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Pacific Economic Outlook: Structure 2007 - Aging and Economic Growth Potentials in the Pacific Region
Background Papers

THE PHILIPPINES

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ABSTRACT

Many countries around the world, including developing nations, are starting to experience the problems of an aging population. The Philippines, however, seems far from having to address this issue. Because of country-specific institutions and policies, the population development pattern emerging there is distinct from those that other countries are going through. This paper reviews some of the demographic developments in the country and projects the future needs arising from these differing circumstances.

1. BRIEF REVIEW OF DEMOGRAPHIC CHANGES IN THE PHILIPPINES

Many nations, including some in the developing world, are experiencing the increasing burdens of an aging population, both in absolute numbers and in proportion to the younger age cohorts (Kaneda, 2006). That is certainly true in many countries (Kinsella, et al., 2001). However, the picture is more complex for the Philippines.

Bloom, Canning and Malaney (1999) pointed out that, in contrast to the East Asian "tigers" whose working population increased from 57 percent in 1965 to 65 percent in 1990, the Philippines proportion of working age cohorts only increased from 52 percent in 1980 to 58.5 percent in 2000. For example, while the Philippines' total fertility rate declined from 6.0 in 1973 to 3.5 in 2003, Thailand and Indonesia's total fertility rate starting at about the same level in the 1970's have already declined to 1.7 and 2.6, respectively¹.

During this period, tremendous changes took place in the economies of the Southeast Asian countries, known as the ASEAN 5. In 1960, the *per capita* income of Malaysia was slightly higher, that of Singapore was four times; while that of Thailand was about half and that of Indonesia was about a third that of the Philippines. However, by the year 2000, the pattern had been substantially changed (Table 1). Singapore had increased its income per person to First World levels, Malaysia and Thailand had increased theirs by several multiples. The Philippine per capita income, on the other hand, had grown so lowly relative to its neighbors that it was roughly around the level of Indonesia.

Table 1. Per capita GDP of ASEAN 5: 1960 and 2000 (at constant 2000 US\$)

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Country	1960	2000	Ave. Annual Growth
Singapore	2,267	22,869	5.80%
Malaysia	788	3,843	3.94%
Thailand	332	1,973	4.44%
Philippines	611	992	1.19%
Indonesia	196	802	3.50%

Source: World Development Indicators

Many events, of course, intervened and many factors were involved in the comparative changes that took place over a few decades. However, one of the palpable

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¹ Alonzo, et al. (2004).

differences over that period was the demographic development within each of the countries. For example, in 1960 the Philippines and Thailand had roughly similar population sizes at about 26 million. By the year 2000, the Philippine population stood at 76 million while Thailand's was 62 million (Table 2). This fact is often mentioned in connection with the differing saving and investment pictures and the social infrastructure costs, among others, between the Philippines on one hand, and Singapore and Thailand on the other. While the population growth rate for Thailand is only slightly below that of the Philippines over the whole 40-year period, the difference is larger in the 1980's and the 1990's.

Table 2. Total population of ASEAN 5: 1960 and 2000

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Country	1960	2000	Ave. Annual Growth
Singapore	1.6	4.0	2.26%
Malaysia	8.1	23.5	2.63%
Thailand	26.4	62.2	2.11%
Philippines	27.1	76.5	2.56%
Indonesia	94.0	205.8	1.93%

Source: World Development Indicators; ADB Key Indicators

The implication is that the country probably missed using the "demographic dividend" to trigger its growth spurt. The demographic dividend hypothesis depends on the transition period when the bulge in the working population allows the country to appropriate the surplus presented by a sudden and drastic increase in current income over dependency needs and invest it for the breakthrough needs of economic growth. A developed country like the United States, for example, benefited from the baby boom after the second world war and, therefore, a rather long period of economic growth soon after. However, this demographic dividend turns into a problem, unless adequate preparations are made, as the working age cohorts rapidly move from earners into retirees.

The population data for the Philippines imply that the demographic transition has been prolonged. This is because the second phase of the demographic transition, i.e. the reduction in fertility attributed partly to increased income and partly to increased access to contraceptive devices, has been largely delayed for the country. As a consequence, the aging of the population has also been delayed, implying a different set of issues for the country from those that have started to occupy most researchers in the area. What these differences imply for government policy will be explored further in this paper.

Population developments in the Philippines

Aging population is not, at this time, a major concern for the Philippines. As of 2004, the aging group (at least 65 years of age) comprises only 4 percent of the total population and is estimated to reach 10 percent only in 2040. However, this does not imply that the country is spared from population burden. On the contrary, the population problem, i.e. rapid population growth, has worsened the poor economic performance of the country.³

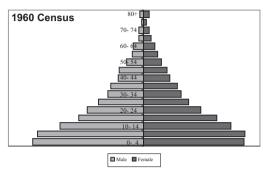
As of the latest population census (2000), the population structure of the Philippines does not significantly differ from what it was 40 years before (Figure 1). The Philippines essentially missed the promises of the "demographic dividend" because unlike Thailand and Indonesia that shifted from high to low fertility rates, it failed

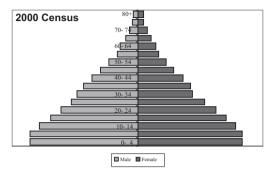
 $^{^2}$ See, for example, Alonzo, et al. (2004).

³ Balisacan and Mapa (2004)

to go through a "demographic transition".

Figure 1. Population by age group: 1960 and 2000





Source: National Statistics Office

Over time, the gender distribution of the total population has been evenly distributed (Table 3). This is true for all age groups, except at the older years, when the females significantly outnumber the males --- manifesting the higher life expectancy of females that, at 71 years, is five years more than that of males.

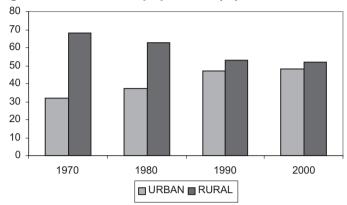
Table 3. Percentage of male population

Age Group	1960	2000
0- 4	51.5%	51.2%
5- 9	51.6%	51.2%
10- 14	51.4%	50.7%
15- 19	49.2%	50.1%
20- 24	48.6%	49.8%
25- 29	48.8%	50.3%
30- 34	49.1%	53.2%
35- 39	49.2%	50.9%
40- 44	49.7%	50.9%
45- 49	50.8%	51.0%
50- 54	51.5%	50.3%
55- 59	51.7%	49.5%
60- 64	53.8%	48.1%
65- 69	49.9%	46.8%
70- 74	51.1%	45.3%
75- 79	50.7%	43.3%
80+	48.3%	39.8%
TOTAL	50.4%	50.5%

Source: National Statistics Office

During the period, there was a substantial population shift from rural to urban areas (Figure 2). This was brought about by both a movement of people from what were initially rural to urban areas, as well as a transformation of large areas from formerly rural to urban classification. At around the same period, the labor force experienced a substantial transformation in the form of increasing labor force participation by females. This started right after the Second World War. It has continued during the last two decades, although much more gradually (Table 4).

Figure 2. Rural-urban population (%)



Source: National Statistics Office

Table 4. Labor force participation rate

	Total	Male	Female
1960	62.0	82.7	41.6
1970	61.7	86.0	38.6
1980	61.9	81.4	42.9
1990	64.4	81.9	47.2
2000	63.1	81.5	48.6
2005	67.0	80.4	49.8

Source: Labor Force Survey Yearbook of Labor Statistics

Both of the changes mentioned above would have been expected to bring about the changes leading to a demographic transition. However, the transition did not happen. Various studies have examined the variables that determine the fertility rate. Among the findings, the following standout: (a) there is a significant difference between the desired and actual family sizes; (b) there is a high unmeet need for contraception; (c) information about and access to family planning services are inadequate; (d) two-thirds of Filipino respondents are in favor of more vigorous family planning program, and that rhythm, condom and ligation are acceptable methods; and, 66 percent of respondents said that the government is right in promoting a program that will allow married couples the freedom to choose a family planning method. Still, in the face of the responses, the total fertility has declined by a half from 1970 to 2001 (the rates of decline in other Asian countries were much more pronounced). Table 5 shows the decline over the last 30 years.

