THE PERFORMANCE AND PROSPECTS OF SMALL AND INTERMEDIATE SIZE CITIES IN THE PHILIPPINES^{*}

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Abstract

The paper argues that small and intermediate size cities (SMCs) are essential parts of the national urban system and, therefore, an understanding of their structure and behavior would sharpen our grasp of issues concerning primacy as well as help rationalize attempts to bring about diffuse urbanization and development. A spatial-temporal framework reflecting economic policy thrusts is used in the analysis. While the few large cities (LCs) in the various regions grew consistently rapidly since the early part of the century, SMCs tended to be subject to the differential impacts of policy on the regions. Thus, those in the central industrial region (CIR) have been buoyant due to a progressive economic environment favored by policy; by contrast, SMCs in the other regions performed poorly because they tended to be sapped by LCs in the same region and those in the CIR. There is some indication, however, that SMCs in the less developed regions have recently begun to perk up - probably less due to the efficacy of regional development policy than to diseconomies of scale at the National Capital Region or more broadly the CIR. Regional policy may become more effective if it systematically considers SMCs so that at least some of them can flourish and thus spontaneously foster broader rural industrialization and regional development.

Introduction

Because urban systems in most developing countries are punctuated by primary, urban research has tended to focus on the primate city or on secondary cities as alternative centers for decentralized urbanization. Very little attention has so far been given to small and intermediate size cities, resulting in a partial view of the national urban system. In discussions of development policy these cities have been taken for granted and their potential role largely ignored.

This paper takes the position that small and intermediate size cities are essential parts of the national urban system so that an understanding of their structure and behavior would sharpen our grasp of issues concerning primacy as well as attempts to bring about diffuse urbanization and development. Accordingly, in this paper we examine small and intermediate size cities in the Philippines to see what has been their growth performance over time, what factors have underlaid their behavior, what role they might play in national development and how such role may be fostered by policy. The organization of the paper follows these questions.

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Performance of SMCs

Data compiled by the United Nations reveal the slackening growth of small and intermediate size cities $(SMCs)^1$ in developing countries since 1950, resulting in a diminution of their position in the national urban hierarchy (Mathur 1981). This observation can also be made regarding $SMCs^2$ in the Philippines, as can be seen in Table 1.

City Size	1903-39	1 9 48-60	1960-70	1970-80
Small	1.79	2.00	2.05	2.17
Intermediate	2.57	3.11	2.11	2.57
Large	3.16	3.75	4.22	3.79
Total	2.51	3.10	3.18	<u>3.15</u>

Table 1.	Annual	Perce	nt Gro	owth	Rates	of	Population	n
of D	ifferent	Size C	ities:	Philip	pines.	, 19	903-80	

Source: Annex Table 1.

We note that large (100,000+) cities consistently grew the fastest, always exceeding the national urban average, over the long historical stretch from 1903 to 1980. Especially salient among these large cities are Metro Manila in Luzon, Metro Cebu and Bacolod in the Visayas, and Zamboanga and Davao in Mindanao (see the Annex map). The overall growth rate of large cities peaked during the 60s at 4.2 percent per annum. Small (40,000-59,999) cities started out slow and hardly changed their growth rate during the 50s and 60s, but picked up somewhat in the 70s. After some burst in 1948-60, intermediate (60,000-99,999) cities decelerated in the 60s and also perked up in the 70s. A particularly noteworthy point in Table 1 is the visibly slow growth of SMCs in the 60s in contrast to a most rapid expansion of large cities (LCs) during the same period. This was the decade when several SMCs experienced absolute decreases in population (see Annex

 $^{^{1}}$ SMC's are defined as urban places with population in the 20,000-100,000 range.

²For the present paper, size categories are reckoned as of 1960: small = 40,000 - 59,999; intermediate = 60,000-99,999; large = 100,000. This procedure allows for a backward and forward inspection of the performance of these different size cities.

Table 2). While SMCs had always been the sources of growth for LCs, it was during 1960-70 when the former suffered severe population losses to the latter. A final point that can be gleaned from Table 1 is that during the 70s SMCs picked up at the same time LCs appeared to be tapering off.

We argue that the growth pattern of small, intermediate and large cities can be explained by natural economic and social forces accentuated by the spatial biases of economic development policies.³ And to the extent that the large-city bias becomes established, dispersal policies designed to promote regional and rural development benefitting SMCs tend to be ineffective.

A Spatial-Temporal Framework

We attempt to explain in growth pattern of different size cities in the context of the country's four broad economic regions and four historical periods representing changing economic policy thrusts (see Pernia, Paderanga and Hermoso, forthcoming). The four regions are: the National Capital Region (NCR or Metro Manila), the Central Industrial Region excluding NCR (Other CIR: Southern Tagalog and Central Luzon), the Sluggish Region (SR: the Visayas, Bicol and Ilocos), and the Frontier Region (FR: Mindanao and Cagayan Valley). These regional divisions of the country were arrived at on the basis of the following criteria: (a) natural resource endowments or constraints, (b) spatial impacts of economic policies, (c) the distributions of rural and urban population and economic activity over time, and (d) growth rates of population and economic activity.

The four historical periods are: the Colonial Period (1903-39), Early Import Substitution Period (1948-60), Later Import Substitution Period (1960-70), and Regional Awareness Period (1970--80). The Colonial Period was characterized by preferential trade relations with the U.S. which facilitated the exportation of agricultural products from the colony to the mother country.⁴ Hence, during this period the center of population and economic activity was largely the traditional agricultural regions of the Visayas, Bicol and Ilocos (what are referred to now as the Sluggish Region).⁵

The period after World War II (1948-60) is known as the Early Import Substitution Period because industrialization policy was anchored on various kinds of import-substituting measures,

³This argument has been made by a number of scholars although in somewhat different contexts (e.g., Alonzo, 1968, Sicat, 1970, Renaud, 1979).

 $^{^{4}}$ For a review of economic policies during the Colonial Period, see Reyes and Paderanga (forthcoming).

⁵This can be seen in Annex Table 4-5.

such as exchange and import controls, tax incentives, tariffs and credit schemes. Because of the (well-known) problems that cropped up on account of exchange and import controls, there was a change in policy to decontrol and devaluation in the subsequent period (1960-70). Nonetheless, the import substitution strategy was effectively carried over with the continuation of the tariff structure and tax incentives, including wage and price policies; hence, the nomenclature Later Import Substitution Period.⁶

We have shown elsewhere (Pernia, Paderanga and Hermoso, forthcoming) that during the 50s and 60s there was massive shift of population and economic activity from the traditional agricultural regions (making them sluggish — thus the term SR) to Metro Manila, gradually spilling over into the adjacent regions of Southern Tagalog and Central Luzon (Other CIR). Thus, the trade and industrial development policies of the earlier and later import substitution periods exerted a strong impact for spatial concentration in Metro Manila and more broadly in what is now known as Central Industrial Region (see Annex Tables 4-7).

The fourth period (1970-80) can be identified by the government's conscious attempt at regional and rural development, although there were already such attempts (or intentions) earlier as exemplified by the Basic Industries Act of 1961. The objectives of dispersed development was to be pursued more vigorously this time by various investment and export promotion policies in addition to agricultural and infrastructure programs (see Reyes and Paderanga, forthcoming). However, due to the lingering spatial effects of former policies, the well-developed networks for migration, as well as agglomeration economies benefitting individual firms and households, the end of the 70s saw little departure from the concentration that had been built up in the 50s and 60s (Pernia, Paderanga and Hermoso, forthcoming).

In the context of our spatial-temporal framework which reflects policy timing and regional impact, we find that the growth of cities of all sizes was both rapid and steadily rising in the NCR, and slightly less so in the other CIR, from 1903 to 1970 followed by some deceleration in 1970-80 (Table 2). The opposite seems to be the case for the SR and the FR although the growth rates in the latter were higher during the first two periods. What is particularly striking are the peak growth rates in the NCR and Other CIR (4.8 and 3.7 percent) in contrast to the low ones in the SR and FR (1.7 and 2.5 percent) during the Later Import Substitution Period (1960-70).

 $^{^{6}}$ For a comprehensive discussion of import-substitution policies during the 50's and 60's, see op. cit.

Region	1903-39	1948-60	1960-70	1970-80
NCR	3.13	4.04	4.78	4.10
Other CIR	1.79	2.96	3.74	2.70
SR	2.23	2.24	1.70	1.86
FR	4.42	3.68	2.53	3.78
Philippines	2.51	3.10	3.18	3.15

Table 2. Annual Percent Growth Rates of Population in AllSize-Class Cities by Broad Region, 1903-80

Source: Annex Table 3.

