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LIRNEasia
Learning Initiatives on Reforms for Network Economies

WDR Dialogue Theme 4th cycle

Discussion Paper WDR0702

# LIRNEasia Six Country Multi-component Study 2006-2007:

# Philippines report



January 2007

Lorraine Carlos-Salazar

Comments invited, please post them to the online at: http://www.lirneasia.net

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# The World Dialogue on Regulation for Network Economies (WDR)

The WDR project was initiated by *info*Dev, which provides foundation funding. Additional foundation support is provided by the International Development Research Centre (IDRC – Canada), and the LIRNE.NET universities: the Center for Information and Communication Technologies (CICT), Technical University of Denmark; the Economics of Infrastructures Section (EI), Delft University of Technology, The Netherlands; the LINK Centre at the University of Witwatersrand, South Africa; and the Media@LSE Programme at the London School of Economics, United Kingdom.

The WDR Project is managed by the Learning Initiatives on Reforms for Network Economies (LIRNE.NET), an international consortium of research and training centres, administered at the Center for Information and Communication Technologies (CICT), Technical University of Denmark. Members include the Technical University of Denmark; the Delft University of Technology, the Netherlands; the London School of Economics, UK; the University of Witwatersrand, South Africa; LIRNE*asia*, Sri Lanka; and Comunica, Uruguay.

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## Contact:

WDR Project, LIRNE.NET
Center for Information and Communication Technologies
Technical University of Denmark, Building 371
DK 2800 Lyngby, DENMARK

Phone: +45 4525 5178
Fax: +45 4596 3171
Email: info@regulateonline.org

WDR Project Coordinator Merete Aagaard Henriksen: henriksen@lirne.net.
WDR <www.regulateonline.org>
LIRNE.NET <www.lirne.net>

## LIRNE*asia*

LIRNEasia is the Asian affiliate of LIRNE.NET. It is a regional ICT [information and communication technologies] policy and regulation capacity building organization, incorporated as a non-profit organization under section 21 of the Companies Act, No. 17 of 1982 of Sri Lanka in 2004 and funded at present by the IDRC and infoDev, a unit of the World Bank. Its primary functions are research, training and informed intervention in policy and regulatory processes. Its current projects include research in South as well as South East Asia.

LIRNEasia aims to improve the lives the people of Asia – by making it easier to make use of the information and communication technologies by facilitating the changing of laws, policies and regulations to enable those uses; by building Asia-based human capacity through research, training, consulting and advocacy.

## Contact:

LIRNEasia
12 Balcombe Place
Colombo 08
SRI LANKA

Phone : +94 11 493 9992
Fax : +94 11 267 5212
Email : asia@lirne.net

<www.lirneasia.net >

*LIRNEasia's Six Country Multi-Component Research Project*

*Philippines Case Study*

# *LIRNEasia's Six Country Multi-Component Research Project*
# *The Philippines Case Study*

**Lead Researcher: Lorraine Carlos Salazar**, Senior Researcher, LIRNEasia and Visiting Research Fellow, Institute of Southeast Asian Studies (ISEAS), Singapore

**Second Researcher: Joseph Wilson**, Senior Researcher, LIRNEasia and Associate Professor of Law and Policy, Lahore University of Management Sciences, Pakistan

## Introduction

Information and Communication Technologies (ICTs) are potentially powerful tools that can bring about socio-economic and political development and change. They can be utilised to help reduce poverty and socio-economic disparities, as well as provide connectivity to people who are traditionally marginalised.

The rapid development of ICTs and the pervasive effects of their deployment and use have made evident the need for improved and standardized indicators to measure the sector's performance and its effects on various aspects of society. Improving the quality and standardization of such indicators, both on a national and international level, is necessary to make comparisons accurate and meaningful. Furthermore, it is important that appropriate indicators for developing countries, ranging from measuring utilisation, investment climate as well as ICT diffusion, are developed with the participation of key stakeholders.

At the same time, after over a decade of privatisation and market liberalisation, there is a need to take stock of the implemented reforms in the ICT sector and their outcomes. In particular, there is a need to examine the status and effectiveness of the regulatory environment because the presence of a credible and effective regulatory environment is essential in shaping the development of a country's information infrastructure. Melody points out that "regulatory risk" is a factor that determines corporate investment strategies. A regulatory environment characterised by clear and transparent rules, standards, and actions can help minimise regulatory risk, and thus, spur further investments in the development of ICT infrastructure.[1]

An important task in monitoring the progress thus far of liberalisation of the telecommunications sector is to collect a systematic set of supply-side indicators. Information such as the number of licensed operators, the services they provide, the extent of infrastructure coverage or its geographic spread, the level of investments in the infrastructure, the level of market concentration, state of interconnection, tariffs, internet penetration, and broadband connectivity have to be methodically and consistently collected to be able to measure the outcomes of liberalisation and benchmark the progress or regression of country's state of ICT. To balance the supply side numbers, measuring the demand for ICT services and their effect on the lives of people, especially the poor, while

[1] William Melody, "Stimulating Investment in Network Development: Roles for Telecom Regulation," *WDR Dialogue Theme 2003 Background Paper WDR 0301*, March 2003.

more difficult to collect, is also vital in completing the picture of how reforms have affected the availability and accessibility of ICT infrastructure and how they have improved or worsened people's lives.