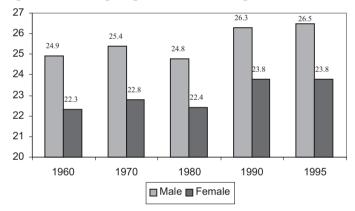
Table 5. Fertility rate, total (births per woman)

Year	Philippines	Malaysia	Indonesia	Singapore	Thailand
1962	6.6	6.7	5.4	5.2	6.4
1967	6.0	5.9	5.6	3.9	6.1
1972	5.5	5.2	5.4	3.0	5.0
1977	5.0	4.2	4.8	1.8	4.3
1982	4.7	4.2	4.1	1.7	3.0
1987	4.3	4.0	3.3	1.6	2.6
1990	4.1	3.8	3.1	1.9	2.3
1992	4.0	3.6	2.9	1.8	2.1
1997	3.6	3.3	2.8	1.6	1.9
2002	3.2	2.9	2.5	1.4	1.8
2003	3.2	2.8	2.4	1.4	1.8

Source: World Development Indicators

One of the variables, age at marriage has increased only slightly from 1960 to 1995 (Figure 3). Although there is anecdotal evidence that it has increased much more in the urban areas and in the last decade, this is apparent in the data.

Figure 3. Average age before marriage



Source: National Statistics Office

The data on contraceptive use is encouraging. It shows a significant increase from 15 percent in 1968 to 49 percent in 2003 (Table 6). However, the current rate fares badly in comparison⁴ to the countries that have undergone the demographic transition such as Thailand. The timing also shows how late the decline happened in the Philippines relative to Singapore, Thailand and Indonesia. Even Malaysia shows an earlier decline in contraceptive prevalence. The cumulative result of these differing rates are ultimately manifested by how much the original population of the Philippines was multiplied by the end of the period relative to those of its neighboring countries.

 $^{^4\;}$ i.e. assuming that the aim is to undergo demographic transition within a specific time.

Table 6. Contraceptive Prevalence

(% of women ages 15-49)

	Philippines	Malaysia	Indonesia	Thailand	Singapore
1968	15.4				
1973	17.4				
1978	38.5				
1982					74.0
1983	32.0				
1984		51.0		65.0	
1987			44.6	65.5	
1988	36.1	56.0			
1991			49.7		
1993	40.0				
1994		55.0	54.7		
1996	48.1			72.0	
1997	47.0		57.4		
1998	46.5		57.0		
2000	47.0			72.0	
2003	49.0		60.0		

Notes: .. No data available.

Source: World Development Indicators

Mostly due to its large young population, accounting for 36 percent of the total, the age-dependency ratio of the Philippines is among the highest in the region (Table 7). While most of its neighbors roughly have one dependent for every two workingage persons (Singapore has the lowest with 2:5 ratio), the Philippines have approximately a 2:3 dependent-age to working-age ratio. Thus, resource allocation within households becomes a more complex problem.

Table 7. Age-dependency ratio

(% to working population)

	1960	1970	1980	1990	2000	2004
Indonesia	77.0	83.0	79.7	65.4	54.1	52.6
Malaysia	94.9	92.3	75.4	67.2	61.6	59.3
Philippines	91.0	92.9	80.7	78.1	70.1	65.4
Singapore	82.7	72.8	46.7	37.0	41.1	39.0
Thailand	90.3	96.9	77.1	56.9	43.2	41.3
Vietnam	75.1	92.9	90.0	77.4	62.6	53.9

Notes: Dependents=0-14 and 65+ years old

Source: WDI

Moreover, household sector saving is reduced with a higher age-dependent ratio, limiting funds for business and government investments. In fact, among the ASEAN 5 plus Vietnam, the Philippines has the lowest saving rate and spending on capital formation in terms of share to GDP (Table 8a and 8b). Together with a rapidly increasing population, a decline in capital formation further deteriorates the capital per worker and that further weakens the prospect for higher output and improved economic conditions.

Table 8a. Gross domestic savings

(% to GDP)

	1960	1970	1980	1990	2000	2003
Philippines	16.2	21.9	24.2	18.4	23.1	16.2
Indonesia	12.4	14.3	38.0	32.3	25.6	21.5
Malaysia	25.9	24.3	29.8	34.5	47.3	42.3
Singapore	8.8	18.4	38.1	43.3	48.5	46.7
Thailand	14.1	21.2	22.9	33.8	31.4	32.0

Source: WDI

Table 8b. Gross domestic capital formation

(% to GDP)

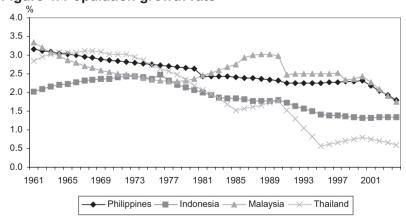
	1960	1970	1980	1990	2000	2004
Philippines	16.0	21.3	29.1	24.2	21.2	17.0
Indonesia	9.2	15.8	24.1	30.7	21.4	22.8
Malaysia	13.8	20.2	27.4	32.4	27.3	20.6
Singapore	9.7	38.7	46.3	36.4	32.8	18.3
Thailand	15.4	25.6	29.1	41.4	22.8	27.1

Source: WDI

Although demographic transition "promises" a realization of the "demographic dividend" after about two decades of the "baby boom" period, it does not arrive automatically. The Philippines, with one of the lowest per capita spending on social services, particularly on education (2.8 percent of GDP in 2004) and health (0.3 percent of GDP in 2004), has failed to set up an environment that enhances human capital in addition to insufficient population management.

The Philippines has done poorly in managing population growth. Despite the assistance and huge inflow of funds from various foreign agencies to help transform the population pattern, the decline in the growth of population is noticeably flatter than most of the Asian countries (Figure 4). The loyalty of policy makers to natural methods of fertility reduction and the perceived restraint in effort are among the major reasons for the resulting population pattern.

Figure 4. Population growth rate



Source: WDI

2. POPULATION DYNAMICS AND GOVERNMENT POLICY

Fiscal and investment policy has been significantly affected by the demographic patterns in the Philippines. The most immediate impact is on the government budget. Because of the continuously increasing influx of students in the elementary grades, at least 10,000 classrooms have to be built by the government every school year. This effect extends to the continuous additions that have to be made in health clinics, hospitals, and other social services that expand with the rapidly increasing population.

Table 9a. Debt services as percentage of total NG expenditure

	Interest	Principal	Total Debt
	Payments	Amortization	Service
1975	3.4	***	
1980	6.0	•••	
1985	18.3	8.7	27.0
1990	32.6	16.2	48.8
1995	20.8	18.4	39.2
2000	21.7	13.4	35.1
2005	31.8	40.2	72.1

Note: ... No Data Available Source: Bureau of the Treasury

Table 9b. Debt services as percentage of gross domestic product

1973 10 2003			
	Interest	Principal	Total Debt
	Payments	Amortization	Service
1975	0.6		
1980	0.9		
1985	2.6	1.2	3.8
1990	6.6	3.3	9.9
1995	3.8	3.4	7.2
2000	4.2	2.6	6.8
2005	5.5	7.0	12.5

Note: ... No Data Available Source: Bureau of the Treasury

The other significant impact is on the character and magnitude of investments that have to be made. Because of the needs dictated by the faster growth of population, more of the investment resources are drawn into expenditures for social infrastructure, away from more directly productive investments such as factories and (even socially supportive projects like) roads and ports. The big difference, of course, lies in the time it takes for benefits of the various types of investments to be felt.

Table 10. National Government's expenditure on social services

(percent to GDP)

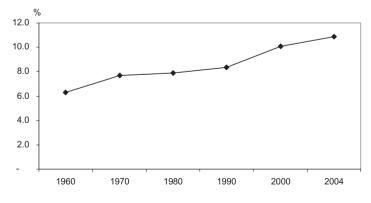
,	1981	1990	2000	2004
Total	17.4	24.0	20.3	17.9
General public services	2.4	2.9	3.7	2.9
Defense	1.7	1.4	1.1	0.9
Education	2.2	3.1	3.5	2.8
Health	0.7	0.7	0.4	0.3
Social security and welfare	0.2	0.2	8.0	8.0
Housing and community amenities	0.4	0.1	0.2	0.1
Economic services	7.9	5.0	5.0	3.2
Agriculture	1.2	1.5	1.0	0.7
Industry	0.9	0.2	0.2	0.1
Electricity, gas, and water	1.4	1.0	0.2	0.2
Transport and communications	3.2	1.7	2.3	1.1
Other economic services	1.1	0.6	1.3	1.1
Others	1.9	10.7	5.7	7.0

Source: Asian Development Bank Key Indicators

The gestation period for the more direct investments like factories and, even, roads and ports, is just the time for the project structures to be completed (or, at most, a few years). For social infrastructure to support a younger population, the shortest gestation periods are at least one generation. In the increasing requirements of more and more knowledge-intensive professions, the gestation period is about 20 years. In sum, the pattern of investments is substantially shaped by a population pattern that has delayed the demographic transition. Further, the time it takes before the investments start paying off is pushed back significantly.