Table 3. Annual Percent Growth Rates of Citiesby Size and Broad Region, 1903-80

	1903-39	1948-60	1960-70	1970-80
NCR	3.13	4.04	4.78	4.10
Other CIR	1.79	2.96	3.74	2.70
Small Intermediate Large	1.57 2.16	2.61 3.45	3.67 3.84	2.61 2.83
Sluggish	2.23	2.24	1.70	1.86
Small Intermediate Large	1.82 2.59 2.60	1.78 2.41 2.78	1.42 0.89 2.84	1.89 1.66 1.99
Frontier	4.42	3.68	2.53	3.78
Small Intermediate Large	$2.73 \\ 4.26 \\ 5.46$	$1.64 \\ 4.79 \\ 4.10$	$1.16 \\ 2.51 \\ 3.59$	$2.12 \\ 4.08 \\ 4.62$
PHILIPPINES	2.51	3.10	3.18	3.15

Source: Annex Table 3.

If we control for city size as in Table 3, we note essentially the same pattern as the more aggregative one in Table 2. Small and intermediate size cities in the CIR evince accelerating growth rates during the Early and Later Import Substitution Periods⁷ at the same time that those in the SR and FR were becoming depressed. In other words, regardless of size, cities tend to perform better in certain regions and periods than in others. It thus seems that insofar as the growth of cities is concerned, the key aspect is not so much size *per se* but the economic region in which cities are located as well as the relevant historical period.

The buoyancy of large cities in the SR even during the Import Substitution Period (1948-70) can be explained by the fact that they (Cebu, Bacolod and Iloilo) have been highly connected with Metro Manila (or the NCR) which was having a heyday during that era. The same is true of Davao and to some extent Zamboanga in the FR (see Annex Table 3).

In sum, small and intermediate cities (SMCs) in the CIR have been growing rapidly over time due to its progressive economic environment favored by economic policy. By contrast, SMCs in the SR and FR have performed poorly because they tended to be sapped by large cities (LCs) in the same region and by cities in the CIR. In other words, following Myrdal (1957), the process has generated mostly backwash and little spread effects to SMCs in the lagging regions. LCs in all regions have been generally buoyant on account of their connectivity with the NCR and to some extent among themselves.⁸ All this bears out the segmentation of the national urban system in line with a fragmented space economy.

Prospects of SMCs

Data on the most recent intercensal period, 1970-80, seem to signal an overall acceleration of the growth of SMCs, on the one hand, and a deceleration for LCs, on the other (Table 1). But, again this generalization does not apply when we look at cities in the context of the different regions (Table 3). SMCs in the SR and FR appear to have become resilient while those in the CIR are slowing down. Particularly resilient SMCs are Bago, Tacloban, Silay and Cauayan in the SR, and Cagayan de Oro, General Santos, Panabo, Midsayap and Pagadian in the FR (Annex Map). Could this be the result of the Regional Awareness policy or of such spontaneous market forces as diseconomies of scale at the NCR and Other CIR?

⁷Noteworthy among these SMC's in the CIR are Calamba, Cavite, Lucena, San Fernando, and Angeles (Annex Map).

⁸Five such cities stand out in recent years and currently: Metro Cebu, Iloilo, Bacolod, Davao and Zamboanga (Annex Table 3 and Annex Map).

Some manifestations of policy and economic activity do not seem to indicate an appreciable reversal of the trends established during the Import Substitution Period. Table 4 shows that the share of government infrastructure expenditures for the CIR remained at about 56 percent of total from 1959-61 to 1971-73; in fact, for most projects the shares increased. Also, during the good part of the 70s tax incentives, purportedly for regional dispersal in addition to export promotion, were mostly granted to firms and investments in the NCR or more broadly the CIR. As can be seen in Table 5, over the period 1968-77, 56 percent of new projects and 86 percent of firms benefitting from the incentives were concentrated in the CIR; as much as 73 percent of firms were located in the NCR.

There had generally been no visible response on the part of the business sector to the government's avowed initiative for the development of the lagging regions, as may be gleaned from Table 6. Business investments have apparently continued to be concentrated in the NCR and other parts of CIR — up to as much as 85 percent of total large investments by 1979 from 73 percent in 1970. The SR and FR captured average shares of only 12 and 11 percent, respectively, of these investments during the 70s.

The government has seemingly been more successful with regard to small and medium scale industries. As Table 7 shows, the proportion of loans going to these enterprises in the peripheral regions appears to have risen from one-fifth to almost one-third of total in the SR and from 15 to 19 percent in the FR during the 1978-79 period alone. The relative success of regional policy in terms of the promotion of small and medium industries (see, e.g., Pernia 1982) may well partially explain the resilience of small and intermediate cities (SMCs) in the SR and FR during the 70s. Their growth and development may have stemmed out-migration from, as well as attracted in-migration to, these SMCs. As is already known, small and medium enterprises abound in the SMCs of the relatively unindustrialized regions.

Conclusion and Implications

On the whole, small and intermediate size cities (SMCs) in the Philippines experienced depressed growth rates during the 50s and 60s, following the general trend observed in developing countries. However, when SMCs are analyzed in a spatial-temporal framework, it turns out that only those in the backward regions performed poorly, as expected. SMCs in the Central Industrial Region favored by the industrial and trade policies of the Import Substitution Period exhibited buoyancy similar to that of Metro Manila and a few other large cities (LCs) in the lagging regions.

Demisur	All Infr	astructure	Port	works	Water	works	Irri	gation	Flood and D	Control rainage	Building and h	g, Schools Iospitals	Highways
Kegion	1959-61	1971-73	1959-61	1971-73	1959-61	1971-73	1959-61	1971-73	1959-61	1971-73	1959-61	1971-73	1971-73
CR	56.6	56.1	70.4	64.5	54.3	92.2	25.9	63.6	61.3	67.1	70.1	60.5	26.0
SR	24.0	24.9	18.4	20.6	26.1	4.1	47.5	8.4	23.3	20.9	4.1	34.7	44.0
FR	19.4	19.0	11.2	14.9	19.6	3.7	23.5	28.0	15.4	12.0	25.8	4.8	30.0
TOTAL*	40,104.0	224,869.8	11,141.9	22,813.6	12,255.3	24,733.7	8,828.4	87,080.1	1,601.7	8,086.6	7,055.9	17,409.0	66,802.0

Table 4. Allocation of Infrastructure Expenditure by Broad Region, FY 1959-61 to 1971-73(in percent)

*Total expenditures are expressed in thousands of pesos.

Source: Javier (1976), p. 298.

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D .:	Projects,	1 9 68-74ª	Firms, 1970-77 ^b			
Region NCR CIR SR FR Philippines	Number	Percent	Number	Percent		
NCR	*	*	379	73		
CIR	167	56	66	13		
SR	51	17	45	9		
FR	80	27	30	6		
Philippines	298	_100_	520	_100		

Table 5. Distribution of Projects and Firms Given TaxIncentives by Broad Region

*Included in CIR.

aUnder Investment Incentives Act, September 1967.

^bUnder Export Incentives Act, October 1970.

Source Board of Investments.

Table 6. Distribution of Paid-in Capital of All BusinessOrganizations by Broad Region (in percent)

1070	
1979	1970-79*
72.5	57.1
12.5	20.0
10.0	12.0
5.0	10.9
₱ <u>2,250 M</u>	₱15,357 M
-	1979 72.5 12.5 10.0 5.0 P 2,250 M

*Cumulative total.

Sources: Central Bank Statistical Bulletin, 1951-79; Bureau of Commerce. and Securities and Exchange Commission.

These LCs have been well connected with Metro Manila but not with SMCs in their own region. Thus, it seems that during the 50s and 60s economic policies along with natural economic and social forces tended to further accentuate the segmentation of the national urban system or the space economy in general.

Region	1978	1979
NCR	40.1	30.0
CIR	23.9	21.4
SR	20.9	29.2
\mathbf{FR}	15.0	19.4
Philippines (100%)	P 132.9 M	₱181.2 M

Table 7.	Distribution	of Government-Sponsored Loans to
Small	and Medium	Scale Industries by Broad Region
		(in percent)

Source: Development Bank of the Philippines.

During the 70s, SMCs in the backward regions appeared to be resilient. It is difficult, however, to attribute such resilience to the government's avowed regional orientation shift because policy manifestations in terms, for example, of the shares of infrastructure expenditures and tax incentives going to the lagging regions remained low relative to the National Capital Region or more broadly the Central Industrial Region. Likewise, large business investments continued to be concentrated in the advanced regions. Regional policy, nevertheless, appears to show some initial success in the promotion of small and medium scale industries in the less developed regions. This may well explain in part the apparent resurgence of SMCs in these regions during the 70s.

In the Philippines, as in many developing countries, small enterprises hold a dominant position in the manufacturing sector (Annex Table 6). This is particularly true in small and intermediate cities outside the industrial region. it seems that providing the environment conducive for the promotion of small industries is a promising role that SMCs can play. This is because small enterprises can prosper without the advantages of agglomeration and urbanization economies present in large cities.

There is scope for government intervention in, for instance, putting up the relatively inexpensive infrastructure in SMCs so that they can offer a climate favorable to small enterprises. In addition, intervention can be in terms of technical extension services and concessionary loans, as had been successfully initiated by the Ministry of Industry about seven years ago, but in which there is still much latitude for expansion and improvement. Recently, the government launched a huge program of local community projects (*Kilusang Kabuhayan at Kaunlaran* — KKK). The KKK approach is supposed to reach all towns in cities throughout the country in as short a time as two to three years. While the economic rationale of such an ambitious program is not yet clear, it seems logical to expect that SMCs are better placed to receive them than are small towns and barrios, and that certain SMCs are more prepared than others would be. It is important, in other words, to have a more general policy on SMCs before specific local projects are put in place.