Given this context, it is very fitting that *LIRNEasia*'s 2006-07 research cycle focuses on:

- providing an account of the implemented reforms in the telecommunications sector,
- developing an ICT sector Indicators Manual appropriate for developing Asia,
- assessing the impact of reforms on the access and use of telecommunications services by the poor (shoestrings study), and
- assessing the Telecommunications Regulatory Environment in six developing countries in Asia[2] using common and comparable methodologies.

The Philippines is one of the six developing countries in Asia under consideration in *LIRNEasia*'s 2006-07 research cycle. This country case study report is divided into four main sections. The first focuses on the analytic description of the implemented reforms in the Philippine telecommunications industry. This section presents a background on the pre-reform Philippine telecommunications industry before looking into how the liberalisation process took place, and what were the outcomes of liberalisation.

The second section of the report examines key supply side sector performance indicators which track the growth and developments in the sector as captured by fixed line, mobile, personal computer, and internet availability, accessibility, and utilisation. This section presents performance indicators that link liberalisation and regulatory reforms to improved sector performance especially in terms of availability, accessibility, and utilisation.

The third section discusses the current Telecommunications Regulatory Environment (TRE) in the Philippines in terms of market entry, scarce resources, interconnection, tariff regulation, anti-competitive practises, and Universal Service Obligation (USO). The section then presents the outcomes of the TRE perception survey conducted with a panel of informed experts.

The fourth and final section presents some conclusions and analyses on the progress thus far of the telecommunications sector in the Philippines over a decade after liberalisation, summarises key issues in sector performance as suggested by supply side and utilisation indicators, and reflects on the regulatory issues and challenges faced.

## Telecommunications Reform in the Philippines: An Analysis of Implemented Reforms[3]

This section presents a brief background on the pre-reform Philippine telecommunications industry. Next, the liberalisation process will be considered. Finally, the outcomes of the sector's liberalisation under the Service Area Scheme will be assessed.

[2] The countries covered in the study are India, Pakistan and Sri Lanka in South Asia and Indonesia, Philippines and Thailand in Southeast Asia.

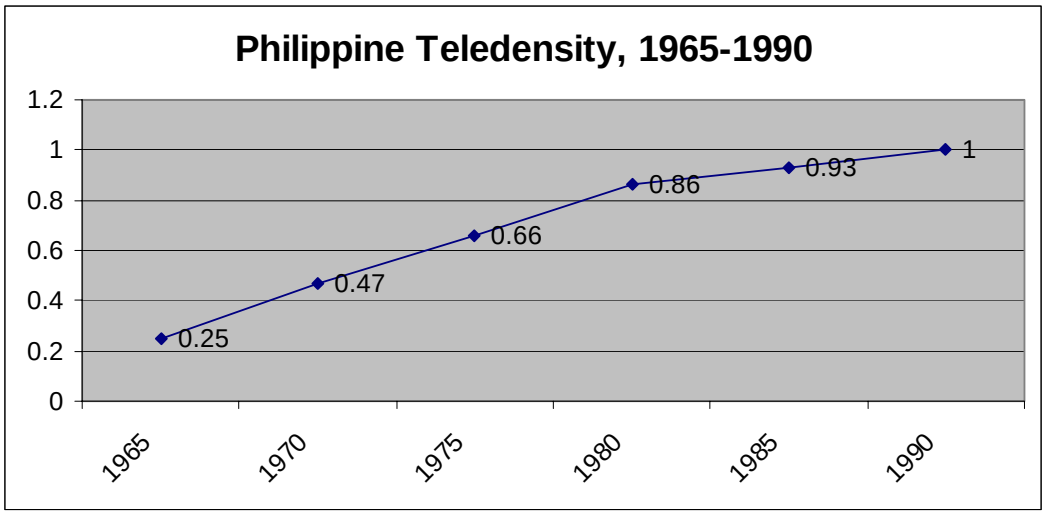
[3] This section draws from Lorraine Carlos Salazar, *Getting A Dial Tone: Telecommunications Reform in Malaysia and the Philippines*. Singapore: Institute of Southeast Asian Studies, 2007.

**The Pre-Reform Telecommunications Sector in the Philippines**

The first telecommunications companies in the Philippines were private, foreign-owned companies which were regulated by the state. In 1967, a group of Filipino businessmen close to the then President took over ownership of the Philippine Long Distance Telephone Company (PLDT), a private company with the sole authority to operate a national communications network. Under martial law, this company consolidated its monopoly status and privileged position, and was under very little pressure to expand its network and improve its services. Then President Marcos granted a few other businessmen exclusive privileges in the industry, while small provincial telephone companies proliferated due to unmet demand. The state under Marcos protected the monopoly profit of PLDT, which was not compelled to improve its services or expand the communications infrastructure. This was allegedly because Marcos was himself a substantial stakeholder in PLDT. Under the Aquino administration on the other hand, PLDT's owners used familial ties to the President and its political influence in Congress and the Supreme Court to protect its position. Monopoly rent was thus captured for private benefit and was growth-hindering.

