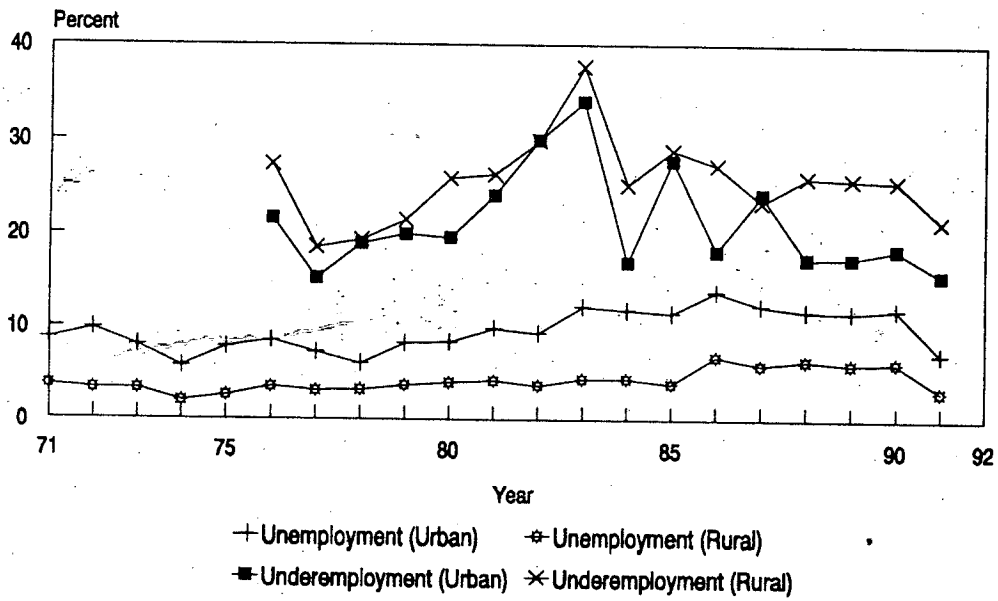


Figure 4.7
Unemployment and Underemployment Rates,
Urban and Rural Areas



rate is particularly high among the young members (aged between 14 and 25) of the labor force, especially among high school and college graduates (Table 4.4). In the late 1980s, about 23% of workers with at least secondary education were unemployed; the corresponding figure for workers with little education (at most elementary education) was only 4%. This suggests that open unemployment is an unsatisfactory indicator of poverty since only those with alternative income sources can afford to remain without work. What it highlights is the economy's inability to generate attractive employment opportunities for schooled entrants into the labor force.

Table 4.4
Unemployment Rates in Urban Areas, by Sex, Age and Education

	1976	1977	1978	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Sex																
Male	6.7	5.9	4.0	6.8	7.1	8.3	8.1	11.2	11.3	10.6	10.5	7.3	7.2	6.5	7.9	6.1
Female	11.2	9.4	8.6	10.3	10.0	11.7	10.8	13.6	12.5	12.6	11.7	9.2	9.1	9.4	9.1	8.5
Age (Years)																
15 - 19	18.6	16.1	12.3	18.8	15.4	17.8	16.1	22.3	20.9	18.3	20.2	16.5	18.1	15.2	19.9	14.5
20 - 24	15.7	14.1	10.7	16.7	16.9	20.1	19.5	23.8	25.0	23.9	22.8	17.8	18.3	18.1	18.9	17.0
25 - 34	6.9	5.9	5.5	6.8	8.3	9.4	9.7	12.0	12.8	12.8	11.9	8.1	8.0	8.6	8.2	7.1
35 - 44	3.1	3.8	3.0	4.5	4.5	5.0	4.5	6.9	6.4	6.1	5.6	3.7	3.5	3.4	3.8	3.5
45 - 54	5.0	2.8	3.0	3.5	2.9	4.3	3.6	3.9	4.2	4.8	3.6	2.2	2.2	2.2	3.3	2.3
55 - 64	3.7	1.9	3.2	3.2	2.9	4.9	3.7	4.5	2.4	3.8	3.0	2.0	1.9	2.0	1.9	1.1
65 yrs. & over	3.3	0.8	2.7	2.6	2.9	6.0	2.7	4.8	3.3	4.7	3.0	3.0	2.3	1.3	0.7	1.3
Education																
No Education	n.a.	4.0	2.8	5.5	2.4	5.0	1.2	3.5	1.9	2.9	0.8	2.1	4.3	1.4	2.4	1.6
Elementary	n.a.	9.7	4.6	6.5	5.0	6.7	5.3	7.0	5.4	6.4	5.5	4.1	4.3	4.1	3.9	3.6
High School	n.a.	13.3	7.0	9.7	10.5	11.6	11.5	15.0	14.9	13.2	12.2	12.5	8.9	9.3	9.2	8.5
College	n.a.	11.0	6.5	8.4	8.7	11.1	10.9	15.0	15.0	14.8	13.5	10.3	10.2	8.9	10.2	8.9

Note : n.a.: Data not available.