To the extent that a policy on SMCs is correctly fashioned, they can be expected to flourish and thus spontaneously serve as agents in rural industrialization and regional development. The time may be ripe for a conscious SMC policy since the lingering concentration effects of the import substitution strategy may be starting to weaken and diseconomies of scale may be creeping up in Metro Manila and in other large cities. An SMC policy may be seen as a complement to, or even a substitute for, the well-worn alternative growth centers strategy.

ANNEX

Table 1.	Population	of Small,	Intermediate and	l Large	Cities:	Philippines,	1903-80
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Size Category*/Name	1903	1918	1939	1948	1960	1970	1975	1980 ^a
SMALL	683,206	811,074	1,358,046	1,652,325	2,367,440	2,912,901	3,233,577	3,607,819
Guagua (Pampanga)	15,151	15,962	22,331	34,738	40,126	58,270	65,336	72,609
Malalag (Davao del Sur)	· _	·			40,153	34,764	44,034	44,669
Sultan sa Barongis (Maguindanao)	-	_	_	****	40,347	45,421	17,630	21,639
Camiling (Tarlac)	25,243	23,375	25,824	33,935	40,536	49,156	52,421	53,920
Bauan (Batangas)	39,0 9 4	27,729	37,043	40,168	41,147	36,862	38,200	43,543
Laoang (N. Samar)	8,636	11,508	19,736	29,748	41,158	37,382	42,498	46,883
Manaoag (Pangasinan)	16,793	22,279	29,030	34,304	41,164	48,091	48,450	36,749
Pagadian (Zamboanga del Sur)		· _	46,262	51,913	41,810	57,615	66,062	80,519
Daraga (Albay)	18,695	_	29,484		41,973	58,335	63,265	73,224
Himamaylan (Negros Occidental)	14,932	15,559	28,407	33,984	41,985	53,663	65,521	70,076
Milang (N. Cotabato)	· _	-	-	_	42,085	44,844	51,596	56,975
Sariaya (Quezon)	12,453	14,158	25,736	29,904	42,089	58,997	66,842	74,154
Panabo (Davao del Norte)			_		42,509	42,920	53,015	63,618
Tuguegarao (Cagayan)	16,105	19,298	27,643	29,083	43,074	56,956	62,513	73,529
Cauayan (Negros Occidental)	8,174	13,907	25,645	34,946	43,384	52,508	64,244	71,301
Ozamis (Misamis Occidental)	11,709	23,237	36,313	35,262	44,091	64,643	71,559	78,036
Lubao (Pampanga)	19,063	21,614	29,154	36,574	44,129	61,608	69,903	77,502
Urdaneta (Pangasinan)	20,544	24,536	29,120	35,811	44,744	58,690	65,390	71,889
Tanauan (Batangas)	18,263	22,473	26,186	30,203	44,979	61,910	66,703	74,005
Concepcion (Tarlac)	12,962	17,487	32,702	30,785	45,084	62,227	72,554	80,650
Lingayen (Pangasinan)	21,529	22,750	30,655	36,806	45,321	56,906	59,034	65,025
Olongapo (Zambales)	_	_			45,330	107,785	147,109	156,312
Bansalan (Davao del Sur)		—		—	45,360	33,374	35,558	40,671

Midsayap (N. Cotabato)	-	_	23,033	42,473	46,169	47,093	52,142	67,079
Talisay (Negros (Occidental)	14,548	14,165	40,547	43,610	46,308	45,084	48,518	52,229
Tabaco (Albay)	21,946	24,812	29,957	33,209	46,416	60,572	65,254	71,928
Bulan (Sorsogon)	13,431	19,268	29,414	37,231	46,520	54,180	56,013	60,843
Manapla (Negros Occidental)	10,123	10,033	19,490	35,218	46,809	31,097	38,357	37,494
Hagonoy (Bulacan)	21,304	22,490	29,734	37,532	46,861	59,899	65,592	73,532
Janiuay (Iloilo)	20,738	24,641	38,778	44,348	46,946	34,409	39,172	39,973
Bayambang (Pangasinan)	11,093	15,260	25,578	35,171	47,490	56,415	62,808	64,044
Guinobatan (Albay)	20,207	25,113	26,419	32,280	48,157	47,190	49,724	52,477
Malolos (Bulacan)	12,575	26,109	33,384	38,779	48,968	73,996	83,491	95,641
Lucena City (Quezon)	9,375	12,108	21,675	33,092	49,264	77,006	92,330	107,872
Roxas City (Capiz)	21,472	23,022	29,021	32,353	49,326	67,648	71,305	81,183
Laoag City (llocos Norte)	34,454	38,469	41,842	44,406	50,198	61,727	66,259	69,648
Baguio City (Benguet)	489	5,464	$24,\!117$	29,262	50,436	84,538	97,449	118,611
Malasigui (Pangasinan)	14,550	22,747	33,660	40,786	50,736	61,423	67,489	71,801
Baybay (Leyte)	22,990	30,917	42,526	50,725	51,779	63,782	67,031	74,771
Libmanan (Camarines Sur)	17,416	11,729	23,000	43,482	52,512	62,862	66,601	68,413
Gingoog (Misamis Oriental)	2,876	5,391	16,746	30,699	52,677	65,522	66,577	81,098
Ligao (Albay)	17,687	21,467	27,927	37,331	53,376	56,765	61,548	62,860
Tacloban (Leyte)	11,948	15,787	31,233	45,421	53,551	74,391	80,707	102,609
Cavite City (Cavite)	16,337	22,169	38,054	35,052	54,891	75,739	82,456	87,813
Naga City (Camarines Sur)	17,943	9,396	22,505	56,238	55,506	79,846	83,337	90,712
La Carlota City (Negros Occ.)	13,097	20,410	26,084	45,789	56,772	38,321	40,984	42,651
San Fernando (Pampanga)	13,556	20,622	35,662	39,549	56,861	84,862	98,382	110,892
Calamba (Laguna)	8,058	18,062	32,363	36,586	57,715	82,714	97,432	121,066
Bago City (Negros Occidental)	23,630	26,262	53,874	56,693	58,834	71,653	89,213	103,116
Escalante (Negros Occidental)	12,192	29,287	60,152	56,846	59,768	52,060	53,969	69,695
INTERMEDIATE	351,726	542,460	887,942	1,138,467	1,613,051	1,997,574	2,232,201	1,573,930
Silay City (Negros Occ.)	25,214	23,328	39,483	35,70	60,324	69,200	104,887	104,018
Legaspi City (Albay)	23,255	52,756	41,468	47,171	60,593	84,090	88,378	100,488

Ormoc City (Leyte)	16,126	38,174	77,349	72,733	62,764	84,563	89,466	104,912
Dagupan City (Pangasinan)	20,357	22,4441	32,602	43,838	63,191	83,582	90,092	98,362
Toledo City (Cebu)	12,929	25,244	34,413	39,225	63,881	67,727	76,521	91,618
Lipa City (Batangas)	37,934	47,677	45,175	46,928	64,239	93,971	106,094	121,162
Calatrava (Negros Occ.)	6,385		38,695	53,805	65,888	53,151	58,867	59,052
Nabua (Camarines Sur)	18,893	19,314	29,433	42,946	66,657	44,417	48,635	53,292
Cagayan de Oro (Misamis								
Oriental)	10,937	28,062	53,194	54,293	68,274	128,319	165,220	228,409
Cabanatuan City (Nueva Ecija)	7,109	15,286	46,626	54,628	69,580	99,890	115,258	138,297
San Pablo City (Laguna)	22,612	31,399	46,311	50,435	70,680	105,517	116,607	131,686
Sagay (Negros Occidental)	8,311	17,752	53,767	67,152	71,335	79,702	95,401	98,409
Buluan (Maguindanao)	-	5,263	15,317	61,934	73,201	49,158	41,357	40,698
San Carlos City (Pangasinan)	27,166	35,780	47,334	61,671	73,900	84,333	90,882	101,254
Iriga City (Camarines Sur)	19,297	24,145	31,005	42,049	75,439	77,382	75,884	66,117
Angeles City (Pampanga)	10,646	17,948	26,027	37,558	75,900	134,544	151,164	185,995
Butuan City (Agusan del Norte)	8,207	10,875	18,295	31,628	79,770	131,094	132,682	172,404
Batangas City (Batangas)	33,131	41,089	46,164	59,582	82,627	108,868	125,363	143,554
Gen. Santos City (S. Cotabato)	33	9,787	14,115	32,019	84,988	85,861	91,154	146,550
Cadiz City (Negros Occidental)	16,429	22,183	41,905	48,960	88,542	124,108	127,653	128,839
Guihulngan (Negros Oriental)	14,415	31,069	53,582	89,745	92,993	72,969	80,041	84,147
Tarlac (Tarlac)	12,340	23,888	55,682	64,597	98,285	135,128	160,595	174,667
ARGE	974,686	869,876	1,753,079	2,513,627	3,821,499	5,828,762	7,187,789	8,450,298
Bacolod City (Negros (Occ.)	15,983	19,424	57,474	101,432	119,315	187,300	223,392	266,604
San Carlos City (Negros (Oc.)	9,749	42,453	69,990	92,250	121,756	90,058	90,982	93,268
Zamboanga City (Zamboanga							-	•
del Sur)	20,692	42,007	74,823	103,317	131,489	199,901	265,023	344,275
Iloilo City (Iloilo)	52,472	77,925	116,277	110,122	151,266	209,738	227,027	244,211