The pre-reform Philippine telecommunications sector was used for political patronage resulting to a poor and inefficient industry, where the dominant player was only interested in earning monopoly profits. PLDT was the recipient of many foreign loans for the expansion of its services but there were no indications of any service improvement. These loans, it seems, dissipated in questionable deals that did not result in any infrastructure or service expansion. Despite its non-performance, the state supported and favoured this company because of the alleged ownership of a majority of the company's shares by Marcos himself. Under Aquino, the company owners used their familial links to the president and their influence over other state institutions to maintain their privileged position and block attempts to liberalise the industry.

**Figure 1**




Source: World Development Indicators Online www.worldbank.ord/publications/wdi

Telecommunications services in the Philippines stagnated, with teledensity remaining at less than 1 telephone per 100 persons for decades until 1993 as Figure 1 below shows because PLDT had neither the incentive nor pressure from the government to expand and improve its service provision. PLDT embarked on various expansion

programs, but there were no visible improvement in the country's telecommunications network. In the Philippines, telecommunications was run not for the attainment of public goals but for the benefit of the president and his cronies, to the detriment of the country.

**Liberalising the Philippine Telecommunications Sector**

This section discusses how an historically weak and penetrated state was able to liberalise the telecommunications industry in the face of an influential vested interest. In particular, liberalisation came about through decisive executive action and help from a coalition for reform, which identified the oligarchic control of the economy as the main reason for economic underdevelopment in the Philippines. A crucial factor in the success of liberalisation was the rise to the presidency of Fidel V. Ramos, who personally supported efforts to open the economy and made such reforms a key aspect of his administration's agenda.

Ramos, the 12th president of the Philippines, never fails to mention that his government stabilised the economy and created avenues for growth by dismantling monopolies and cartels. In his inaugural address in June 1992, Ramos identified the need to break up the oligarchic cartels and monopolies that had long dominated the Philippine economy as one of the central tasks of his government. He argued that the Philippine state had long been preyed upon by "oligarchies that used their privileged access to the bureaucracy to accumulate great fortunes and tremendous political power."[4] Ramos' aims were "levelling the playing field" by "dismantling oligarchic cartels and monopolies" and introducing competition to a closed and protected economy.[5] A celebrated example of this reform effort was the break-up of the PLDT telecommunications monopoly.

Executive Order 59

On 24 February 1993, President Ramos signed Executive Order (EO) 59, which required interconnection[6] among all authorised telecommunications companies. The aim was to create an accessible and integrated national telecommunications network to promote greater private sector investment in the expansion of the country's telecommunications infrastructure and encourage effective competition in the industry. The executive order empowered the National Telecommunications Commission (NTC), the industry's regulator, to set the terms of interconnection in case parties could not arrive at a settlement and to establish penalties for violations. Section 13 of EO 59 enumerated severe penalties for refusal to interconnect.[7] Before this, the only law governing any

[4] Fidel V. Ramos, *Developing as a Democracy: Reform and Recovery in the Philippines 1992-1998* (Hong Kong: Macmillan Publishers, Ltd., 1998), p. xii.
[5] Ramos, 1998, p. 31.
[6] Interconnection refers to the linkage by wire, radio, satellite or other means, of two or more existing telecommunications carriers or operators with one another for the purpose of allowing or enabling the subscribers of one carrier or operator to access or reach the subscribers of the other carriers or operators. NTC Memorandum Circular 9-7-93, *Implementing Guidelines on the Interconnection of Authorized Public Telecommunications Carriers*, 23 July 1993, p. 1. Document found at the NTC Website at www.ntc.gov.ph.
[7] Section 13 of EO 59 provides for the following penalties in case of violations: 1) the imposition of administrative fines, penalties, and sanctions as may be allowed or prescribed by existing laws; 2) the suspension of further action on all pending and future applications for permits, licenses, and authorisations; 3) withholding the release of any loans or credit; 4) the disqualification of employees, officers, and directors from being employed in any enterprise under NTC supervision; and 5) the suspension of the authorised rates for any services of the violating carriers without disruption to its services to the public. Nonetheless, as will

failure to comply with NTC regulations was Section 21 of Commonwealth Act 146 (Public Service Law), which provided a maximum penalty of P200 per day.

Meanwhile at the At the NTC, then Commissioner Simeon Kintanar, announced that the NTC would award licenses to several cellular companies to meet the huge demand for telephone services.[8] Even before EO 59, there were already nine companies that have obtained telecommunications franchises from Congress. These companies had applications pending at the NTC for provisional authority to operate international, cellular, or value-added services. However, without the assurance of interconnection being made compulsory and mandatory, new entrants were virtually at the mercy of the dominant player. Historically, PLDT used interconnection as a tool to block the expansion and growth of its competitors. Without interconnection, the subscribers of a company could not call the subscribers of PLDT, which owned and controlled the only national public network and had about 90 percent of all telephone subscribers. Thus, EO 59 was a central aspect of liberalising the industry.[9]