Other aspects of socioeconomic policy affected that may be mentioned are labor and education policy. The relatively faster growth of population has prolonged the task of significantly reducing unemployment. In fact, rather than improving, the unemployment rate of the Philippines has been deteriorating (Figure 5). This has allowed or induced the large outflow of overseas workers. This in turn has complicated the task of unemployment reduction as the overseas worker phenomenon has probably increased the reservation wage for all workers (i.e. both domestic and overseas).

Figure 5. Unemployment rate 1960-2004



Source: Yearbook of Labor Statistics; Labor Force Survey

Education and human resource policies are also complicated as the outflow of workers has intensified the pressure on schools. As the higher-quality graduates

are attracted to overseas jobs, the quality of domestic workers tends to deteriorate, leading to reduced competitiveness of domestic industry. If strong enough to threaten domestic industry growth, this could lead to still another cycle of unemployment. At any rate, this has led to discussions of the eroding quality of schools as the remaining supply of professionals, including teachers dry up.

In terms of literacy rate, the Philippines fares well against its neighbors. However simple literacy measures are not enough to gauge the quality of education that a country offers. Results of standardized tests initiated to some primary and secondary indicate a deterioration of quality, particularly in the fields of English, Science, and Math. Improving the quality of education requires, among others, an increase in funds. But, with the current fiscal problem of the Philippines, government budget on education has been limited and in fact diminished in real terms (Table 11).

Table 11. Literacy rates: 15-24 years old and comparative achievement test scores

		Total	Male	Female	Science achievement	Science achievement
		rotai	waie	remale	score 8 th graders	score 8 th graders
Philippines	2003 2004	99.0 95.1	98.8 94.5	99.2 95.7	378	377
Malaysia	2003 2004	98.0 97.2	97.8 97.2	98.2 97.3	508	570
Indonesia	2003 2004	98.2 98.0	98.6 98.5	97.8 97.6	411	420
Thailand	2003 2004	99.1 98.0	99.6 98.1	98.5 97.8		
Vietnam	2003 2004	97.5 	95.3 	96.0		

Source: Asian Development Bank

"Third International Mathematics and Science Study," 08 Dec. 2000, cited in ADB (2003)

An added effect of the population problem in the country is on poverty alleviation. Addressing poverty has also been made difficult with rapid population growth accompanied by high fertility rates. Although population growth cannot solely explain poverty, it aggravates the problem.⁵

Household data suggests a relationship between household size and poverty incidence – the larger the family size, the higher the prevalence of poverty (Table 12). Moreover, poverty incidence is above the national average for families with more than 5 members. At the extreme, the incomes of more than half of families with at least 8 members are below poverty line.

Table 12. Poverty incidence by family size

Family Size	1985	1988	1991	1994	1997	2000
National	44.2	40.2	39.9	35.5	31.8	33.7
1	19.0	12.8	12.7	14.9	9.8	9.8
2	20.0	18.4	21.8	19.0	14.3	15.7
3	26.6	23.2	22.9	20.7	17.8	18.6
4	36.4	31.6	30.1	25.3	23.7	23.8
5	42.9	38.9	38.3	31.8	30.4	31.1
6	48.8	45.9	46.3	40.8	38.2	40.2
7	55.3	54.0	52.3	47.1	45.3	48.7
8	59.8	57.2	59.2	55.3	50.0	54.9
9+	56.9	59.0	60.0	56.6	52.6	57.3

Source: Alonzo, et al (2004)

 $^{^5}$ Alonzo, et al (2004)

3. IMPLICATIONS FOR THE GOVERNMENT BUDGET

The other substantial impacts are on the government budget and on national saving. In both these areas, there is a measurable difference that can be traced to the demographic evolution of the Philippines. Because of the delayed demographic transition, a higher dependency ratio (measured as the proportion of the population under 15 and over 64 years old) persists over a longer period. There are two immediate consequences. First, the government has to spend more on schools, medical facilities including child care clinics, and other costs classified generally under social infrastructure. Second, the additional expenditures mentioned above require longer gestation periods before returns to the economy are expected. The first consequence is estimated in broad and rough terms here in an attempt to get a first approximation of the economic impact of the delayed demographic transition. Besides only the first round effects are estimated here. The second consequence is less obvious and more roundabout and will not be estimated here, although this may have a larger impact over the long run.

Table 13 shows the large impact of the different expenditure patterns under the actual Philippine population pattern as compared to the case where the Philippine demographic evolution had followed that of Thailand.

Table 13. Government expenditure pattern (in billion pesos)

Year	Projected government expenditure (average)	Projected government expenditure* (average)	Implied savings
1971-1980	40.8	41.8	-0.9
1981-1990	49.8	46.8	3.0
1991-2000	65.8	57.7	8.1
2001-2010	79.6	57.7	21.9
2011-2020	94.6	52.2	42.4

^{*}Assumes population growth pattern of Thailand and that per capita government expenditure remained constant

If the difference in social service expenditures were to translate directly into public infrastructure investments, the growth pattern of the gross domestic product would have been different. Table 14, in rough magnitudes, shows the differences in growth pattern under the differing public saving assumptions.

A Cobb-Douglas production function is used to provide estimates of aggregate supply on various assumptions of population growth rates. The production function is written as a function of capital stock and labor, Y=f(K,L).

The data is taken from the National Income Accounts (NIA) published by the National Statistics Coordination Board. Complete NIA goes back from 1946. Data on population are taken from the Census of Population and Housing which is undertaken every 10 years and published by the National Statistics Office (NSO). Data for non-census years between 1960 and 1980 are synthetically derived.

Labor, L, is measured in number of employed workers, $Lt = P^*(PR)$ where P is the working-age population and PR is labor participation rate. Forecast for the working-age population, P, is taken from the NSO estimates. The data for labor participation rate is obtained by statistical smoothing to take into account the pro-

cyclical nature of participation rates.

Capital stock is derived by using the perpetual capital inventory method, $Kt = Kt-1(1-\delta)+It$, where k0 is initial capital stock, δ is depreciation, and I investment. Following Cororaton (2002) and Austria (2000), an annual depreciation of 5 percent is assumed. Cororaton's estimate for the initial capital stock, k0, of P449,935 million in 1966 is adopted. Forecast for capital stock is derived by statistical smoothing.

Table 14. Projected GDP growth

	Projected GDP growth	Projected GDP growth*
1971-1980	5.06	5.04
1981-1990	1.31	1.10
1991-2000	1.43	1.07
2001-2010	3.99	4.26
2011-2020	3.03	3.10

^{*}Assumes population growth pattern of Thailand

Note that a delayed transition initially results in higher growth. Only after one or two generations does the shift to a lower population growth rate result in higher GDP growth. The faster growth of the labor force over the initial period provides the faster GDP increased. However, as lower saving and investment rates translate into lower capital per worker and, therefore, lower productivity, the faster population growth rate (through the absence of the demographic transition) takes its toll in the form of lower GDP growth.

The effect of the delayed demographic transition, however, is manifested much earlier. Table 15 shows the difference in growth of GDP per person.

Table 15. Growth rate of GDP per person

	Projected GDP growth	Projected GDP growth*
1971-1980	2.58	2.54
1981-1990	-0.80	-0.43
1991-2000	-0.59	0.35
2001-2010	2.29	3.70
2011-2020	1.60	2.59

^{*}Assumes population growth pattern of Thailand

4. POPULATION POLICY IN THE PHILIPPINES

Population dynamics and, as asserted by several observers in the country, poverty has been intensively discussed in the Philippines. Observers, including Alonzo, et al., (2004) argue for an active public policy on population because of three considerations: a) the tremendous externalities imposed by faster population growth on environmental degradation and resource depletion, urban congestion, other areas, and even the policy externalities into other social and economic policy of the government; b) inadequate information on the various alternatives available to attain

households' desired family size; and, c) the large gap demonstrated in repeated surveys between wanted and actual fertility.

Several population programs have been launched in the last three decades. These programs have also been reviewed by analysts. Orbeta, et al (2002), for example, provide an extensive review of the population program in the Philippines from 1986 to 2002. On the other hand, population programs during the Marcos administration are documented by the Special Committee to Review the Philippine Population Program in 1978.