TOTAL	1,609,618	2,223,408	3,999,067	5,304,419	7,801,990	10,739,237	12,653,567	14,632,407
Metro Manila ^c	328,939	461,166	993,889	1,569,128	2,462,489	3,966,695	4,970,006	5,924,563
Metro Cebu ^b	133,811	182,274	288,448	315,818	450,760	639,308	755,654	767,037
Davao City (Davao del Sur)	8,560	21,538	95,546	111,263	225,712	392,473	484,678	611,311
Sur)	4,480	23,089	56,632	110,297	155,712	143,289	171,027	199,029
Basilan City (Zamboanga del								

*Size categories are reckoned as of 1960: small = 40,000-59,999; intermediate = 60,000-99,999; large = 100,000+.

^aPreliminary data.

^bMetro Cebu is defined to include Cebu City, Lapu-Lapu, Mandaue, Minglanilla & Talisay.

^CMetro Manila comprises Manila, Quezon City, Pasay City, Caloocan City, Las Piñas, Makati, Malabon, Mandaluyong, Marikina, Muntinglupa, Navotas Parañaque, Pasig, Pateros, San Juan, Taguig & Valenzuela.

Source: Census on Population (various years).

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ANNEX

Table 2. Annual Percent Growth Rates of Population in Small, Intermediate and Large Cities: Philippines 1903-80

Size Category/Name	1903-18	1918-39	1939-48	1948-60	1960-70	1970-75	1975-80
SMALL	1.27	2.22	2.26	2.00	2.05	2.12	2.21
Guagua (Pampanga)	0.33	1.69	4.64	1.28	3.72	2.32	2.13
Malalag (Davao del Sur)	_		—	_	-1.40	4.86	0.29
Sultan sa Barongis (Maguindanao)	-	<u> </u>	_	-	1.17	-17.29	4.18
Camiling (Tarlac)	-0.48	0.50	2.84	1.58	1.91	1.30	0.57
Bauan (Batangas)	-2.15	1.46	0.83	0.21	-1.07	0.72	2.65
Laoang (N. Samar)	1.83	2.73	4.30	2.90	-0.94	2.61	1.98
Manaoag (Pangasinan)	1.80	1.33	1.73	1.62	1.53	0.15	-5.38
Pagadian (Zamboanga del Sur)	_		1.19	-1.88	3.19	2.78	4.04
Daraga (Albay)		-	—		3.27	1.64	2.97
Himamaylan (Negros Occidental)	0,26	3.06	1.86	1.88	2.43	4.09	1.35
Milang (N. Cotabato)	—		_	—	0.62	2.85	2.00
Sariaya (Quezon)	0.81	3.03	1,55	3.05	3.36	2.54	2.10
Panabo (Davao del Norte)	-			_	0.09	4.33	3.71
Tuguegarao (Cagayan)	1.15	1.81	0.52	3.15	2.77	1.89	3.30
Cauayan (Negros Occidental)	3.41	3.11	3.23	1.92	1.89	4.13	2.11
Ozamis (Misamis Occidental)	4.42	2.26	-0.30	1.98	3.82	2.06	1.75
Lubao (Pampanga)	0.80	1.51	2.35	1.66	3.32	2.57	2.09
Urdaneta (Pangasinan)	1.13	0.86	2.14	1.98	2.69	2.19	1.91
Tanauan (Batangas)	1.32	0.77	1.48	3.56	3.18	1.51	2.10
Concepcion (Tarlac)	1.91	3.18	-0.62	3.41	3.20	3.13	2.14
Lingayen (Pangasinan)	0.35	1.50	1.89	1.85	2.11	1.03	1.95
Olongapo (Zambales)	_			—	8.85	6.44	1.22

Bansalan (Davao del Sur)	<u> </u>	<u> </u>			-2.96	1.28	2.72
Midsayap (N. Cotabato)		_	6.48	0.74	0.19	2.06	5.17
Talisay (Negros Occidental)	-0.17	5.40	0.75	0.53	-0.26	1.48	1.49
Tabaco (Albay)	0.78	0.95	1.06	2.99	2.64	1.50	1.97
Bulan (Sorsogon)	2.31	2.14	2.45	1.98	1.50	0.67	1.67
Manapla (Negros Occidental)	-0.06	3.38	6.26	2.53	-3.92	4.30	-0.45
Hagonoy (Bulacan)	0.34	1.41	2.42	1.97	2.43	1.84	2.31
Janiuay (Iloilo)	1.10	2.29	1.39	0.50	-2.99	2,63	0.41
Bayambang (Pangasinan)	2.03	2.62	3.32	2.68	1.70	2.18	0.39
Guinobatan (Albay)	1.44	0.25	2.08	3.58	-0.20	1.06	1.19
Malolos (Bulacan0	4.72	1.24	1.55	2.07	4.12	2.45	2.76
Lucena City (Quezon)	1.63	2,95	4.44	3.56	4.47	3.71	3.16
Roxas City (Capiz)	0.44	1.17	1.12	3,78	3.14	1.06	2.63
Laoag City (Ilocos Norte)	0.70	0.42	0.61	1.08	2.04	1.43	1.00
Baguio City (Benguet)	16.47	7.71	2.00	4.90	5.18	2.89	4.01
Malasigui (Pangasinan)	2.86	1.98	1,99	1.94	1.89	1.91	1.25
Baybay (Leyte)	1.89	1.61	1.83	0.18	2.06	1.00	2.21
Libmanan (Camarines Sur)	-2.47	3.42	6.75	1.67	1.78	1.17	0.54
Gingoog (Misamis Oriental)	4.05	5,83	6.41	4.86	2.16	0.32	4.03
Ligao (Albay)	1.23	1.32	3.02	3.19	0.60	1.64	0.42
Tacloban (Leyte)	1.78	3.47	3.92	1.46	3.26	1.66	4.92
Cavite City (Cavite)	1.95	2.74	0.84	4.02	3.20	1.72	1.27
Naga City (Camarines Sur)	-4.00	4.46	9.85	-0.16	3.62	0.86	1.71
La Carlota City (Negros Occ.)	2.84	1.23	5.94	1.91	-3.62	1.36	0.80
San Fernando (Pampanga)	2.69	2.78	1.07	3.24	4.00	3.01	2.42
Calamba (Laguna)	5.23	2.96	1.27	4.09	3.58	3.34	4.44
Bago City (Negros Occidental)	0.67	3.66	0.53	0.33	1.95	4.49	2.94
Escalante (Negros Occidental)	5.69	3.66	-0.98	0.44	-1.34	0.73	5.25
INTERMEDIATE	2.83	2.50	2.98	3.11	2.11	2.25	2.89
Silay City (Negros Occidental)	-0.49	2.67	-1.06	4.75	1.35	8.70	0.17

	1903-18	1918- 39	1939-48	1948-60	1960-70	1970-75	1975-80
Legaspi City (Albay)	5.31	-1.20	1.33	2.23	3.26	1.00	2.60
Ormoc Leyte (Leyte)	5.59	3.59	-0.63	-1.29	2.96	1.14	3.24
Dagupan City (Pangasinan)	0.62	1.89	3.08	3.27	2.77	1.52	1.77
Toledo City (Cebu)	4.32	1.56	1.35	4.38	0.57	2.48	3.67
Lipa City (Batangas)	1.32	-0.16	0.39	2.80	3.79	2.46	2,69
Calatrava (Negros Occidental)	-		3.44	1.80	-2.08	2.07	0.06
Nabua (Camarines Sur)	0.14	2.13	3.95	3.94	-3.89	1.84	1.85
Cagayan de Oro (Misamis Occ.)	6.13	3.25	0.21	2.04	6.37	5.20	6.69
Cabanatuan City (Nueva Ecija)	4.95	5.73	1.64	2.15	3.60	2.91	3.71
San Pablo City (Laguna)	2.10	1.96	0.88	3.01	4.00	2.02	2.46
Sagay (Negros Occidental)	4.91	5.70	2.31	0.53	1.09	3.67	0.62
Buluan (Maguindanao)	—	5.49	15.41	1.48	-3.82	1.21	-0.32
San Carlos City (Pangasinan)	1.76	1.41	2.75	1.60	1.30	1.51	2.19
Iriga City (Camarines Sur)	1.43	1.26	3.18	5.27	0.25	-0.39	-2.72
Angeles City (Pampanga)	3.35	1.88	3.88	6.38	5.76	2,36	4.23
Butuan City (Agusan del Norte)	1.79	5.48	2.44	8.47	4.98	0.24	5.38
Batangas City (Batangas) Gen. Santos City (South	1.37	0.58	2.65	2.92	2.74	2.87	2.75
Cotabato)	43,27	1.85	8.77	8,96	0.10	1.21	9.96
Cadiz City (Negros Occ.)	1.92	3.23	1.61	5,35	3.36	0.57	0.19
Guihulngan (Negros Oriental)	4.97	2.76	5.43	0.31	-2.35	1.87	1.01
Tarlac (Tarlac)	4.26	4.32	1.54	3.76	3.16	3.52	1.69
LARGE	2.65	3.57	3.77	3.75	4.22	4.29	3.29
Bacolod City (Negros Occ.)	1.24	5.57	6.00	1.44	4.51	3.60	3.60
San Carlos City (Negros Occ.) Zamboanga City (Zamboanga	9.74	2,53	2.87	2.69	-3.14	0.21	0.90
del Sur)	4.97	2.93	3.37	2.14	4.18	5.82	5.37