Executive Order 109

On 12 July 1993, President Ramos signed EO 109, entitled "Policy to Improve the Provision of Local Exchange Carrier Service."[10] The executive order's main objective was to improve the provision of local exchange service in unserved and underserved areas. The policy laid down a strategy of expanding the national telecommunications infrastructure based on the cross-subsidisation of non-profitable local exchange services by profitable international services.[11]

On 12 September 1993, the NTC issued Memorandum Circular No. 11-9-93, which provided implementation guidelines for EO 109. The memorandum, also known as the Service Area Scheme (SAS) required all authorised International Gateway Facility (IGF) operators, within three years of the date of issue of their authorisation, to install and maintain a minimum of 300,000 lines. Cellular mobile telephone system (CMTS) operators were required to install at least 400,000 telephones lines within five years. In their roll-out plans, telcos were required to provide at least one rural exchange line for every ten urban lines. Finally, the telecommunications network had to be interconnected in accordance with EO 59. In effect, liberalisation was used to attain a social goal, with market entry to the industry incurring a service obligation cost to new entrants.

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be discussed later, the threat of these penalties was not enough to stop PLDT from dragging its feet in interconnecting with its competitors, to the detriment of the consuming public.

[8] *Philippine Daily Inquirer*, 17 February 1993.

[9] Interview with Antonio Carpio, Makati City, 3 May 2001.

[10] EO 109 defined a local exchange carrier service as a "telecommunications service primarily but not limited to voice-to-voice service, within a contiguous geographic area furnished to individual subscribers under a common local exchange rate schedule."

[11] Section 4 of EO 109 stated that "until universal access to basic telecommunications services is achieved, and such service is priced to reflect actual costs, local exchange service shall continue to be cross-subsidized by other telecommunications services within the same company."

**Table 1**
**Eleven Service Areas**

| Subdivision No. | Region | Coverage | Assigned Carrier |
|---|---|---|---|
| 1 | Region I<br><br><br>NCR D | Abra, Ilocos Norte, Ilocos Sur, La Union, Pangasinan, Mt. Province, Benguet<br>Pasay City, Las Pinas, Paranaque, Pateros, Taguig, Muntinlupa | Smart |
| 2 | Region II<br><br><br>NCR A | Batanes, Cagayan Valley, Isabela, Quirino, Nueva Vizcaya, Ifugao, Kalinga-Apayao<br>Manila, Navotas, Caloocan City | ETPI/Teletech |
| 3 | Region III | Tarlac, Pampanga, Zambales, Bataan, Bulacan, Nueva Ecija | Smart |
| 4 | Region IV-A | Aurora, Laguna, Quezon, Marinduque, Rizal, Romblon | PT&T/Capwire |
| 5 | Region IV-B | Cavite, Batangas, Occ. Mindoro,<br>Or. Mindoro, Palawan | Globe |
| 6 | Region V<br><br><br>NCR B | Albay, Camarines Norte, Camarines Sur, Catanduanes, Masbate, Sorsogon<br>Quezon City, Valenzuela, Malabon | ICC/Bayantel |
| 7 | Region VI<br><br>Region VII-A | Aklan, Antique, Capiz, Iloilo, Negros Occidental, Guimaras<br>Negros Oriental, Siquijor | Islacom |
| 8 | Region VII-B<br>Region VIII | Bohol, Cebu<br>Eastern Samar, Leyte, Northern Samar, Southern Leyte, Samar, Biliran | Islacom |
| 9 | Region IX-A<br><br>Region X<br><br><br><br><br><br><br>Region XI-B | Zamboanga del Norte, Zamboanga del Sur<br>Agusan del Norte, Agusan del Sur, Bukidnon, Camiguin<br><br>Misamis Occidental<br><br>Misamis Oriental, Surigao del Norte<br><br>Surigao del Sur, Davao Oriental | Piltel<br><br>Philcom<br><br><br><br>Piltel<br><br>Philcom |
| 10 | Region XI-A<br><br><br><br>Region IX-B | Davao del Norte<br>Davao del Sur, South Cotabato, Sarangani<br>Basilan<br>Sulu, Tawi-Tawi | Philcom<br>Piltel<br><br>Philcom/ Piltel<br>Piltel |
| 11 | Region XII<br><br><br>NCR C | Lanao del Norte, Lanao del Sur, Maguindanao, North Cotabato, Sultan Kudarat<br>Makati, San Juan, Mandaluyong, Marikina, Pasig | Globe |

Source: National Telecommunications Commission, 1998.

According to then NTC Commissioner Simeon Kintanar, the SAS was the NTC's response to something that had to be done fast while also ensuring that investments were distributed nationally. When the NTC staff examined the new companies' deployment plans, they found out that everyone wanted to go to lucrative urban areas where telephone demand was high. None were keen to service the rural areas. The SAS was thus developed to correct overcrowding in urban areas but at the same time allow a company to earn profits by pairing profitable with less profitable areas.[12] Table 1 presents the 11 services areas to be served by eight international gateway and cellular telephone companies.