During the Marcos era, the main thrust of the population program was the reduction of fertility through family planning. Under the Aquino administration, the population policy shifted from emphasis on fertility reduction to improved family welfare by providing information and services to assist couples' fertility decisions. Orbeta, et al (2002) note that the shift in policy was largely attributed to the influence of the Catholic Church hierarchy who has been against the use of artificial contraceptives for population management. The re-emphasis on fertility reduction again developed during the Ramos administration but was again de-emphasized in 1998 in favor of reproductive health. The administration also focused on the devolution in the delivery of family planning services. The following administrations, Estrada and Arroyo, inherited the population program of 1998.

Spending for population programs has escalated from P12.7 million in 1970 to P492 million in 1994 but reduced to P133 million in 1998 as a result of reduced inflow of foreign funds. Population programs during the early part of 1970s were mainly financed by external organizations, e.g. USAID, WB, UNFPA, ADB. However, financial support from foreign donors for population programs has been in decline and programs have increasingly relied on domestic financing.

Some Foreig	gn Assisted Programs		
Organization	Program	Years	Amount
UNFA	First Country Program	1972-1977	\$8.3 million
	Second Country Program	1988-1988	\$9.125 million
	Third Country Program	1989-1993	\$22.3 million
	Fourth Country Program	1994-1998	\$41.4 million
	Fifth Country Program	2000-2004	\$30 million
USAID	Population Planning I Project	1970	\$11 million
	Population Planning II Project	1977	\$14 million
	Population Planning III Project	1980	\$27 million
	Family Planning Assistance Project	1990	\$40 million
	Integrated Family Planning/Maternal Health Program	1994-2000	\$150 million
World Bank	Population I Project	1994-1979	\$25 million
	Population II Project	1979-1988	\$40 million

However, the hierarchies various religious groups, including the Catholic Church and Islam, have been suspicious of most family planning programs and have largely objected to nationwide programs, even those with incidental impact on population growth. These programs with implications on population have often taken the form

of various programs such as maternal health and family size choices. The religious hierarchies have often been skeptical, suspecting these programs as merely camouflage population control programs.

Unfortunately, these opposing views have resulted in confusion and uncertainty as to the direction and vigor of any resulting program. The inability to come to an agreement has stymied whatever government contraceptive and health programs may be agreed upon that incorporate the ability to attain desired family size. More intensive discussions on this issue will need to be undertaken in the country if the more insidious of the side-effects of rapid and untrammeled population increase are to be avoided.

5. CONCLUDING CONSIDERATIONS

The foregoing discussion focuses on the sometimes critical role played by demographic changes on the economic development of countries. A comparison of the growth paths of the emerging economies in Southeast Asia --- Singapore, Thailand, Malaysia --- as well as the Asian Dragons to that of the Philippines points out the important difference provided by the demographic transition and its absence. Not discussed here but cited in other papers⁶ is the pivotal opportunity that the transition presents when the working population bulges as a proportion of the population at the same time that the dependency ratio decreases (as those below 15 are reduced by lower fertility while those above 64 have not yet increased in proportion to total population). This affords the economy an injection of higher income leading to increased domestic demand (and therefore, a stable market base for efficient production) and from higher investment coming from higher saving. The higher investment also results in higher productivity leading to the next round of increased production and feedback; leading to a virtuous cycle that result in economic take-off, if conditions are right.

The chain of beneficial events is, of course, not guaranteed. The channel from saving to local investment, for example, requires an efficient financial sector and a favorable investment environment. Other factors related to enhancing the economic returns to investments such as policy clarity and stability also need to be present for the full potential of investments to be realized. Without these, the benefits of a demographic transition may not be obtained.

The focus in this paper was on the more direct impact of differences in the pattern of demographic change. The delayed demographic transition has allowed the Philippines to postpone the difficulties now being anticipated many countries in Asia like Japan, Chinese Taipei, Korea and China. However, the continuing fast population growth has resulted in other difficulties. Among these is the continuing problem of unemployment. The economy has also been unable to make a noticeable dent on the poverty rate.

These problems have persisted partly due to the budget difficulties imposed by the continuing high dependency ratio of the population, especially at the younger years. This pattern has kept government expenditures on social service functions high. As a result, budget difficulties continue to persist and the investment pattern has been bent in the direction of social infrastructure investments that have long

⁶ e.g. Bloom and Canning (__), Bloom, Canning and Malaney (1999).

gestation periods rather than on more directly economic projects with much shorter periods of payback. Budget issues have also tended to reduce, at least, public saving. The foregoing review suggests that actual demographic developments of the Philippines have resulted in lower growth, both for the whole economy and per capital, higher unemployment, persistent poverty and other related problems.

While other countries in Asia have started confronting the imminent predicament of ageing populations, the Philippines has been able to postpone it. However, it has to face alternative problems that may be just as difficult, if not more.

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Table 1.1. Philippine population, by age and sex (Census Years)

Age		1960			1970			1975			1980	
Group	Both Sexes	Male	Female									
All ages	27,087,685	13,662,869	13,424,816	36,684,486	18,250,351	18,434,135	42,070,660	21,276,224	20,794,436	48,098,460	24,128,755	23,969,705
Under 1	786,464	404,391	382,073	1,017,193	517,883	499,310	1,213,577	623,585	589,992	1,742,912	893,971	848,941
1- 4	3,785,951	1,949,647	1,836,304	4,819,425	2,447,141	2,372,284	5,267,189	2,700,837	2,566,352	5,923,285	3,038,799	2,884,486
6 -5	4,369,398	2,254,566	2,114,832	5,894,819	3,001,138	2,893,681	6,330,637	3,249,452	3,081,185	6,605,446	3,396,682	3,208,764
10-14	3,435,427	1,765,992	1,669,435	5,025,876	2,547,450	2,478,426	5,681,852	2,895,474	2,786,378	5,949,904	3,036,022	2,913,882
15- 19	2,814,306	1,384,759	1,429,547	4,079,731	1,982,777	2,096,954	4,950,580	2,454,432	2,496,148	5,255,641	2,566,848	2,688,793
20-24	2,458,623	1,194,182	1,264,441	3,150,634	1,526,521	1,624,113	3,837,688	1,893,903	1,943,785	4,588,224	2,210,308	2,377,916
25-29	1,953,349	952,368	1,000,981	2,460,222	1,188,984	1,271,238	2,982,466	1,491,032	1,491,434	3,854,164	1,918,288	1,935,876
30-34	1,556,451	764,978	791,473	2,071,530	1,007,747	1,063,783	2,329,462	1,163,945	1,165,517	2,998,581	1,521,082	1,477,499
35-39	1,428,474	702,568	725,906	1,898,645	940,632	958,013	2,210,770	1,112,361	1,098,409	2,419,171	1,227,966	1,191,205
40-44	1,098,978	546,393	552,585	1,484,876	731,954	752,922	1,728,675	874,089	854,586	2,077,506	1,046,208	1,031,298
45-49	1,032,683	524,638	508,045	1,282,192	625,860	656,332	1,478,256	751,499	726,757	1,660,486	825,018	835,468
50-54	710,099	365,354	344,745	1,015,600	501,965	513,635	1,151,010	582,036	568,974	1,386,743	682,996	703,747
55-59	487,930	252,394	235,536	807,601	402,888	404,713	914,420	469,678	444,742	1,094,560	528,491	566,069
60-64	430,904	231,786	199,118	613,621	311,285	302,336	791,910	408,277	383,633	905,496	441,026	464,470
62-69	225,828	112,702	113,126	388,179	191,463	196,716	494,986	253,244	241,742	718,336	349,270	369,066
70- 74	208,940	106,799	102,141	292,265	150,576	141,689	372,737	194,129	178,608	440,304	216,036	224,268
75- 79	110,011	55,731	54,280	130,573	62,660	67,913	143,186	72,170	71,016	283,810	142,315	141,495
80 +	193,869	93,621	100,248	251,504	111,427	140,077	191,259	86,081	105,178	193,891	87,429	106,462