TOTAL	2.15	2.80	3.02	3.10	3.18	3.34	2.95
Metro Manila	2.16	3.91	4.80	4.04	4.78	4.63	3.58
Metro Cebu	1.97	2.32	0.93	3,18	3.48	3.41	0.30
Davao City (Davao del Sur)	6.00	7.73	1.57	6.42	5.56	4.32	4.75
Sur)	10.91	4.59	7.08	3.08	-0.77	3.61	3.08
Basilan City (Zamboanga del							
Iloilo City (Iloilo)	2.53	2.02	-0.56	2.83	3.25	1.60	1.47

Source. Annex Table 1,

ANNEX

Table 3. Annual Percent Growth Rates of Population in Small, Intermediate and Large Cities by Broad Region: Philippines, 1903-80

Region/Size/Name	1903-18	1918-39	1939-48	1948-60	1960-70	1970-75	1975-80
NCR (Metro Manila)	2.16	3.91	4.80	4.04	4.78	4.63	3.58
OTHER CIR	1.52	2.01	1.67	2,96	3,74	2.85	2.55
SMALL	1.07	1.96	1.64	3.61	3.67	2.94	2.27
Guagua (Pampanga)	0,33	1.69	4.64	1.28	3.72	2.32	2.13
Camiling (Tarlac)	-0.48	0.50	2.84	1.58	1.91	1.30	0.57
Bauan (Batangas)	-2.15	1.46	0.83	0.21	-1.07	0.72	2,65
Sariaya (Quezon)	0.81	3.03	1.55	3.05	3.36	2.54	2.10
Lubao (Pampanga)	0.80	1.51	2.35	1.66	3.32	2.57	2.09

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	1903-18	1918-39	1939-48	1948-60	1960-70	1970-75	1975-80
Tanauan (Batangas)	1.32	0.77	1.48	3.56	3.18	1,51	2.10
Concepcion (Tarlac)	1.91	3.18	-0.62	3.41	3.20	3.13	2.14
Hagonoy (Bulacan)	0.34	1.41	2.42	1.97	2.43	1.84	2.31
Malolos (Bulacan)	4.72	1.24	1.55	2.07	4.12	2.45	2,76
Lucena City (Quezon)	1.63	2,95	4.44	3.56	4.47	3.71	3,16
Cavite City (Cavite)	1.95	2.74	-0.84	4.02	3.20	1.72	1.27
San Fernando (Pampanga)	2.69	2.78	1.07	3.24	4.00	3.01	2.42
Calamba (Laguna)	5.23	2.96	1.27	4,09	3.58	3.34	4.44
Olongapo (Zambales)	—	_		—	8.85	6.44	1.22
INTERMEDIATE	2.26	2.08	1.71	3.45	3.84	2.72	2.93
Lipa City (Batangas)	1.32	-0.16	0.39	2,80	3.79	2.46	2,69
Cabanatuan City (Nueva Ecija)	4.95	5.73	1.64	2.15	3.60	2.91	3.71
San Pablo City (Laguna)	2.10	1.96	0.88	3.01	4.00	2.02	2.46
Angeles City (Pampanga)	3.35	1.88	3,88	6.38	5.76	2.36	4.23
Batangas City (Batangas)	1.37	0.58	2.65	2.92	2.74	2.87	2,75
Tarlac (Tarlac)	4.26	4.32	1.54	3.76	3.16	3.52	1.69
SLUGGISH REGIONS	1.98	2.46	2.17	2.24	1.70	2.27	1.45
SMALL	1.24	2.32	2.53	1.78	1.42	1.91	1.87
Manaoag (Pangasinan)	1.80	1.33	1.73	1.62	1.53	0.15	5.38
Laoang (North Samar)	1.83	2.73	4.30	2.90	0.94	2.61	1.98
Himamaylan (Negros Occ.)	0.26	3.06	1.86	1.88	2.43	4.09	1.35
Cauayan (Negros Occidental)	3.41	3.11	3.23	1.92	1.89	4.13	2.11
Urdaneta (Pangasinan)	1.13	0.86	2.14	1.98	2.69	2.19	1.91
Lingayen (Pangasinan)	0.35	1.50	1.89	1.85	2.11	1.03	1.95
Talisay (Negros Occidental)	-0.17	5.40	0.75	0.53	-0.26	1.48	1.49

Manapla (Negros Occidental)	-0.06	3,38	6.26	2.53	-3.92	4.30	-0.45
Janiuay (Iloilo)	1.10	2.29	1.39	0.50	-2.99	2.63	0.41
Bayambang (Pangasinan)	2.03	2.62	3.32	2.68	1.70	2.18	0.39
Roxas City ((Capiz)	0.44	1.17	1.12	3.78	3.14	1,06	2.63
Laoag City (Ilocos Norte)	0.70	0.42	0.61	1,08	2.04	1.43	1.00
Baguio City (Benguet)	16.47	7.71	2.00	4.90	5.18	2,89	4.01
Malasigui (Pangasinan)	2.86	1.98	1.99	1,94	1.89	1.91	1.25
Baybay (Levte)	1.89	1.61	1.83	0.18	2.06	1.00	2.21
Tacloban (Levte)	1.78	3.47	3.92	1.46	3.26	1.66	4.92
La Carlota City (Negros							
Occidental)	2.84	1.23	5.94	1.91	-3.62	1.36	0.80
Bago City (Negros Occ.)	0.67	3.66	0,53	0.33	1.95	4.49	2.94
Escalante (Negros Occ.)	0.67	3.66	0,58	0.44	-1.34	0,73	5.25
Daraga (Albay)					3.27	1.64	2.97
Tabaco (Albay)	0.78	0.95	1.06	2,99	2.64	1.50	1.97
Bulan (Sorsogon)	2.31	2.14	2.45	1.98	1.50	0.67	1.67
Guinobatan (Albay)	1.44	0.25	2.08	3.58	-0.20	1.06	1.19
Libmanan (Camarines Sur)	-2.47	3.42	6.7	1.67	1.78	0.17	0.54
Ligao (Albay)	1.23	1.32	3.02	3.19	0.60	1.64	0.42
Naga City (Camarines Sur)	-4.00	4.46	9,85	-0.16	3.62	0.86	1.71
INTERMEDIATE	2.78	2.20	2.21	2.41	0.89	2.11	1.21
Silay City (Negros Occ.)	0.49	2.67	-1.06	4.75	1.35	8.70	-0.17
Ormoc City (Leyte)	5.59	3.59	10.63	-1.29	2.96	1.14	3.24
Dagupan City (Pangasinan)	0.62	1.89	3.08	3.27	2.77	1.52	1.77
Toledo City (Cebu)	4.32	1.56	1.35	4.38	0.57	2.48	3.67
Calatrava (Negros Occ.)	—	_	3.44	1.80	-2.08	2.07	0.06
Sagay (Negros Occ.)	4.91	5,70	2.31	0.53	1.09	3.67	0.62
San Carlos City (Pangasinan)	1.76	1.41	2.75	1.60	1.30	1.51	2,19
Cadiz City (Negros Occ.)	1.92	3.23	1,61	5.35	3.36	0.57	0.19
Guihulgan (Negros Oriental)	4.97	2.96	5.43	0.31	-2.35	1.87	1.01