Republic Act 7925

From the NTC, the next stage of efforts to secure liberalisation of the telecommunications industry shifted to Congress. Some legislators felt that the executive had pre-empted what Congress could do and bypassed Congress in its efforts to liberalise the industry. Some legislators endeavoured to put their imprint on market reform, in some ways reversing what the executive had done.

The Telecommunications Act of the Philippines (Republic Act 7925) became law on 1 March 1995. The act institutionalised liberalisation and competition, emphasising the role of private enterprises in the provision of telecommunication services, affirmed the policy of cross-subsidisation, and provided for the privatisation of all existing government communications facilities.[13]

Its salient provisions include: the responsibilities of the regulatory authority (the NTC) and the Department of Transportation and Communications (DOTC); a categorization of telecommunications entities; the management and allocation of radio frequency spectrum; the need to obtain a legislative franchise; interconnection rules; the mandate of the NTC to establish rates and tariffs; access charges and revenue sharing; the rights of telecommunications users; and ownership of telecommunications entities.

The NTC was identified as the principal administrator of the law while the Department of Transportation and Communications (DOTC) was tasked to formulate and recommend national policy guidelines.

As a reaction to the SAS, the law affirmed the power of Congress as the sole franchise-giving body. In addition, RA 7925 reduced the timeframe for rollout compliance and provided that failure to comply with the obligation within three years would be a cause for the cancellation of a company's authority to operate.[14]

While RA 7925 was a landmark law, it was nevertheless quiet on important matters, which it could have covered. In terms of interconnection, the law provided that the NTC would mandate "a fair and reasonable interconnection of facilities of authorized

[12] Interview with Simeon Kintanar, Quezon City, 20 March 2001.
[13] The government, though the Telecommunications Office (Telof), an office attached to the DOTC, provides for telex and telegram services in underserved rural areas, and manages a few telephone exchanges in Mindanao.
[14] RA 7925, Section 10 and 12.

public network operators and other providers of telecommunications services."[15] However, the NTC's role in fostering interconnection was unspecified. This deliberate omission was significant, given that there were already bills on interconnection filed in both Houses of Congress that specified the NTC's role. Thus, instead of bolstering the provisions of EO 59, which mandated interconnection, RA 7925 muddled and removed the role of the regulator in the process.

Another issue that the authors of RA 7925 deliberately avoided was the strengthening of the NTC as a regulatory body. A bill had already been filed as early as 1987 calling for the reorganisation and professionalisation of the NTC, aiming to make it more independent and autonomous from political pressures. One proposal was to institute a fixed term of office for the Commissioner and the two deputies, instead of them serving at the pleasure of the President. However, the authors of RA 7925 purposely wanted to set parameters and boundaries that would limit the power of the NTC.

Clearly, RA 7925, although etching into law the principles of competition and liberalisation, nonetheless showed how Congress could be obstructionist. Far from encouraging reform, the authors of RA 7925 sought to reverse the process that the executive had laboured to create. The telecommunications law was quiet about things that it could have been categorical about, such as interconnection and the role of the regulator, because the authors of the law had other considerations in mind. Despite the existence of bills on interconnection that could have been incorporated into the law, the lobbying of PLDT coincided with a senator's self-interest and won the day. The ensuing insertions in the law are evidence of the anomaly of the bicameral conference committee structure, where after a law has gone through three readings and a lengthy process of public hearings to accommodate various points of view, the final law can be entirely different, with watered down provisions or insertions that negate the legislation's original intent. This is clearly demonstrated by RA 7925, with which the authors succeeded in setting back reforms that the executive had already instituted.

**Assessment of the Service Area Scheme (SAS)**

Under the SAS, nine telecommunications companies had installed over four million new landlines, increasing the available number of lines from 1.4 million in 1995 to 6.9 million by 2000. (See Table 2) Installed telephone density increased from 2.01 in 1995 to 9.12 in 2000. However, only 2.8 million lines were subscribed to, which constituted a subscribed line teledensity of 3.44 in 2000.

Only four of the eight telecommunications companies that initially joined the SAS accomplished their required fixed line rollouts. These were Bayantel, Globe, Smart, and Piltel. Islacom, Philcom, Piltel, and PT&T failed to meet their commitments. Telephone companies cited various reasons for their failure to fulfil their fixed line rollout commitments: peace and order situation in some areas, delays and conflicts over permit issuance at the local government level, environmental issues raised by residents of the area, and the 1997 financial crisis.[16]

[15] RA 7925, Section 5c.
[16] *Assessment of EO 109*, p. 4.

**Table 2**
**SAS Accomplishment as of December 2000**

| Company | Commitment | Installed | Subscribed |
|---|---|---|---|
| PLDT* | 300,000 | 2,623,797 | 1,701,607 |
| Digitel* | 300,000 | 611,166 | 344,368 |
| Bayantel | 300,000 | 466,493 | 219,082 |
| Islacom | 700,000 | 488,531 | 150,440 |
| Globe | 700,000 | 790,291 | 158,249 |
| Smart | 700,000 | 866,954 | 116,992 |
| PT&T | 300,000 | 190,456 | 50,678 |
| Piltel | 400,000 | 463,541 | 56,967 |
| Philcom | 300,000 | 64,620 | 38,539 |
| ETPI | 300,000 | 69,085 | 21,677 |
| TOTAL | 4,300,000 | 6,634,934 | 2,858,599 |
| Paptelcos | | 271,028 | |
| Grand TOTAL | | 6,905,562 | |

* PLDT and Digitel were not part of the original 11 service area allocation. They were however required to put up a minimum of 300,000 in their existing service areas but opted to undergo bigger expansion programs. PLDT on its own launched the Zero-Backlog program in 1993, aiming to install 1.6 million lines in 5 years.