Age		1990			1995			2000	
Group	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All ages	60,559,116	30,443,187	30,115,929	68,616,536	34,584,170	34,032,366	76,234,077	38,524,266	37,709,811
Under 1	1,817,270	929,641	887,629	1,878,319	970,072	908,247	1,917,431	986,506	930,925
1- 4	6,649,703	3,412,875	3,236,828	7,483,799	3,857,196	3,626,603	7,752,071	3,965,426	3,786,645
6 -5	8,061,008	4,125,409	3,935,599	8,893,430	4,566,569	4,326,861	9,694,781	4,962,013	4,732,768
10-14	7,465,732	3,799,408	3,666,324	8,040,658	4,081,676	3,958,982	8,949,614	4,541,197	4,408,417
15-19	6,640,651	3,320,861	3,319,790	7,465,451	3,726,799	3,738,652	8,017,298	4,017,830	3,999,468
20-24	5,768,325	2,866,207	2,902,118	6,270,557	3,119,589	3,150,968	7,069,403	3,522,518	3,546,885
25-29	4,945,251	2,459,263	2,485,988	5,752,631	2,879,753	2,872,878	6,071,089	3,053,616	3,017,473
30-34	4,201,026	2,110,791	2,090,235	4,861,116	2,454,570	2,406,546	5,276,294	2,804,522	2,471,772
35-39	3,501,621	1,768,532	1,733,089	4,318,168	2,195,627	2,122,541	4,901,023	2,496,821	2,404,202
40- 44	2,753,843	1,389,855	1,363,988	3,402,813	1,729,637	1,673,176	4,163,494	2,120,314	2,043,180
45-49	2,221,488	1,113,345	1,108,143	2,734,379	1,384,973	1,349,406	3,330,054	1,696,712	1,633,342
50-54	1,905,828	944,837	960,991	2,063,363	1,032,912	1,030,451	2,622,316	1,318,632	1,303,684
55- 59	1,439,403	705,646	733,757	1,715,069	844,164	870,905	1,903,649	943,133	960,516
60-64	1,127,881	547,008	580,873	1,322,088	641,970	680,118	1,633,150	786,137	847,013
62-69	807,620	376,777	430,843	922,878	448,557	507,321	1,138,842	533,468	605,374
70- 74	565,339	264,981	300,358	654,459	299,990	354,469	797,972	361,614	436,358
75- 79	385,644	176,680	208,964	410,024	184,175	225,849	505,356	218,622	286,734
+08	301,483	131,071	170,412	394,334	165,941	228,393	490,240	195,185	295,055

Source: Census Yearbooks

Table 1.2. Projected population, by age: 2001-2050

Both Sexes	Total, All Ages	9 - 9	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	+08
2001	81,369,751	10,605,189	10,096,262	9,331,627	8,435,777	7,885,981	6,848,143	5,897,593	5,004,860	4,252,883	3,540,137	2,675,897	2,084,961	1,652,912	1,249,508	851,484	525,727	430,810
2002	82,995,088	10,654,425	10,179,723	9,527,123	8,533,683	8,024,364	7,032,577	6,039,947	5,146,710	4,362,147	3,663,605	2,817,602	2,147,762	1,701,489	1,289,723	884,779	543,185	446,244
2003	84,619,974	10,696,658	10,266,381	9,690,939	8,667,757	8,131,031	7,220,062	6,185,150	5,294,983	4,475,040	3,779,177	2,968,609	2,217,919	1,752,221	1,329,750	919,315	562,434	462,548
2004	86,241,697	10,733,732	10,349,382	9,827,432	8,836,831	8,209,203	7,404,859	6,337,956	5,443,841	4,594,784	3,891,098	3,118,485	2,301,396	1,805,103	1,370,179	954,170	583,368	479,878
2002	87,857,473	10,763,142	10,423,988	9,938,094	9,040,361	8,274,686	7,5/3,630	6,502,519	5,591,390	4,7,21,166	4,000,837	3,259,199	2,401,801	1,860,707	1,411,802	989,255	600,544	498,352
2002	91.077.287	10,785,720	10,467,797	10,027,913	9,250,960	8 4.32 951	7 878 323	6.862.074	5,733,701	4,654,072	4,109,052	3,509,100	2,521,533	1,916,061	1,455,349	1,025,115	659 652	539 203
2008	92,681,453	10,821,741	10,587,464	10,200,144	9,615,591	8,566,873	7,985,072	7,048,189	6,019,175	5,141,295	4,328,588	3,623,188	2,803,302	2,045,058	1,548,137	1,097,271	688,304	562,061
2009	94,279,088	10,836,682	10,628,481	10,284,157	9,752,028	8,735,479	8,063,687	7,231,705	6,170,856	5,288,719	4,446,897	3,733,007	2,947,629	2,124,566	1,597,461	1,133,746	717,327	586,661
2010	95,868,410	10,850,764	10,661,749	10,359,786	9,862,829	8,938,231	8,129,781	7,399,484	6,334,124	5,434,911	4,571,743	3,840,766	3,083,356	2,220,023	1,649,348	1,171,353	746,720	613,442
2011	97,451,041	10,864,342	10,688,053	10,424,639	9,952,954	9,153,979	8,190,721	7,565,201	6,509,160	5,576,012	4,703,026	3,947,129	3,208,972	2,333,649	1,702,999	1,210,740	776,952	642,513
2012	99,028,550	10,877,110	10,710,844	10,479,079	10,037,841	9,348,348	8,289,168	7,702,799	6,690,691	5,716,191	4,841,736	4,053,333	3,326,082	2,462,925	1,759,190	1,251,833	807,585	673,795
2013	100,598,928	10,888,903	10,731,042	10,526,412	10,125,823	9,511,527	8,423,023	7,809,593	6,875,290	5,859,220	4,986,725	4,163,071	3,436,139	2,600,545	1,821,794	1,294,639	838,378	706,804
2014	102,159,894	10,899,499	10,749,257	10,568,460	10,210,133	9,647,810	8,591,138	7,888,695	7,057,385	6,009,691	5,132,400	4,279,427	3,542,960	2,737,291	1,895,882	1,339,170	869,579	741,117
2015	103,709,572	10,908,790	10,766,478	10,602,756	10,286,095	9,758,689	8,792,973	7,955,465	7,224,060	6,171,590	5,276,913	4,402,190	3,647,871	2,866,135	1,984,608	1,386,054	901,813	777,092
2016	105,251,153	10,918,422	10,783,042	10,630,080	10,351,344	9,849,073	9,007,653	8,017,205	7,388,746	6,345,085	5,416,489	4,531,282	3,751,534	2,985,747	2,089,957	1,434,668	935,637	815,189
2017	106,787,580	10,929,836	10,798,645	10,653,860	10,406,230	9,934,266	9,201,193	8,115,902	7,525,808	6,525,024	5,555,227	4,667,667	3,855,132	3,097,609	2,209,535	1,485,635	970,944	855,067
2018	108,316,624	10,942,764	10,813,141	10,675,015	10,454,045	10,022,507	9,363,868	8,249,467	7,632,612	6,708,037	5,696,840	4,810,222	3,962,183	3,203,004	2,336,683	1,542,306	1,007,690	896,240
61.02	109,835,951	10,957,120	10,826,328	10,694,154	10,496,580	10,107,101	9,499,925	8,416,777	7,712,192	7,054,404	5,845,808	4,953,521	4,0/5,6/6	3,305,441	2,463,107	1,609,079	1,045,890	938,595
2020	111,343,300	10,972,615	10,030,000	10,712,236	10,551,591	10, 163,396	9,610,690	0,017,299	7,779,041	7,034,161	6,006,042	5,095,725	4,195,365	3,400,144	2,562,542	1,000,700	1,000,139	902,000
2021	112,039,133	10,986,378	10,650,054	10,729,666	10,559,250	10,249,062	9,701,619	0,630,490	7,042,130	7 254 202	0,177,001	5,233,100	4,321,200	3,505,779	2,693,900	1,7 63,097	1,120,030	1,029,745
2022	114,323,381	10,995,683	10,863,665	10,746,081	10,583,576	10,304,426	9,787,215	9,022,851	7,941,012	7 464 066	0,355,697 6 F 2 6 9 0 3	5,369,881	4,454,247	3,605,447	2,7 98,500	7,689,826	1,1 / 2,044	1,078,942
2023	113,793,933	11,000,657	10,070,000	10,751,331	10,605,273	10,352,762	9,675,791	9,104,707	8 240 505	7 541 112	6715 630	5,509,490	4,393,240	3,700,444	2,097,400	2,003,100	1 278 070	1,130,047
2024	118 685 776	10 998 448	10,634,336	10,77,3,281	10,624,940	10,333,831	10.037.415	9,320,429	8 439 534	7 609 241	6,712,030	5814 290	4,733,040	3 932 749	3.088.512	2,113,300	1346 142	1 238 706
2026	120.105.814	10.992.071	10.927.895	10.800.395	10,661,469	10.459.694	10,103,569	9.522.331	8.651.054	7.672.544	7.041.953	5.983.363	5.006.033	4.053.817	3.182.470	2.323.313	1.426.386	1.297.457
2027	121,510,052	10,983,482	10.938.905	10,814,644	10.678.372	10,484,641	10,159,516	9,608,236	8,842,085	7.771.563	7.177.637	6.158.731	5.139.655	4.181.705	3,276,586	2.418.117	1.516.867	1.359.310
2028	122,896,532	10,972,869	10,945,520	10,830,248	10,694,119	10,506,960	10,208,481	9,697,050	9,003,138	7,904,291	7,284,218	6,337,201	5,276,205	4,315,385	3,373,858	2,508,172	1,612,818	1,425,999
2029	124,263,454	10,960,617	10,948,040	10,847,141	10,708,511	10,527,249	10,252,201	9,782,231	9,138,333	8,069,649	7,364,618	6,513,527	5,419,873	4,449,900	3,476,948	2,596,085	1,708,467	1,500,064
2030	125,608,770	10,947,114	10,946,406	10,865,027	10,721,435	10,546,465	10,288,284	9,859,258	9,249,163	8,267,148	7,433,352	6,675,518	5,574,298	4,583,473	3,585,607	2,682,762	1,799,605	1,583,855
2031	126,932,873	10,931,976	10,941,468	10,881,079	10,734,510	10,564,964	10,317,489	9,925,856	9,340,347	8,476,958	7,497,446	6,835,786	5,739,531	4,712,759	3,699,885	2,768,878	1,885,706	1,678,235
2032	128,236,378	10,914,926	10,934,256	10,892,590	10,749,175	10,582,445	10,343,190	9,982,363	9,426,511	8,666,638	7,596,590	6,970,170	5,910,931	4,841,603	3,820,590	2,855,298	1,967,650	1,781,452
2033	129,517,807	10,896,451	10,924,960	10,899,706	10,765,169	10,598,763	10,366,266	10,031,947	9,515,516	8,826,820	7,728,794	7,076,214	6,085,443	4,973,402	3,946,767	2,944,632	2,045,925	1,891,032
2034	130,776,069	10,877,026	10,913,970	10,902,714	10,782,431	10,613,715	10,387,305	10,076,313	9,600,921	8,961,557	7,892,983	7,156,780	6,257,975	5,112,122	4,073,822	3,039,287	2,122,582	2,004,566
2035	132,010,141	10,857,228	10,901,659	10,901,560	10,800,660	10,627,195	10,407,243	10,113,112	9,678,259	9,072,319	8,088,683	7,226,011	6,416,716	5,261,180	4,200,036	3,139,008	2,198,318	2,120,954
2036	133,220,636	10,836,811	10,887,655	10,897,097	10,817,046	10,640,800	10,426,451	10,143,086	9,745,291	9,163,746	8,296,480	7 290,869	6,573,866	5,420,563	4,322,315	3,243,904	2,273,782	2,240,874
2037	135 572 551	10,793,886	10,874,262	10,881,494	10.836.380	10,633,972	10 461 632	10,103,371	9,802,347	9,230,210	8,404,023	7.521.299	6,810,832	5 754 364	4 569 339	3.470.488	2,343,001	2,303,372
2039	136,712,904	10,772,321	10,835,827	10,870,941	10,839,751	10,690,162	10,477,251	10.215,247	9,897,564	9,425,121	8,777,700	7,683,793	6.891,108	5.921.030	4,700,963	3,587,197	2.511.292	2,615,636
2040	137,828,938	10,751,327	10,816,965	10,859,045	10,838,966	10,708,826	10,491,379	10,235,940	9,935,079	9,502,821	8,888,277	7,876,980	6,960,483	6,074,623	4,842,337	3,703,188	2,598,838	2,743,864
2041	138,920,835	10,730,432	10,797,433	10,845,447	10,834,878	10,725,640	10,505,612	10,255,878	9,965,839	9,570,338	8,979,900	8,081,980	7,025,886	6,226,790	4,993,363	3,815,701	2,690,968	2,874,750
2042	139,988,764	10,709,030	10,776,997	10,829,886	10,828,499	10,737,943	10,521,387	10,274,779	9,993,115	9,628,006	9,066,658	8,267,714	7,124,457	6,355,160	5,150,078	3,928,196	2,788,279	3,008,580
2043	141,032,278	10,687,326	10,756,172	10,812,835	10,820,031	10,745,873	10,538,437	10,292,483	10,017,779	9,678,877	9,156,107	8,425,126	7,254,177	6,457,570	5,309,848	4,043,647	2,890,018	3,145,972
2044	142,050,949	10,665,459	10,735,375	10,794,774	10,809,854	10,749,714	10,556,693	10,308,797	10,040,387	9,724,617	9,242,003	8,558,137	7,413,921	6,536,742	5,468,105	4,165,303	2,992,665	3,288,403
2045	143,044,380	10,643,592	10,715,111	10,776,273	10,798,318	10,749,408	10,575,860	10,323,603	10,061,860	9,762,925	9,320,045	8,668,232	7,603,252	6,605,615	5,614,263	4,295,914	3,094,739	3,435,370
2046	144,012,714	10,621,879	10,694,907	10,757,089	10,785,079	10,745,812	10,593,164	10,338,489	10,082,549	9,794,546	9,388,062	8,759,890	7,803,983	6,671,072	5,759,208	4,435,287	3,193,880	3,587,818
2047	144,955,989	10,600,368	10,674,165	10,736,987	10,769,885	10,739,916	10,605,986	10,354,881	10,102,190	9,822,694	9,446,381	8,846,801	7,986,093	6,768,224	5,881,988	4,579,943	3,293,237	3,746,250
2049	146,765,376	10,57,3,012	10,631,835	10.696.005	10,735,488	10,722,237	10,618,841	10,372,300	10, 120,620	9,040,230	9,497,902	9.022.277	8.271.769	7,050,246	5,960,664	4,727,374	3,503,260	3,910,404
2050	147,630,852	10,536,619	10,610,536	10,676,043	10,717,331	10,711,179	10,619,089	10,410,971	10,153,158	9,894,044	9,583,666	9,100,539	8,380,709	7,233,519	6,125,642	5,009,620	3,618,976	4,249,211