	1903-18	1918-39	1939-48	1948-60	196 0-70	1970-75 _	_ 1975-80
Legaspi City (Albay)	5.59	3.59	-0.63	1.29	2.96	1.14	3.24
Nabua (Camarines Sur)	0.14	2.13	3,95	3.94	-3.89	1.84	1.85
Iriga City (Camarines Sur)	1.43	1.26	3,18	5.27	0.25	-0.39	-2.72
LARGE	2.68	2.54	1.57	2.78	2.84	2.87	1.12
Bacolod City (Negros Occ.)	1.24	5.57	6.00	1.44	4,51	3.60	3.60
San Carlos City (Negros Occ.)	9.74	2.53	2.87	2.69	-3.14	0.21	0,50
Iloilo City (Iloilo)	2.53	2.02	-0.56	2.83	3.25	1.60	1.47
Metro Cebu	1.97	2.32	0.93	3.18	3.48	3.41	0.30
RONTIER REGIONS	5.08	3.94	3.90	3.68	2,53	0,90	4.66
SMALL	2.86	2.64	2.42	1.64	1.16	1.10	3.14
Milang (N. Cotabato)			_	_	0.62	2.85	2.00
Panabo (Davao del Norte)	_	_		_	0.09	4.33	3.71
Tuguegarao (Cagayan)	1.15	1.81	0,52	3.15	2.77	1.89	3.30
Ozamis (Misamis Occidental)	4.42	2.26	-0.30	1.98	3.82	2,06	1.75
Bansalan (Davao del Sur)	_	_		_	-2.96	1.28	2.72
Midsayap (N. Cotabato)		_	6.48	0.74	0.19	2.06	5.17
Gingoog (Misamis Oriental)	4.05	5.83	6.41	4.86	2.16	0.32	4.03
Sultan sa Barongis (Maguindanao)	_		_		1.17	-17.29	4.18
Malalag (Davao del Sur)	_	—		—	-1.40	4.86	0.29
Pagadian (Zamboanga del Sur)			1.19	-1.88	3.19	2.78	4.04
INTERMEDIATE	6.07	3.18	6.11	4.79	2.51	1.77	6.44
Cagayan de Oro (Misamis							
Oriental)	6.13	3.25	0.21	2.04	6.37	5.20	6,69

Buluan (Maguindanao)	—	5.49	15.41	1.48	-3.82	1.21	-0.32
Butuan City (Agusan del							
Norte)	1.79	5.48	2.44	8.47	4.98	0.24	5.38
Gen. Santos City (South							
Cotabato)	43.27	1.85	8.77	8.96	0.10	1.21	9.96
LARGE	6.14	4.93	-0.75	4.10	3.59	4.60	4.63
Zamboanga City (Zamboanga							
del Sur)	4.57	2.93	3.37	2.14	4.18	5.82	5.37
Basilan City (Zamboanga							
del Sur)	10.91	4.59	7.08	3,08	-0.77	3.64	3.08
Davao City	6.00	7.73	1.57	6.42	5.56	4.32	4.75
TOTAL	2.15	2.80	3.02	3.10	3.18	3.34	2.95
				· · · · · · · · · · · · · · · · · · ·			

Source: Census on Population (various years).

ANNEX

MAP: Large Cities, Small and Intermediate Cities (SMC's) in CIR Brisk During the Import Substitution Period, and SMCs in SR and FR Resilient During 1970-1980.



ANNEX

Region	1903	1939	1948	1960	1970	1975
CIR						
Total	27.1	27.3	28.6	29.8	32.8	34.2
Urban	45.7	38.8	40.9	46.3	51.8	52.6
Rural	24.2	24.4	24.6	23.2	22.1	21.9
SR						
Total	59,6	54.2	52.1	45,9	40.9	39.5
Urban	52,4	46.2	42.1	37.4	31.8	31.3
Rural	60.8	56.2	55.3	49.3	46.0	44.9
FR						
Total	13.3	18.5	19.3	24.3	26.3	26.3
Urban	1.9	15.0	17.0	16.3	16.4	16.1
Rural	15.0	19.4	20.1	27.5	31.9	33.2
PHILIPPINES (1	00. 0%)		(in the	ousands)		
Total	7.635	16,300	19,234	27,088	36,684	42,071
Urban	1,026	3,272	4,615	7,731	13,211	16,878
Rural	6,609	12,728	14,619	19,356	23,473	25,192

Table 4. Distribution of Total, Urban and Rural Population by Broad Region, 1903-75 (in percent)

Notes: CIR — Central Industrial Region, SR — Sluggish Region, FR Frontier Regions. Source: NCSO, Census on Population (various years).

ANNEX

Region	1903-39	1948-60	1960-70	1970-75
CIR				
Total	2 11	3 11	2 00	2 65
Urban	2.11	5.80	5,99 6 5 1	3,00
Rural	1.87	1.94	1.45	1.21
SR				
Total	1.81	1 91	1.85	2.06
Urban	2.93	3.55	3 71	4 74
Rural	1,63	1.47	1.22	0.94

Table 5. Growth Rates of Total, Urban and Rural Population by Broad Region, 1903-75 (in percent)

3.04	5.15	3.81	2.80
9.41	4.24	5.50	4.59
2.57	5.38	3.38	2.25
2.09	3.06	3.01	2.78
3.29	4.64	5.38	5.04
1.85	2.50	1.91	1.43
	3.04 9.41 2.57 2.09 3.29 1.85	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Note: CIR – Central Industrial Region, SR – Sluggish Regions, FR – Frontier Regions.

Source: NCSO, Census on Population (various years).

FR

ANNEX

Establishr Size*	nent 1967	(% Share)	1975	(% Share)	% Growth Rate
	A. 1	Number of Esta	blishments		
Cottage Small Medium Large	34.995 9,343 278 384 45.000	(77.8) (20.8) 98.6 (0.6) (0.8) (100.0)	59,251 17,153 401 486 77,291	(76.6) (22.2) (0.5) (0.6)	$69.3 \\ 83.6 \\ 72.3 \\ 44.2 \\ 26.6 \\ 71.8 $
IOIND	<u>40,000</u> B.	Employment	11,201	(100.0)	
Cottage Small Medium Large	85,083 127,529 38,407 267,685	(16.4) (24.6) (7.4) (51.6) (16.4)	121,832 211,186 56,371 329,625	(16.9) (29.4) 46.3 (7.8) (45.9)	43.2 65.6 56.6 46.8 23.1
TOTAL	518,704	(100.0)	719,014	(100.0)	38.6
	C.	Census Value-A	dded (P 00	0 at 1965 price	s)
Cottage Small Medium Large TOTAL	111,870 1,571,344 482,138 3,978,858 6,144,210	(1.8) (25.6) (7.8) (64.8) (100.0)	113,983 836,759 1,154,861 4,219,054 6,324,657	(1.8) (13.2) 15.0 (18.3) (66.7) (100.0)	$ \begin{array}{c} 1.9\\ -87.8\\ 139.5\\ 6.0\\ 2.9 \end{array} $

Table 6. Number of Establishments, Employment and Value-Added in Small, Medium and Large Industries, Philippines 1967 and 1975

*Cottage refers to establishments with 1-4 workers, small 5-99 workers, medium 100-199, and large 200+ workers. References to small enterprises in the text concern cottage and small establishments combined.

Source: NCSO, Census of Establishments.

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DISCUSSION ON THE PERFORMANCE AND PROSPECTS OF SMALL AND INTERMEDIATE SIZE CITIES IN THE PHILIPPINES

Alejandro N. Herrin, Ph. D., Discussant

My comments will focus on two aspects of Dr. Pernia's important paper; first, on his description of the differential growth rates of cities by size and region, and second, on his explanation of these differential growth rates. While agreeing essentially with the general findings and conclusions of the paper, I would like to suggest a slightly different approach to the analysis of the data, the aim of which is to facilitate the linking of Dr. Pernia's data on what is known about the broad patterns of Philippine migration in this century, as well as to provide a broader basis for identifying additional factors that may explain more fully the observed differential growth rates presented in the paper. Needless to say, Dr. Pernia's highly aggregative description of the performance of small and intermediate size cities is but an opening gun in what is hoped to be a series of serious studies on the spatial aspects of Philippine economic development.

On the basis of the growth rates of cities by size and regions shown in Table 3, Dr. Pernia finds that (a) the growth of cities of all sizes was both rapid and steadily rising in the NCR, and slightly so in the other CIR from 1903 to 1970, followed by some deceleration in the 1970-80 period; (b) the opposite is true for the cities in the SR and FR where the growth rates tended to be low and declining during 1903 to 1970 but perking up in the 1970-80 period; and (c) controlling for city size, SMCs in the Other CIR show accelerating growth rates during the 1948-60 and 1960-70 periods at the same time that those in the SR and FR were becoming depressed. Thus, Dr. Pernia concludes, regardless of size, cities tend to perform better in certain regions and periods than in others.

An alternative approach to the analysis of the same data is to consider the city growth rates in relation to the estimated rates of natural increase. This involves decomposing the city growth rate into its components, namely, natural increase or the balance between births and deaths, and net migration or the balance between in-and out-migration. Between these two components of change, net migration is the more relevant variable to look at in analyzing the performance of cities. For example, cities of a given size in a particular region may exhibit relatively high growth rates, but such rates may still be lower than the rate of natural increase, hence in effect these cities are in fact losing population in relative terms, that is, relative to what they could have had due to natural increase alone. Using the data in Table 3, I estimated the net migration rates for each city size and region by subtracting from the overall growth rate the estimated rate of natural increase. In the absence of readily available information, the expected rate of natural increase may be taken to be equal to the growth rate of the entire Philippine population in the respective periods. Although urban areas are expected to have lower fertility relative to rural areas, they also may have lower mortality, hence the average annual national growth may still reasonably reflect the rate of natural increase in cities. The following observations may be noted:

(a) In the 1903-39 period, the NCR and the intermediate and large cities in FR were growing over and above the expected rate of natural increase. The cities of all sizes in the SR region, on the other hand, showed growth rates less than the natural increase signifying a relative loss of population mainly to the NCR and to the FR. These observations are consistent with the broad patterns of migration during this period which was mainly frontierward, i.e., to Mindanao and Cagayan Valley, and to a lesser extent but significant nonetheless to the NCR.