Source: "Assessment of the Implementation of the Service Area Scheme (SAS)" by DAI-Agile Consultants at the NTC, p. 4. Hereafter cited as *Assessment of the SAS.*

**Table 3**
**Concentration of Telephone Facilities in Urban Centres, 2001**

| Area | Installed Lines | % of Total Installed Capacity |
|---|---|---|
| (1) Metro Manila | 3,248,046 | 47.03 |
| (2) Cebu, Mandaue and Lapu-Lapu City | 322,951 | 4.68 |
| (3) Bacoor and Kawit Cavite | 113,846 | 1.65 |
| (4) Davao City | 85,757 | 1.24 |
| (5) Baguio City | 75,406 | 1.09 |
| (6) Angeles City | 71,116 | 1.03 |
| (7) Bacolod City | 66,609 | 0.96 |
| (8) Malolos, Bulacan | 60,218 | 0.87 |
| (9) Biñan, Laguna | 58,224 | 0.84 |
| (10) Iloilo City | 54,949 | 0.80 |
| (11) Antipolo City | 51,398 | 0.74 |
| (12) Gen Santos, South Cotabato | 49,348 | 0.71 |
| (13) Batangas City | 47,132 | 0.68 |
| (14) Cabanatuan City | 46,760 | 0.68 |
| (15) Cainta, Rizal | 45,702 | 0.66 |
| (16) Imus, Cavite | 40,693 | 0.59 |
| (17) Lipa City | 39,148 | 0.57 |
| (18) Dagupan City | 38,900 | 0.56 |
| (19) Iligan City | 37,480 | 0.54 |
| (20) Naga City | 37,100 | 0.54 |
| (21) Taytay, Rizal | 36,608 | 0.53 |
| (22) Koronadal, South Cotabato | 34,014 | 0.49 |
| (23) Tacloban City | 30,794 | 0.45 |
| (24) Tarlac | 30,612 | 0.44 |
| (25) Vigan | 26,474 | 0.38 |
| (26) Meycauayan, Bulacan | 22,340 | 0.32 |
| (27) Calamba | 22,182 | 0.32 |
| (28) Tagbilaran City | 21,234 | 0.31 |
| (29) San Fernando, La Union | 20,776 | 0.30 |
| (30) Laoag City | 18,020 | 0.26 |
| (31) Binangonan, Rizal | 17,680 | 0.26 |

| | | |
|---|---|---|
| (32) Zamboanga City | 17,642 | 0.26 |
| (33) Baliuag, Bulacan | 16,750 | 0.24 |
| (34) Legaspi City | 16,088 | 0.23 |
| (35) Angono, Rizal | 15,796 | 0.23 |
| (36)Mabalacat, Pampanga | 11,000 | 0.16 |
| TOTAL | 4,950,791 | 71.64% |

Source: *Assessment of the SAS*, p. 11.

None of the telecommunications companies fulfilled the requirement of a one in every ten line rural-urban deployment ratio. Like PLDT, the new entrants concentrated their rollout obligations in urban areas. Table 3 shows that about 72 percent or 4.9 million lines are installed in 36 urban centres in the country, of which, 47 percent or 3.2 million lines are in Metro Manila. This demonstrates the big regional disparity in terms of telephone service in the country, because only 14 percent of the population lives in Metro Manila.

Table 4 shows that, as of December 2000, of the 1609 towns and cities in the Philippines, only 52.4 percent or 844 have fixed line coverage, while 40.6 percent or 654 have cellular phone coverage. The rest of the country relies on payphones or public calling offices (PCO) at the municipal level.[17] Thus, despite about four million fixed lines lying idle, 745 cities and towns were still without fixed line local exchange services. The pairing of lucrative and non-lucrative areas and the ten to one ratio of lines under the SAS did not provide enough compulsion to guide the private companies to build networks in unserved but low demand areas. On hindsight, if the telcos have fulfilled this obligation, it would have resulted to more unused capacity. Further complicating the story was how consumer demand declined as a result of the 1997 financial crisis.[18] As incomes shrank, people substituted fixed line telephones with prepaid cellular telephones, which offered the added features of mobility and services such as text messaging.

**Table 4**
**Coverage of Telecommunications Services**
**as of December 2000**

| Total Cities and Towns in the Philippines (1,609) | Total Number | % of total cities and Municipalities |
|---|---|---|
| With Local Exchange Service/fixed line service | 844 | 52.4% |
| With cellular service | 654 | 40.6% |
| With Payphone/PCO service | 1417 | 88.1% |
| With fixed lines/ Payphone/PCO | 1481 | 92% |
| With fixed lines/cellular/ Payphone/PCO | 1495 | 92.9% |

Source: *Assessment of the SAS*, Appendix A, p. 32.