Sources: National Statistics Office, *Integrated Survey of Households Bulletin*, various issues.
National Statistics Office.

High open unemployment among the highly schooled groups exerts a downward pressure on the wages of both the skilled workers and the poor with little or no education. However, this does not deter private investments in higher education. Indeed, as shown elsewhere (Balisacan, 1994), private returns to higher education are high, particularly among wage and salary workers.

As noted earlier, underemployment is a better indicator of labor's economic condition. Underemployment in rural areas rose from about 19% in the late 1970s to 30% in the mid-1980s, and then fell slightly to 25% in the late 1980s. The underemployment rates in the urban areas were relatively lower but the trend was essentially the same. In 1992, only three

in every 20 employed labor in the urban sector desired longer working hours, whereas there were five out of 20 in the rural areas who wanted additional working hours. This disturbing situation reflects increasingly limited opportunities for productive employment.

The participation of nonprime-age children in the labor market is more common in the rural areas than in the urban areas. This is explained partly by the greater incidence of poverty in the former and the seasonal nature of agricultural production in a monsoon-dependent agrarian economy.

The seasonality of production causes steep shifts in the demand for farm labor. These shifts are particularly pronounced during planting and harvesting seasons. In poor agrarian economies, farm households tend to meet this demand by drawing on their own pool of labor resources, including the children and adult female members. One reason for this preference is the relatively high cost of hiring and supervising hired workers. That is, the supply price of own family labor is less than the effective unit cost of hired labor. Another reason is the high cost of operating capital because of limited access by small farm households to formal credit channels.

Urban labor markets are often described as consisting of formal and informal subsectors. The dividing lines are not always clear, but the informal sector is often associated with ease of entry, low capital-labor ratio, restricted access to credit, limited capacity for accumulation, dominance of self-employment, production of low-quality goods or services, and lack of official registration. These attributes are by no means coincidental or universal, and as a result, there are many "informal" sectors with varying levels of production capacity, labor intensity, productivity, and organization.⁵

Nonetheless, popular views have associated the urban informal sector with low wages (or earnings) vis-à-vis the formal sector. Wages in the informal sector are competitively set (i.e., determined by supply and demand) owing to ease of entry. In the formal sector, institutional factors prevent wages from being bid down by low-income workers in the urban informal sector. Because of the wage differential, workers queue for formal sector jobs. These views are best exemplified by the Harris-Todaro model of migration. This model assumes that the urban informal sector is predominantly a "parking lot" for rural migrants while they search for jobs in the high-wage urban formal sector. Moreover, the model assumes that migrants are gamblers who hope to take advantage of expected wage differentials between the rural sector and the urban formal sector.

Empirical research in developing countries provides little support to these assumptions (Mazumdar, 1987, 1993; Williamson, 1988). What is increasingly being shown is that an average worker is as likely to move in the direction of the informal sector as the other way around. One reason is

⁵ Mazumdar (1993) provides a lucid description of the functioning of urban labor markets in developing countries.

that some segments of the informal sector require capital investments. A worker in a high-paying formal sector may thus build up savings and set himself up as an independent entrepreneur in middle years. Available evidence also reveals that the risks of migration have become an important consideration and that high risks serve to deter labor movement. Thus, labor migrants are not typically the poorest of the poor, but often come from prosperous villages or from households with some assets. These migrants also tend to get high-wage urban formal jobs sooner.

The graduation of workers from the low-paying informal sector to the high-paying formal sector in urban areas is thus limited. Indeed, the increasingly accepted view is that urban labor markets are segmented, possibly leading to the perpetuation of large differences in earnings between the two sectors. While institutional factors may be important (e.g., minimum wage legislation and labor unions), economic factors may also necessitate labor market segmentation.

First, there may be incentives for employers to increase wage rates rather than hire extra workers from the low-wage informal sector if wage increases result in greater efficiency.

Second, if urban employers perceive a strong link between efficiency and stability of labor supply, they may offer wages high enough to attract permanent (family) migrants whose supply price is higher than that of transitory (individual) migrants. The relatively high supply price for the former is due to the high transaction costs of resettling a family, as well as the opportunity costs associated with the family's loss of farm income. In firms or sectors where stability is not an important consideration, offered wages are relatively low and the takers are expected to be transitory migrants.