(b) In the early import substitution period 1948-60, the NCR and the intermediate and large cities in the FR continued to draw in migrants, again mainly from the SR regions. In addition, intermediate cities in the CIR also began to pick up population both from the SR and the spill over from the NCR. The spill over to the CIR accelerated in the 1960-70 period so that even the small cities gained population more than its natural growth rate. In the FR, only the large cities gained. The loss of population in the SRs as well as of the SMCs in the FR is consistent with the shift in migration patterns from the early frontierward to the more recent urbanward migration especially to the NCR and other CIR and to the large cities of the FR.

(c) In the 1970-80 period, the NCR and the intermediate cities in other CIR gained population but at a slower rate, while the intermediate and large cities in the FR gained at a faster rate than the previous period. Of interest is that the losing regions were losing population >t a rate less than the previous period.

What might be postible explanations for these differential patterns of excess growth (i.e., growth over the expected rate of natural increase). Dr. Pernia's analysis regarding the shift in economic activities from the SRs to the NCR and Other CIR during the import substitution periods appears reasonable. The excess growth approach that we adopt here, however, suggests the need for a broader interpretation. The rapid growth in the NCR and the intermediate cities of the Other CIR during the early import substitution period is consistent with Dr. Pernia's analysis. However, it does not explain why the intermediate and large cities in the FIR also grew, in fact, much faster than in the NCR and CIR. The reason may be that while the impact of the import substitution policies began to shift economic activities to the NCR and CIR regions, agricultural land was still available in the frontiers and hence continued in-migration to these areas was to be expected. In the later import substitution period, however, two factors seemed to have played important and reinforcing roles: (a) the more rapid shift in economic activity to the NCR and CIR, given the momentum generated in the earlier period, and (b) the vanishing of the frontiers. The link between the large cities in the FR to the economies of the NCR and CIR as Dr. Pernia suggested may only be part of the reason for their growth performance. The other factor, it would appear, is that with the vanishing of the frontiers and the relative neglect of agriculture, people began to move from the small and intermediate cities in the FR either to the large cities in the same region or to the cities in other regions. in search of non-agricultural employment.

What happened in the last period 1970-80? The rapid growth of NCR and the intermediate cities in the CIR continued but at a decelerating rate. The intermediate and large cities in the FR now grew at a much rapid rate than the previous period. And finally, the cities of all sizes in the losing region, SR, are losing at a slower rate. Dr. Pernia's analysis alluded to the possible impact of the regional thrust of development policy during this period, but finds that in terms of such indicators as the distribution of expenditures for infrastructures, number of firms given tax incentives, etc., the thrust does not appear to be substantial in favor of the SR and FR regions. This seems to be a reasonable conclusion. Going further however, even the distribution of government-sponsored loans to small and medium scale industries by region, which Dr. Pernia suggests has been more successful, do not appear in my view to be significant if we consider this in comparison with the distribution of population in these regions. Hence, some other forces may be at work that explains what Dr. Pernia called the resiliency of the cities of all sizes in the SR and of the small cities in the FR. One possible factor that I would like to suggest for future investigation is the impact of agricultural and rural development programs during the 1970s (i.e., land reform, price support, input subsidies, credit and extension services, rural electrification, etc.) which may have increased productivity in the rural areas with spill over effects to the cities. Additionally, the high growth rate in the intermediate and large cities in the FR may be partly due to the "refugee problem" arising from the deteriorating peace and order conditions in the rural areas during the 1970s.

In summary, our proposed "excess growth analysis" to the same data provided by Dr. Pernia supports his main conclusions about the performance of the cities by region during the various development periods in the Philippines. At the same time, the approach provides a basis for identifying additional sources of the differential growth performance of cities, one of which is the impact of rural development programs.

With respect to strategies for development, we find that past policies have had important spatial biases, the recognition of which has led to the recent regional thrust in development planning. A question arises as to the effectiveness of the instruments used, for which answers must await careful studies. For example, is the program of industry dispersal beyond the CIR effective? One may speculate, in the absence of more complete information. that the promotion of large-scale, resource based, export-oriented industries in the lagging regions may fail to create enough opportunities for employment in the receiving areas, if such industries tend to have limited backward and forward linkages, in the inputoutput sense. For example, one immediately has in mind the large sintering plant in Northern Mindanao where the major inputs are imported, and where the outputs are directly exported. Very little multiplier effects in the local economy can be expected to generate additional employment opportunities in the area.

In another vein, one could ask whether agricultural modernization may not be a more effective basis for generating non-farm employment in the rural areas as well as in small and intermediate size cities. New activities may be directly needed to support such agricultural modernization. Indirectly, the resulting increase in farm incomes due to modernization would generate additional non-farm output and employment.

These and other questions, of course, still need to be studied carefully. In the meantime, I would like to congratulate Dr. Pernia for generating interest among researchers and policy makers on the spatial and urban aspects of Philippine development.

Lita J. Domingo, Ph. D., Discussant

The spatial-temporal framework adopted by Pernia "reflecting policy timing and regional impact", provides a fresh and innovative approach to the analysis of spatial development in the Philippines. By bringing context into the analysis, this study has given new vitality to an analytic theme which has long been dormant in research — it acknowledges the importance of historical time, the events and changes occuring within the time frame, in the interpretation of variations in spatial development.

The four historical periods used in the study identify segments in the course of this nation's economic development marked by important shifts in industrial and economic policies. Furthermore the typology adopted to categorize regions meaningfully and comprehensively discriminates the areas.

In addition to this, while most studies usually end up with a section called "policy implications", perhaps to make them sound relevant, this study takes a bold approach of using policies not only to help define the context within which change occurs but suggests treating them as explanatory variables that can help account for the differences in the recorded patterns of growth of cities in the country.

I would now like to make a few observations which I believe might be helpful if refinements (further work?) in the application of the framework be attempted. These comments are based on what I suspect the framework used in the analysis demands.

First, a simple observation on the presentation of results. If we examine the growth rates as presented in the appendix tables, one is immediately struck by the wide range of values not only among the various regions during various time periods but also within these regions in specific time periods. For example from Table 3 and for the section on Sluggish Regions, the growth rates for small cities between 1975 to 1980 range from -5.38 to 5.25; for the intermediate sized cities, the corresponding values are -2.72 to 3.67 while for large cities, they vary from -0.30 to 3.60. The summary figures presented which served as basis for the discussion conceals such variability. I feel that the variability of estimates is an interesting statistical phenomenon which may actually be reflective of differing consequences of natural, economic and social forces and policies.

Second, a point has to be made regarding the use of growth rates in this study. Growth rate is a complex measure, the basic components of which are the rate of natural increase and net migration rate. It is even suggested by Pernia elsewhere that in the case of the Philippines, we should consider a third component — the effect of net rural to urban reclassification.

Considering that the paper focuses on the pattern of growth of cities, one would expect that in the study, the relevant component is the rate of growth attributable to net migration as it may *partly* reflect movements of labor or of people who have been attracted to specific places as a response to the "spatial biases of economic development policies". We emphasize the word *partly* since migration studies have shown that although the motivations of people who migrate are highly economic in nature, there are other social or non-economic motivating forces. By not isolating this component of the growth rate, in effect the rate of natural increase which is the difference between the birth and death rates and the net effect of reclassification are controlled for these various regions and through time. Given the variability of the rates makes this unacceptable. To illustrate these points we quote the results from Pernia's work in 1977 where he shows the components of urban growth in the Philippines. We select data which can be comparable to the classification utilized in this present study. Between 1903 and 1939, for Metro Manila, 33.9% of the urban growth is attributable to net reclassification, 55.1% to natural increase and 11.0% to migration. For the same years and for the frontier regions, 89.4% was due to net reclassification, 7.8% natural increase and 2.7% due to net migration. For a later period 1960 to 1970, the distribution for Metro Manila is 8.2%due to net reclassification, 54.3% natural increase and 37.5% due to net migration. For the Frontier region, 31.6% is due to reclassification, 51.9% due to natural increase and 16.5% accounted for by net migration. With these observations, as we examine the rates presented in the summary tables in the text keeping in mind the historical perspective defined for us by the author, one becomes less confident in interpreting the figures and in directly linking the observed changes to the economic-oriented policies operating during those periods.

Thirdly, timing is a very important element in the framework adopted. While the author acknowledges the fact that there are "lingering spatial effects" of policies, it is not clear from the paper what attempts have been made to make allowances or adjustments to accommodate the lag effects.

Given all these comments, I still go back to my original observation that the strength and value of this paper lies in the perspective that the author has offered us which I believe does much to sensitize us to the need of "bringing back context" in research.