According to various telecommunications executives that were interviewed, the SAS failed because of the mismatch between supply and demand, whereby over 50 percent

[17] 1495 or 93 percent of the country's towns and cities have fixed line, payphone, PCO, or cellular telephone services. However, 80 percent of these were installed through the Ramos government's Telepono Para sa Barangay (Telephones for the Village) Program, and not the provision of universal access to communications services by the new telephone companies.

[18] As of 2000, a monthly household income of P10,000 or less for the average Filipino family meant that less that 25 percent of households could afford the basic telephone service which cost between P300 and P500 per month. See *Assessment of EO 109*, p. 6.

of the existing landlines were unsubscribed. Telecommunications companies criticised the NTC for not properly designing the program. In particular, they observed that no study was conducted to correlate the required number of fixed lines, the level of demand for telecommunications services, and the ability of households or families to pay for them. The NTC counters that the telcos were partly to blame because they assented to the plan. Moreover, they concentrated on lucrative urban areas, which led to higher competitive pressures.

The biggest criticism of the SAS was that it preserved PLDT's dominant position.[19] Although it might have averted the over-concentration of investment in profitable urban areas and ensured investments in the provision of telephone services to unserved rural areas, some analysts contend that the scheme ignored economies of scale.[20] New players were given geographically segregated areas, thus preventing them from realising economies of scale and scope, as well as enjoying positive network externalities. PLDT, in contrast, had a national network to which all of the new entrants needed to interconnect. All new entrants complained to the regulator that PLDT was taking its time to interconnect, to the detriment of all subscribers. Smart and Bayantel, the two most badly hit by interconnection problems with PLDT, were the most vocal in publicising their problems. All of the new telephone companies lobbied the government to solve the interconnection problem and reform the regulatory framework --but reform was slow to come forth.

Others asserted that the SAS was a political scheme designed to accommodate competing interests rather than deal with the lack of telephones. The NTC, critics say, did not responsibly decide which players had the most efficient and viable network development plans.[21]

When assessed in terms of its overall goal of expanding and modernising the Philippine telecommunications infrastructure, the SAS was successful. It resulted in the speedy rollout of fixed lines and the provision of various types of communication services in the country. The program increased the available phone lines per 100 people from one in 1991 to 9.12 in 1999.[22] Using another measure, as of 2000, the liberalisation of telecommunications in the Philippines attracted over P600 billion in foreign and local investments.[23]

The use of mobile phones, which were only available to those with higher incomes when they were introduced in 1991, reached about 16 million subscribers by the end of

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[19] As of 2002, PLDT (including Smart and Piltel) controlled 65.52 percent of the fixed line market. In the mobile market segment, Smart and Piltel control 44.37 percent and 11.53 percent respectively. See National Telecommunications Commission Annual Report 2002, pp. 28-30 at http://www.ntc.gov.ph/consumer-frame.html viewed on 10 December 2003.

[20] Ma. Joy Abrenica and Gilberto Llanto, "Services," in *Philippine Economy: Developments, Policies and Challenges* edited by Arsenio Balisacan and Hal Hill (New York: Oxford University Press, 2003), pp. 254-282.

[21] See Abrenica and Llanto, 2003. In addition, it should be noted that before the NTC issues a license, the company has to obtain a franchise from Congress.

[22] See National Telecommunications Commission Annual Report 2002, p. 29 at http://www.ntc.gov.ph/consumer-frame.html viewed on 10 December 2003. In 2002, teledensity was down to 8.70 per 100 persons, because of a faster population growth.

[23] *Assessment of SAS*, p. 6.

2002.[24] In effect, mobile phones became substitutes or replacements for fixed line telephones as they became more affordable. This directly undermined the SAS, which was modelled on fixed line telephone usage and teledensity count. In addition, unforeseen circumstances such as the financial crisis not only affected demand for telephone services but also their supply. Thus, factors that were beyond the control of both government and business came into play during the SAS' implementation.

## Analysis of Key Sector Performance Indicators

The liberalisation of the telecommunications industry in the Philippines successfully expanded the availability of fixed line and cellular mobile telephones at a very rapid rate.

The Service Area Scheme (SAS) utilised liberalization as a means to attain the social goal of increasing the availability of fixed line phones and not merely to introduce competition per se. Table 5 shows the six-fold growth in fixed lines from 1992 to 2000, with an inflection point starting 1996 when new players started their fixed line roll-out. However, growth reached a plateau and eventual decline after 2002 when the installed fixed lines were not being subscribed. Meanwhile, mobile telephony's uptake grew tremendously, as Table 6 documents. The SAS effectively expanded the number of available fixed lines in the country. However, it was overtaken by mobile telephony, with the launch of prepaid mobile services and the popularity of text messaging, launched in 1999— the inflection point of growth in the country's number of mobile subscribers.