Third, the costs of learning new work skills may be high, and since specialization tends to rise with the size of the firm, there may be a positive relationship between wage level and firm size. This suggests that once a stable labor force has been formed, it could be costly to replace them with the "reserve army" of workers from the urban informal sector.

Finally, internal labor markets may be well developed in medium and large firms. That is, new workers are recruited principally to fill up positions in the bottom of the organizational ladder, while vacancies at higher rungs of the ladder are filled up by current employees. The savings from on-the-job training as well as efficiency gains obtained from vertical mobility within the firm could be strong incentives for employers to fill high-paying positions from their old workers within the organization.

The difficulty in defining what constitutes an informal sector has been noted. In practice, data availability dictates the choice of definition. One common practice of ascertaining the magnitude of the informal sector is to deduct estimates of employment in large enterprises from estimates of the employed labor force. The latter is obtained from household surveys, while

the former is typically estimated from surveys of establishments. In the Philippines, large enterprises are defined as those employing 10 or more workers. Based on this approach, the informal sector in the Philippines accounts for 82% of nonagricultural employment (Table 4.5). While this share was virtually constant from 1983 to 1988, the sector's share in nonagricultural income rose from 46% in 1972 to 55% in 1983 and 1988. However, despite the rise in income share, real value added in the informal sector was lower in 1988 than in 1983.

Table 4.5
 Size and Productivity of the Informal Sector in the Philippines

	1972	1983	1988
A. Employment			
Nonagricultural employment	5,800,000	9,879,000	11,339,000
In large enterprises ^a	968,762	1,733,788	2,079,991
Informal sector employment ^b	4,831,238 (83)	8,145,212 (82)	9,259,009 (82)
B. Value added (million pesos at 1972 constant prices)			
Nonagricultural value added	40,035	75,076	73,741
In large enterprises ^a	21,604	33,750	33,521
Informal sector value added ^b	18,431 (46)	41,326 (55)	40,220 (55)
C. Labor productivity in informal sector (1000 pesos at 1972 prices)	3.82	5.07	4.34

^a Include enterprises employing 10 or more workers.

^b Figures in parentheses refer to the percentage proportion of informal to total nonagricultural employment (value added).

Sources: NSO, *Census of Establishments*, various issues.
 National Statistics Office.

The available data do not provide a breakdown of the informal sector into its urban and rural components. One clue to the size and changing composition of the urban informal sector is the type of employment. Employment in the urban informal sector is typically dominated by own-account and unpaid family workers.⁶ A rise in the share of these workers in total employment could be seen as a deterioration in employment quality since these types of jobs are viewed as employment of last resort (Gregory,

⁶ Own-account workers include those who operate their own business and do not employ paid workers in the conduct of their economic activities, as well as those who employ one or more paid employees in the operation of their business or trade. Self-employed workers are included in this category. In urban areas, small retail operators constitute the most common type of self-employed persons; in rural areas, the self-employed also include most farmers. Unpaid family workers, on the other hand, are members of the family who assist another member in the operation of the family business enterprise and who do not receive any salary or wage for their work.

1980; Harris and Rashid, 1986). In urban areas, the share of own-account workers in total employment increased from 24% in the mid-1970s to 33% in the early 1990s (Table 4.6). The growth of own-account workers was particularly rapid (9% a year) in the 1980s when overall GDP growth was way below population growth (Table 4.7). About two thirds of them were in the low-paying services sector. Unpaid family workers also increased in the first half of the 1980s when the worst economic contraction in postwar years set in.

Meanwhile, the growth rate of urban wage and salary workers continued to slide throughout the 1980s to early 1990s at 3.9% a year compared to a more than 5% annual growth in the previous decade. This fact mirrors the worsening economic condition in the country, which was suffering from declining GDP in the early 1980s. This was coupled by the growing restiveness in the labor front. Another source of explanation is the continuing migration of rural workers to the urban areas. The migrant factor exacerbated the already swelling number of new graduates who found themselves competing for a very small number of new job openings.

Another noteworthy observation is the contraction in the number of unpaid family workers in rural areas in the 1980s; their share in total rural employment dropped from 30% in the mid-1970s to 20% at the turn of the 1990s. Tables 4.6 and 4.7 do not, however, suggest that the migration of rural unpaid family workers to urban areas accounted for the swelling of the ranks of own-account and unpaid family workers in urban areas. The available data do not allow for a matching of reported job types in urban areas with origins of workers.