Leandro A. Viloria, Ph.D., Discussant

1. Prof. Pernia's paper is thought provoking in at least two ways. Firstly, he provides us with a new way at looking at our urban areas and their performance over time. Secondly, he builds up our expectation for what small and intermediate size cities could do for rural industrialization and regional development.

2. Since he has relied mainly on census data in depicting historical growth of urban areas, Prof. Pernia has to introduce a spatial-temporal framework to explain the performance of his three types of cities, over four epochal periods, by his four-way classification of regions (why not three?). The major lesson from this exercise, using his own words, is: "regardless of size, cities tend to perform better in certain regions and periods than in others." The hypothesis that may be derived from this study then is: "insofar as the growth of cities is concerned, the key aspect is not so much size *per se* but the economic region in which cities are located as well as the relevant historical period." (p. 7).

3. Prof. Pernia's finding in this regard seems to confirm parallel studies (also using census data) made earlier on internal migration patterns in this country, whereby some provinces previously tagged as losing ones became receiving ones later.

4. The intriguing question such findings suggest is this: To what extent does international factors affect apparently "national events" as migration, growth of cities, etc.? This is critical if indeed Myrdal's backwash effects may be successfully reverted to a spread effect, particularly in favor of particular regions. In this regard, one may also speculate to what extent may the strategy of "regional closure" espoused by regional planners from the U.N. Centre for Regional Development at Nagoya, Japan, help in a situation like this.¹

5. Let me now move on to the possible developmental role of small and intermediate size cities. What is significant here is that in at least two countries subscribing to the capitalist system and the democratic ideology, it has been proven beyond doubt that market towns or central places served as vehicles for transforming stagnant agricultural societies to progressive rich industrialized countries today.

6. The first great example is the role played by the castle towns of Tokugawa Japan. Several studies leave little doubt that the additional income that members of Japanese farm families received as wages in the small industrial establishments of the castle towns provided the increments of additional spending powers that, on a national scale, widened the effect demand for all manner of consumer goods and thereby stimulated industrial capital formation, inter-regional movement of goods, and the progressive modernization of the whole Japanese economy.² More importantly, the availability of industrial employment in the castle towns introduced millions of farms boys and girls

¹See Fu-chen Lo, Kamal Salih and Mike Douglas, Uneven Development, Rural-Urban Transformation, and Regional Development Alternatives in Asia, Nagoya, UNCRD, 1978, p. 83 ff.

²E.A.J. Johnson, "The Integration of Agrarian, Commercial and Industrial Activities in Functional Economic Areas," in *March Towns and Spatial Development*, New Delhi, National Council of Applied Economic Research, 1972, p. 58.

to the rudiments of modern technology. Thus while still living in their farm homes, they were being trained for a widening variety of occupations, and in the process, their latent talents, skills, and aptitudes, which might have been largely wasted in simplier village cultures, were released, to the advantage not only of the individuals themselves but to the benefit of the whole economy and the Japanese nation.³

7. The other outstanding example is provided by the Commonwealth of Puerto Rico. In a single generation the per capita gross product in this country increased from less than \$100 to over \$1000. This was accomplished through the systematic industrialization of central places in all the 77 municipalities of the Commonwealth. The use of Government-built-industrial estates has been the means of transforming the stagnant over-populated rural communities in Puerto Rico into pulsing hives of industry today.⁴

8. It is not suggested of course that we should copy the approaches illustrated in our two examples. We still have to learn a little more about the spatial pattern of development and the settlement system in each region of the country before we may suggest appropriate development strategies. At least we have a good example of this study we have in mind. I refer to a study conducted in 1978 for USAID by the Center for Policy and Development Studies (CPDS), U.P. Los Baños entitled Urban Functions in Rural Development: A Research Project in Spatial Analysis and Planning.

9. The Bicol River Basin is the focus of this study. It is a part of the Bicol Region which is considered as one of the poorest regions in the country. The economy is predominantly agricultural. The median annual family income is only one-third of Metro Manila. There is a maldistribution of income as 10 per cent of the households mostly living in urban areas, get 43 per cent of total income while the bottom 50 per cent of rural income-earning families received only 13 per cent of household income in 1971.⁵ The great irony is that while most Bicolanos live in dire poverty their land has abundant natural resources. For instance, it is envisioned that with proper irrigation and correct agricultural practices the Basin could sustain an additional million people. Moreover, there is a host of untapped mineral resources in Bicol — about 30 per cent of marble deposits, 75 per cent of perlite and

³Ibid., p. 59.

⁴Ibid., p. 68.

⁵Junio M. Ragragio, "The Design and Application of a Manual Scalogram Method for Spatial Analysis in the Bicol IAD Area "unpublished master's thesis, U.P. Institute of Environmental Planning, 1981, pp. 33-35.

about 20 per cent of coal resources in the Philippines, not to mention the proven geothermal capacity there.

10. Why then poverty amidst plenty? Analysis of the spatial pattern of development and the regional settlement in the Bicol River Basin shows trends similar to those of the nation as a whole as painted quite broadly by Prof. Pernia. Thus the CPDS study finds great intraregional urban-rural disparities, weak linkages among settlements, and a weak market system. Services, facilities and economically productive activities are highly concentrated in only 6 of the 54 municipalities. These half dozen urban municipalities account for 45 per cent of all municipal government revenues collected in the Basin. On the other hand the 38 predominantly rural municipalities are subsistence agricultural areas forming the periphery of the Basin in which more than half of the population lives. They have a far smaller portion of facilities, services, educated manpower, financial resources, and productive economic activities than their share of population. Their residents are scattered in numerous small barangays. Only 8 per cent of households receive water and less than 6 per cent have electrical power. Only five of the 38 municipalities have postsecondary educational or vocational training institution, nearly 40 per cent have no markets of any kind, and 8 contain no financial institutions. These municipalities collect less than 2/5 of all municipal revenues and on the averages depend on the national government for nearly a third of their municipal income. As a group, these municipalities contain less than one-quarter of the manufacturing, commercial, financial and service establishments. only more than a third of agro-processing, storage and commercial establishments and one-fourth of health facilities.

11. The linkages among settlements are very weak indeed. For instance an intermodal transport study found that most travel within the Basin is highly localized. About 85 per cent of all trips taken within the Basin are among places within the same municipality and 99 per cent are within the same province.

12. Analysis of commodity flows and market functions of the six largest centers within the Basin and six of the prominent periodic markets indicate that a "market system" does not really exist. Nearly all commodities traced within the markets surveyed are obtained from and sold to people who live within the municipality. Except for manufactured consumer goods, which are imported from Manila for resale through the Naga and Legaspi markets, even the two largest market centers serve primarily their immediately surrounding territory.

13. In this context, the American consultant to this study provided this sobering analysis: "Traditionally macro-economic approaches to accelerating development will have little effect on ameliorating poverty in regions with spatial patterns such as the Bicol River Basin. Simply reallocating investments more equitable among regions of favoring those previously given low priority. while necessary, are not sufficient to reduce spatial inequalities and increase the access of the rural poor to resources necessary to amelioriate their poverty." "Similarly", he says, "growth center development strategies are likely to exacerbate already severe urban and rural differences within regions."⁶ As an alternative he proposes "a strategy combining regional reallocation of national investment and selective location of physical infrastructure, social services, facilities, and productive activities."⁷ According to him this strategy consists of four components. First, deconcentrate important development investments from already burgeoning cities and metropolitan centres to other less developed regions, so as to provide the opportunities for developing potential resources in those regions and to create a more articulated and integrated national spatial economy. Secondly, careful location and "decentralized concentration" of high population threshold investments in intermediate and secondary cities, which would serve as inter-regional production centers, act to counter-balance continued rapid growth in Metropolitan Manila and become part of a network of domestic exchange and market centers. Third, locate infrastructure investments and productive activities within regions in such a way as to articulate the spatial system and integrate urban centers and rural hinterlands. Articulation of the spatial system implies the development of at least three "levels" of settlements within regional economies: rural service centers, market towns (small cities) and regional centers or intermediate cities. Finally, strengthen linkages among rural settlements and between them and urbanized centers within regions through farm-tomarket roads and all weather arterials between market centers and larger towns and cities.

14. This four-pronged strategy, it is argued, would promote greater spread effects from development in larger urban centers and generate more diversified economic growth in smaller rural villages. It is further argued that this strategy, combines "bottom up" and "top down" development strategies to forge an integrated national economy in which the benefits of accelerated growth could be more equitably distributed.⁸

⁶Dennis A. Rondinelli, "Regional Disparities and Investment Allocation Policies in the Philippines, Spatial Dimensions of Poverty in a Developing Country", Canadian Journal of Development Studies, Vol. I, No. 2 (1980), p. 281.

⁷Ibid., p. 282. ⁸Ibid., p. 284.

15. Our two final questions then are: Who shall take the lead in the adoption of this suggested strategy and over-see its implementation: the Cabinet, the NEDA or the MHS? Pushed to its logical conclusion, doesn't a strategy like this require as a precondition for real success a careful review of present areal division of powers, i.e., between the central government, on the one hand, and, local governments on the other? Perhaps more autonomous regional governments in the future?