Source: US Census Bureau, International Database http://www.census.gov/cgi-bin/jpc/idbpyrs.pl?cty=RP&out=y&ymax=200

Table 2. Labor data (Old definition of unemployment)

Year	Total 15 Years Old and Over	Labor Force Population	Employed Persons	Unemployed Persons	Underemployed Persons
1980	29,061	17,717	16,219	1,498	
1981	29,963	18,437	16,767	1,669	
1982	30,863	19,070	17,216	1,855	
1983	31,588	20,084	18,050	2,035	6,461
1984	32,598	20,538	18,101	2,437	5,606
1985	32,934	20,866	18,323	2,545	4,177
1986	33,715	21,491	18,998	2,493	5,385
1987	34,714	22,856	20,422	2,434	5,197
1988	35,736	23,589	21,386	2,203	4,998
1989	36,784	24,241	21,996	2,246	5,104
1990	37,999	24,486	22,423	2,063	4,946
1991	38,880	25,797	23,039	2,758	5,065
1992	40,121	26,491	23,931	2,560	4,958
1993	41,304	27,091	24,558	2,534	5,463
1994	42,518	27,810	25,162	2,648	5,094
1995	43,454	28,706	26,010	2,697	5,356
1996	44,890	29,910	27,389	2,521	5,768
1997	46,066	30,506	27,804	2,702	6,179
1998	47,265	30,968	27,800	3,193	6,072
1999	48,045	31,590	28,502	3,088	6,348
2000	47,947	31,467	27,812	3,655	5,752
2001	49,286	33,162	29,559	3,603	5,000
2002	50,705	34,081	30,165	3,916	5,140
2003	52,142	35,007	30,986	4,021	5,390
2004	53,469	35,908	31,632	4,278	5,467
2005	54,525	35,286	32,538	2,748	7,351