Table 4.6
Employment Shares by Type of Workers ^a

	1974	1980	1985	1990	1991	1992
A. Urban Areas	100	100	100	100	100	100
Wage and salary workers	69.14	70.65	62.96	63.94	59.97	59.60
Own-account workers	23.75	22.47	28.95	29.97	33.01	33.34
Unpaid family workers	7.11	6.88	8.09	6.10	7.03	7.06
B. Rural Areas	100	100	100	100	100	100
Wage and salary workers	25.92	30.01	33.52	35.49	34.02	32.79
Own-account workers	43.70	44.49	44.75	44.53	46.61	47.84
Unpaid family workers	30.39	25.49	21.73	19.98	19.37	19.36
C. Philippines	100	100	100	100	100	100
Wage and salary workers	39.09	42.24	43.84	45.73	46.16	45.15
Own-account workers	37.62	37.87	39.21	39.28	40.25	41.16
Unpaid family workers	23.29	19.89	16.95	14.98	13.59	13.70

^a Three-year averages centered on the year shown, except for 1990-1992 which are the averages for each year shown.

Sources: NSO, *Integrated Survey of Households Bulletin*, various issues.
National Statistics Office.

Table 4.7
Growth Rates of Employment by Type of Workers

	1971-1976	1977-1990	1980-1992
A. Urban Areas			
Wage and salary workers	5.56	5.39	3.90
Own-account workers	2.45	7.84	8.68
Unpaid family workers	6.49	5.39	4.92
B. Rural Areas			
Wage and salary workers	5.67	4.02	3.40
Own-account workers	15.40	2.64	2.28
Unpaid family workers	4.70	3.85	-0.18
C. Philippines			
Wage and salary workers	5.61	3.80	3.64
Own-account workers	1.71	3.81	3.71
Unpaid family workers	4.89	1.01	0.53

Sources: NSO, *Integrated Survey of Households Bulletin*, various issues.
National Statistics Office.

RURAL DEVELOPMENT AND EMPLOYMENT LINKAGES

Increases in incomes of farm households induce an expansion of the demand for nonfarm goods and services (i.e., consumption linkages) such as electricity, transportation, restaurants, trading, housing, health and personal services, and entertainment. These goods and services are typically produced by small labor-intensive enterprises, in rural as well as urban areas. The rising demand for these goods and services sets in motion the demand of these enterprises for additional goods (raw materials) and services (labor) for the production of their output. Their consumption demand also rises with increases in their incomes. The interaction of demand and supply linkages creates multiplier effects, the ripples of which can be gleaned in the national income accounts.

Estimates of the various rounds of the *Family Income and Expenditures Survey (FIES)* show that the share of nonfarm incomes in total rural household incomes is significantly increasing, at rates ranging from 44% to 55%. The considerable fluctuation partly reflects the measurement problems in the FIES data. It would be noted that the rural industrialization experiences of Japan and Taiwan saw a consistently rising share of nonfarm incomes in the farm household.

The FIES estimates clearly demonstrate the significant contribution of nonfarm employment to the total farm household incomes. Among farm households, off-farm and nonagricultural incomes account for at least one-

Table 4.8
Sources of Rural Household Income
(Percent of Total Income)

Sector of Employment	Farming	Farm Wages	Nonfarm Wages	Sustenance Activities	Other Sources	Total
Palay	48.88	9.21	7.90	8.35	25.65	100
Corn	50.51	7.07	6.42	11.14	24.87	100
Coconut	43.85	13.49	7.36	8.67	26.64	100
Sugarcane	18.60	47.15	7.78	7.94	18.53	100
Other crops	29.06	26.89	7.98	8.08	27.99	100
Poultry & livestock	7.44	20.50	9.51	6.49	56.06	100
Fishery	2.78	16.39	4.73	6.23	69.87	100
Forestry	3.60	52.51	3.72	6.52	33.65	100
Other agricultural services	16.58	42.74	11.13	9.43	20.12	100
Mining & quarrying	1.87	0.58	71.44	2.32	23.79	100
Manufacturing	2.63	2.53	46.81	3.94	44.09	100
Electricity	1.99	3.73	73.76	3.75	16.78	100
Construction	4.59	5.47	60.47	5.98	23.49	100
Trade	3.03	2.46	16.53	3.28	74.70	100
Transport	2.22	1.98	49.95	3.00	42.85	100
Finance	8.52	0.29	59.06	1.79	30.34	100
Other services	3.10	1.30	58.34	2.85	34.41	100
Others	14.74	4.55	20.84	5.33	54.58	100
All rural households	23.06	9.08	21.65	6.35	39.87	100

Source: NSO, Family Incomes and Expenditures Survey, 1985.

third of total household incomes (Table 4.8). It is worth noting that even households headed by landless farm workers — who are among the poorest of the poor (Balisacan, 1992) — have a variety of income sources. In rice, corn, sugarcane, and coconut farming, incomes obtained by these households from sources other than farm wages represent 30-40% of their household incomes.

In resource-poor (unfavorable) areas where production technology is stagnant, population pressure on land is intense, and per capita income is at subsistence levels, risk aversion may dominate the household's decisions on resource allocation (Binswanger and Rosenzweig, 1986; Hayami and Ruttan, 1985). The pressure to augment income from the main crops (in particular, staple crops) with off-farm as well as other farm sources is likely to be strong. As technological change takes place in agriculture — partly induced by population pressure — and as the forces of rural development reduce transaction costs, the income gains from specialization drive households to exploit their comparative advantages. The diversity of income sources may initially fall. As technological change continues and infrastructure development further reduces transaction costs and risks associated with access to basic needs, the diversification of income is likely to rise with per capita income.

The above discussion has important implications on the issue of income inequality and poverty in the rural areas. Because farm earnings tend to be highly correlated with farm size holdings,⁷ inequities in the sizes of the holdings are often associated with income inequality (and poverty) in rural areas (Hayami, Quisumbing, and Adriano, 1990; Mangahas, 1985; FAO, 1986). But given the importance of nonfarm income earnings among small farmers,⁸ it is possible that these earnings would substantially reduce the inequalities in holding size, and, in effect, reduce household income inequality. Indeed, this is the observation for selected villages in Malaysia (Shand, 1987). However, where there are imperfections in the off-farm employment market characteristics — as is likely to be the case in a highly underdeveloped agricultural economy — the demand for unskilled (and skilled) labor of low-income households would be limited. In this case, it is plausible that the inclusion of nonfarm earnings in farm incomes may even upset the distribution equity of total household income.

It is clear that if improvements in the size distribution of household incomes are desired, they will have to be sought through policies affecting not only operational holdings, but more importantly, nonfarm employment and incomes.

Primary emphasis should be given to raising the educational levels and improving skills of rural workers in order to increase productive employment outside of agriculture, including urban employment. Differences in the level and quality of education of workers account for much of the variation of household welfare in both rural and urban areas of the Philippines.

Adequate provision of rural infrastructure (roads, electricity, communication) is likewise critical for backward integration, sustained poverty alleviation, and balanced urban-rural growth. It allows domestic rural supply to respond dynamically to agricultural growth as well as to opportunities opened up by urban growth.

Finally, the macroeconomic climate must be conducive to the building of dynamic rural-urban employment linkages. Policy-induced disincentives inimical to both the production (and consumption) of labor-intensive goods (particularly exportables) and backward integration will have to be removed, in order to allow the sustained expansion of productive earning opportunities for the poor (as well as the nonpoor).

⁷ This is especially true for large differences in operational holding size. To some extent, farm earnings in small farms can be greater than those in large farms if productivity in the former is higher than that in the latter. There is considerable evidence for the inverse relation between yield and the size of operational area (Berry and Cline, 1979). This relation is, however, weak if one corrects for differences in land quality (Roumasset and James, 1979). Moreover, the degree of the relation depends on the production technology, institutional arrangements, and the economic environment (Binswanger and Rosenzweig, 1986). Indeed, in the Philippines, the relation was observed to be weak for commercial crops, but strong for the staple crop (ILO, 1974, p. 95).

⁸ Anderson and Leiserson (1980) provide evidence on the inverse relationship between off-farm income and size of operational holding for Pakistan, the Republic of Korea, and North Thailand. The same relationship emerged for Taiwan (Ho, 1979).

CONCLUDING REMARKS

Sustained employment creation can be secured only by a comprehensive, economywide policy reform aimed at correcting the disincentives against the production (and consumption) of labor-intensive exports, and at promoting backward integration and balanced urban-rural growth. In particular, the reform has to allow for a rapid, sustained growth of employment outside the agriculture sector and the informal urban sector. The reform should also encourage infrastructure and institutional development outside Metro Manila.

The dynamics of urban-rural employment linkages are complex. And because of their complexity and, more importantly, scanty treatment in the economic development literature, much remains to be done and learned. Future research must look closely into the expenditure patterns of urban and rural households, the incremental demand for nonagricultural goods generated by the increase in rural (particularly agricultural) incomes, and the domestic supply response — particularly the urban supply response — to that demand. Research should move beyond simply describing the characteristics and composition of rural (and urban) employment and incomes. It should delve as well into a systematic assessment of the impact of various factors — including public policies on human capital and physical infrastructure development — on income distribution, poverty, and overall economic growth.

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