Source: Bureau of Labor and Employment Statistics

National Statistics Office

Table 3. Social expenditure

% to GDP

ltem	1981	1981 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 1	1998 1	1999 2	2000	2001 2	2002	2003 2004
Total 「	17.4	17.4 16.1	15.1	13.1	14.0	19.9	22.6	21.0	21.8	24.0	23.7	21.6	21.3	19.4	19.5	19.2	20.3 2	20.2	19.5 2	20.3	15.9 1	18.7 18.	9 17.9
General public services	2.4	2.7	2.4	1.8	2.2	2.2	2.3	2.4	2.4	2.9	2.8	3.2	3.3	3.5	3.4	3.6	3.8	3.8	3.6	3.7	2.6	3.4 3.	1 2.9
Defence	1.7	1.6	1.5	1.0	1.2	1.2	1.2	1.5	4.	4.1	1.3	1.3	4.1	4.	4.	4.1	1.2	1.2	1.1	1.1	1.0	1.0 0	6.0 6.0
Education	2.2	2.1	1.8	1.5	1.9	2.3	2.5	2.8	3.0	3.1	2.7	2.8	5.6	2.7	3.2	3.4	3.9	4.0	3.7	3.5	3.3	3.2 3	3.0 2.8
Health	0.7	0.7	0.7	0.5	9.0	9.0	9.0	0.7	0.7	0.7	0.7	0.7	0.5	0.5	9.0	0.5	9.0	0.5	0.5	0.4	0.3	0.4 0	0.3 0.3
Social security and welfare	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.5	0.8	0.9	0.8	0.8	0.7	0.9	0.8 0.8
Housing and community amenities	0.4	0.5	0.5	0.2	0.1	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.0	0.0	0.0 0.1
Economic services	7.9	0.9	2.0	4.1	3.6	4.6	3.9	3.4	4.4	2.0	2.0	4.4	4.4	5.3	2.7	4.9	5.4	4.9	4.7	5.0	3.1	3.8	8 3.2
Agriculture ^s	1.2	1.3	1.0	0.7	8.0	0.7	1.	1.0	1.3	1.5	1.3	1.	[.	1.2	1.2	1.3	1.7	1.2	1.1	1.0	1.1	0.9	0.8 0.7
Industry ^t	6.0	0.5	9.0	0.3	0.2	0.5	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2).1	0.2	0.1	0.1 0.	1 0.1
Electricity, gas, and water	1.4	0.8	0.3	0.3	0.5	0.5	0.5	0.2	0.3	1.0	0.4	0.4	9.0	9.0	0.4	0.2	0.3	0.2	0.3	0.2	0.2 (0.2 0	0.2 0.2
Transport and communications	3.2	2.7	2.3	1.3	4.	1.2	4.1	1.5	2.0	1.7	2.4	2.0	1.5	2.1	2.1	2.0	2.0	2.2	8.1	2.3	, 9.1	1.4	1.4 1.1
Other economic services	1.1	0.7	0.9	1.5	9.0	1.8	0.7	9.0	9.0	9.0	9.0	0.7	1.0	1.	1.6	1.	1.2	1.1	.3	0 5.1	0.0	1.3	1.3 1.1
Others '	1.9	2.3	3.1	3.8	4.3	9.8	11.9	6.6	9.7	10.7	10.8	8.9	8.8	2.7	4.7	9.4	4.4	4.9	5.0	5.7 4	4.9	6.1 6	8 7.0

Footnotes:

r On obligation basis.

s Includes agrarian reform and natural resources.

t Includes trade and tourism.

u Includes subsidy to local government units (LGUs).

v Includes other social services, social service subsidy to LGUs, net lending, debt service, and land distribution.

Source: Asian Development Bank Key Indicators

Table 4. Gross capital formation

% to GDP

Year	GCF	Year	GCF
1946	22.4	1976	32.9
1947	28.9	1977	30.6
1948	28.8	1978	30.8
1949	20.9	1979	30.8
1950	19.3	1980	29.1
1951	18.6	1981	27.5
1952	16.8	1982	27.9
1953	19.4	1983	29.6
1954	18.3	1984	20.3
1955	17.8	1985	14.3
1956	18.1	1986	15.2
1957	20.0	1987	17.5
1958	19.1	1988	18.7
1959	20.3	1989	21.6
1960	18.6	1990	24.2
1961	20.7	1991	20.2
1962	20.4	1992	21.3
1963	22.1	1993	24.0
1964	23.5	1994	24.1
1965	23.4	1995	22.0
1966	22.2	1996	24.0
1967	23.5	1997	24.8
1968	22.6	1998	20.3
1969	22.4	1999	18.8
1970	21.3	2000	21.2
1971	21.0	2001	19.0
1972	20.8	2002	17.7
1973	21.8	2003	16.7
1974	26.9	2004	17.1
1975	30.9	2005	15.7

Source of basic data: National Statistical Coordination Board

Table 5.a Population, live births, deaths and natural increase in the Philippines: 1903-2000

Year	Population ²	Number	Births Rate ³	Deat Number	Rate ³	Natural I	ncrease Rate ³
1903		•				Number	
	7,635*	284,800	37.3	329,671	43.2	-44,871	-5.9
1904	7,659	216,176	28.2	146,894	19.2	69,282	9
1905	7,699	244,586	31.8	166,555	21.6	78,031	10.1
1906	7,761	215,296	27.7	143,284	18.5	72,012	9.3
1907	7,844	258,010	32.9	138,464	17.7	119,546	15.2
1908	7,964	278,369	35	190,495	23.9	87,874	11
1909	8,095	234,726	29	179,355	22.2	55,371	6.8
1910	8,220	290,210	35.3	191,576	23.3	98,634	12
1911	8,387	302,855	36.1	188,412	22.5	114,443	13.6
1912	8,576	290,995	33.9	185,185	21.6	105,810	12.3
1913	8,786	316,056	36	154,086	17.5	161,970	18.4
1914	9,017	347,337	38.5	163,943	18.2	183,394	20.3
1915	9,269	327,206	35.3	176,313	19	150,893	16.3
1916	9,542	340,629	35.7	195,970	20.5	144,659	15.2
1917	9,836	353,283	35.9	212,334	21.6	140,949	14.3
1918	10,314*	345,751	33.5	367,106	35.6	-21,355	-2.1
1919	10,314	306,832	29.7	326,716	31.6	-19,884	-1.9
1920	10,324	351,195	33.6	200,690	19.2	150,505	14.4
1921							
	10,673	364,432	34.1	205,654	19.3	158,778	14.9
1922	10,908	373,506	34.2	203,237	18.6	170,269	15.6
1923	11,152	385,418	34.6	202,981	18.2	182,437	16.4
1924	11,405	-	-	-	-	-	-
1925	11,666	-	-	-	-	-	-
1926	11,935	400,439	33.6	229,928	19.3	170,511	14.3
1927	12,212	414,357	33.9	229,328	18.8	185,029	15.2
1928	12,498	422,716	33.8	218,096	17.5	204,620	16.4
1929	12,792	428,996	33.5	237,733	18.6	191,263	15
1930	13,094	429,245	32.8	252,988	19.3	176,257	13.5
1931	13,405	440,159	32.8	240,825	18	199,334	14.9
1932	13,724	446,940	32.6	211,809	15.4	235,131	17.1
1933	14,051	459,682	32.7	227,594	16.2	232,088	16.5
1934	14,387	447,738	31.1	239,703	16.7	208,035	14.5
1935	14,731	461,410	31.3	257,181	17.5	204,229	13.9
1936	15,084	485,126	32.2	239,107	15.9	246,019	16.3
1937	15,445	513,760	33.3	254,740	16.5	259,020	16.8
1938	15,814	512,389	32.4	261,848	16.6	259,020	15.8
1939	16,000*		32.4	273,141	16.9		15.6
1940		522,432				249,291	
1940	16,460	535,117	32.5	273,480	16.6	261,637	15.9
1941	16,774	-	-	-	-	-	-
	17,093	-	-	-	-	-	-
1943	17,419	-	-	-	-	-	-
1944	17,751	-	-	-	-	-	-
1945	18,090	-	-	-	-	-	-
1946	18,434	533,283	28.9	278,546	15.1	254,737	13.8
1947	18,786	272,226	14.5	238,527	12.7	33,699	1.8
1948	19,234*	602,415	31.3	243,467	12.7	358,948	18.7
1949	19,509	609,138	31.2	231,151	11.8	377,987	19.4
1950	19,881	642,472	32.3	226,505	11.4	415,967	20.9
1951	20,260	637,264	31.5	237,937	11.7	399,327	19.7
1952	20,646	650,725	31.5	241,020	11.7	409,705	19.7
1953	21,039	468,489	22.3	239,988	11.4	228,501	10.9
1954	22,869	702,662	30.7	217,650	9.5	485,012	21.2
1955	23,568	734,761	31.2	212,798	9.5	521,963	22.1
1956	24,288	542,249	22.3	205,581	8.5	336,668	13.9

Table 5.a. (Concluded)

Year	Live Births			Deaths		Natural Increase	
	Population ²	Number	Rate ³	Number	Rate ³	Number	Rate ³
1957	25,030	514,202	20.5	199,919	8	314,283	12.6
1958	25,795	484,592	18.6	185,437	7.2	299,155	11.6
1959	26,584	616,893	23.2	176,448	6.6	440,445	16.6
1960	27,088*	649,651	24	196,544	7.3	453,107	16.7
1961	28,214	647,846	23	207,436	7.3	440,410	15.8
1962	29,064	775,146	26.7	169,880	5.9	605,266	20.8
1963	29,937	786,698	26.3	214,412	7.2	572,286	19.1
1964	30,841	802,648	26	222,097	7.2	580,551	18.8
1965	31,770	795,415	25	234,935	7.4	560,480	17.6
1966	32,727	823,342	25.2	236,396	7.2	586,946	17.9
1967	33,713	840,302	24.9	240,122	7.1	600,180	17.8
1968	34,728	898,570	25.9	261,893	7.5	636,677	18.3
1969	35,774	946,753	26.5	241,678	6.8	705,075	19.7
1970	36,684*	966,762	26.4	234,038	6.4	732,724	20
1971	37,902	963,749	25.4	250,139	6.6	713,610	18.8
1972	38,991	968,385	24.8	285,761	7.3	682,624	17.5
1973	40,123	1,049,290	26.2	283,475	7.1	765,815	19.1
1974	41,279	1,081,073	26.2	283,975	6.9	797,098	19.3
1975	42,071*	1,223,837	29.1	271,136	6.4	952,701	22.6
1976	43,338	1,314,860	30.3	299,861	6.9	1,014,999	23.4
1977	44,417	1,344,836	30.3	308,904	7	1,035,932	23.3
1978	45,498	1,387,588	30.5	297,034	6.5	1,090,554	24
1979	46,592	1,429,814	30.7	306,427	6.6	1,123,387	24.1
1980	48,098*	1,456,860	30.3	298,006	6.2	1,158,854	24.1
1981	49,536	1,461,204	29.5	301,117	6.1	1,160,087	23.4
1982	50,783	1,474,491	29	308,758	6.1	1,165,733	23
1983	52,055	1,506,356	28.9	327,260	6.3	1,179,096	22.7
1984	53,351	1,478,205	27.7	313,359	5.9	1,164,846	21.8
1985	54,668	1,437,154	26.3	334,663	6.1	1,102,491	20.2
1986	56,004	1,493,995	26.7	326,749	5.8	1,167,246	20.8
1987	57,356	1,582,469	27.6	335,254	5.8	1,247,215	21.7
1988	58,721	1,565,372	26.7	325,098	5.5	1,240,274	21.1
1989	60,097	1,565,254	26	325,621	5.4	1,239,633	20.6
1990	60,703*	1,631,069	26.9	313,890	5.2	1,317,179	21.7
1991	63,729	1,643,296	25.8	298,063	4.7	1,345,233	21.1
1992	65,339	1,684,395	25.8	319,579	4.9	1,364,816	20.9
1993	66,982	1,680,896	25.1	318,546	4.8	1,362,350	20.3
1994	68,624	1,645,011	24	321,440	4.7	1,323,571	19.3
1995	68,617*	1,645,043	24	324,737	4.7	1,320,306	19.2
1996	69,951	1,608,468	23	344,363	4.9	1,264,105	18.1
1997	71,549	1,653,236	23.1	339,400	4.7	1,313,836	18.4
1998	73,147	1,632,859	22.3	352,992	4.8	1,279,867	17.5
1999	74,746	1,613,335	21.6	347,989	4.7	1,265,346	16.9
2000	76,504*	1,766,440	23.1	366,931	4.8	1,399,509	18.3

Notes: * Actual census count.

Source: Health and Vital Statistics Division, Civil Registration Department, National Statistics Office

¹ Figures are results of actual registration without any adjustment for underregistration.

² Estimated midyear population. 3 Per 1,000 midyear population.

Table 5.b Infant mortality rate in the Philippines: 1926-2000

Year	Infant Mortality		Year	Infant M	Infant Mortality	
	Number	Rate⁴	rear	Number	Rate ⁴	
1926	62,753	156.7	1964	56,614	70.5	
1927	63,205	152.5	1965	57,988	72.9	
1928	63,441	150.1	1966	59,284	72	
1929	69,334	161.6	1967	60,703	72.2	
1930	70,826	165	1968	63,786	71	
1931	68,290	155.1	1969	63,719	67.3	
1932	61,511	137.6	1970	57,970	60	
1933	67,002	145.8	1971	59,730	62	
1934	72,008	160.8	1972	65,719	67.9	
1935	70,793	153.4	1973	67,881	64.7	
1936	64,999	134	1974	63,491	58.7	
1937	70,515	137.3	1975	65,263	53.3	
1938	71,239	139	1976	74,792	56.9	
1939	76,377	146.2	1977	76,330	56.8	
1940	72,647	135.8	1978	73,640	53.1	
1941	-	-	1979	71,772	50.2	
1942	-	-	1980	65,700	45.1	
1943	-	-	1981	64,415	44.1	
1944	-	-	1982	61,665	41.8	
1945	-	-	1983	64,267	42.7	
1946	66,902	125.5	1984	56,897	38.5	
1947	63,809	234.4	1985	54,613	38	
1948	68,897	114.4	1986	52,263	35	
1949	66,114	108.5	1987	50,803	32.1	
1950	65,273	101.6	1988	47,187	30.1	
1951	67,209	105.5	1989	43,026	27.5	
1952	65,883	101.2	1990	39,633	24.3	
1953	69,720	148.8	1991	34,332	20.9	
1954	66,175	94.2	1992	36,814	21.9	
1955	61,958	84.3	1993	34,613	20.6	
1956	60,136	110.9	1994	31,073	18.9	
1957	58,028	112.9	1995	30,631	18.6	
1958	52,923	109.2	1996	30,550	19	
1959	57,590	93.4	1997	28,061	17	
1960	54,968	84.6	1998	28,196	17.3	
1961	57,280	88.4	1999	25,168	15.6	
1962	45,440	58.6	2000	27,714	15.7	
1963	57,308	72.8				

Note: ⁴ Per 1,000 live births.

Source: Health and Vital Statistics Division
Civil Registration Department
National Statistics Office
Republic of the Philippines

Table 5.c Fetal mortality rate in the Philippines: 1960-2000

Year	Fetal Mo	Fetal Mortality		Fetal Mortality	
rear	Number	Rate ⁴	Year	Number	Rate⁴
1960	9,966	15	1981	13,343	9
1961	11,007	17	1982	13,465	9
1962	11,480	15	1983	14,780	10
1963	12,045	15	1984	11,884	8
1964	11,389	14	1985	8,948	6
1965	14,454	18	1986	8,400	6
1966	12,125	15	1987	10,515	7
1967	12,315	15	1988	10,641	7
1968	12,835	14	1989	11,423	7
1969	11,496	12	1990	11,915	7
1970	12,561	13	1991	10,776	7
1971	12,969	14	1992	8,631	5
1972	13,577	14	1993	9,338	6
1973	10,808	10	1994	9,291	6
1974	13,451	12	1995	9,731	6
1975	13,764	11	1996	9,693	6
1976	14,865	11	1997	9,706	6
1977	14,589	11	1998	6,232	4
1978	14,365	10	1999	9,841	6
1979	14,586	10	2000	10,360	6
1980	13,965	10			

Note: 4 Per 1,000 live births.

Source: Health and Vital Statistics Division Civil Registration Department National Statistics Office Republic of the Philippines

Table 6. Literacy rate in the Philippines: 15-24 Years Old

%

Year	Both Sexes	Male	Female
1990	97.3	97.1	97.4
1991	97.4	97.2	97.6
1992	97.6	97.4	97.8
1993	97.8	97.6	98.0
1994	97.9	97.7	98.1
1995	98.1	97.9	98.3
1996	98.2	98.0	98.4
1997	98.4	98.1	98.6
1998	98.5	98.3	98.7
1999	98.6	98.4	98.8
2000	98.7	98.5	98.9
2001	98.8	98.6	99.0
2002	98.9	98.7	99.1
2003	99.0	98.8	99.2
2004	95.1	94.5	95.7

Source: Asian Development Bank Key Indicators Notes: Data for 2004 refer to 2000-2004 average.