**Table 5**
**Fixed Line Teledensity**

| Year | No. of Main Lines | YOY Growth in Mainlines (%) | Installed Teledensity | Subscribed | YOY Growth of Subscribed Teledensity (%) |
|---|---|---|---|---|---|
| 1992 | 740,033 | | 1.17 | 1.03 | |
| 1995 | 1,409,639 | 90.5 | 2.01 | 1.65 | 60.2 |
| 1996 | 3,352,842 | 137.9 | 4.66 | 2.55 | 54.5 |
| 1997 | 5,775,556 | 72.3 | 8.07 | 2.86 | 12.2 |
| 1998 | 6,641,480 | 15.0 | 9.08 | 3.41 | 19.2 |
| 1999 | 6,811,616 | 2.6 | 9.12 | 3.87 | 13.5 |
| 2000 | 6,905,962 | 1.4 | 9.05 | 4.01 | 3.6 |
| 2002 | 6,914,235 | 0.1 | 8.7 | 4.17 | 4.0 |
| 2005 | 6,538,387 | -5.4 | 7.76 | 4 | -4.1 |

Source: National Telecommunications Commission

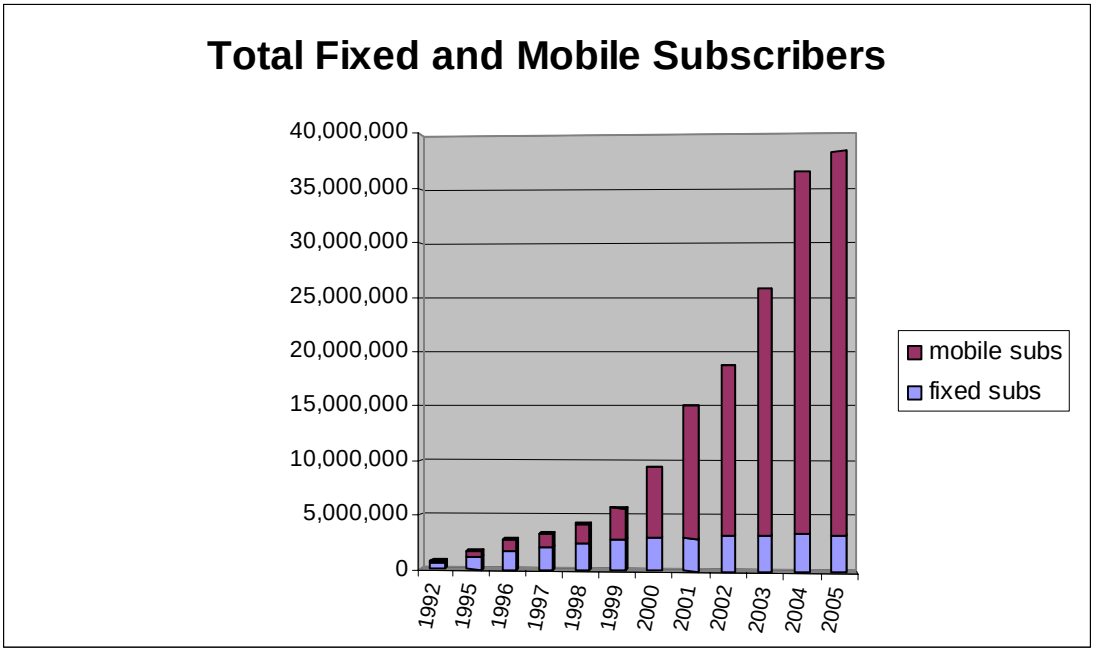
[24] Clearly, with the changes in technology and types of telephone services available, the use of teledensity based on number of fixed line telephones is no longer the best measure of the state of telecommunications in developing countries such as the Philippines, where the number of mobile phone users grew to more than fivefold the number of fixed line subscribers by 2002.

**Table 6**
**Mobile Teledensity**

| Year | Number of Mobile Phone Subscribers | YOY Growth Rate (percent) | Mobile Density |
|---|---|---|---|
| 1990 | 9,800 | -- | 0.016 |
| 1991 | 33,800 | 244.90 | 0.054 |
| 1995 | 492,700 | 1357.69 | 0.720 |
| 1996 | 959,024 | 94.65 | 1.37 |
| 1997 | 1,343,620 | 40.10 | 1.87 |
| 1998 | 1,733,652 | 29.03 | 2.27 |
| 1999 | 2,849,880 | 64.39 | 3.80 |
| 2000 | 6,454,359 | 126.48 | 8.46 |
| 2001 | 12,159,163 | 88.39 | 15.61 |
| 2002 | 15,383,001 | 26.51 | 19.36 |
| 2003 | 22,509,560 | 46.33 | 27.77 |
| 2004 | 32,935,875 | 46.32 | 39.85 |
| 2005 | 34,778,995 | 5.60 | 41.3 |

Source: National Telecommunications Commission

**Figure 2**




Source: NTC

The state's liberalisation of the telecommunications industry by mandating interconnection and the allowing the entry of new players was the reason behind the expansion in the sector in the past decade. The liberalisation of the telecommunications industry in the Philippines has been successful in reforming a backward, monopoly sector, leading to the availability of choice and lower prices for communications services.[25]

[25] The success of implementing the SAS, however, is qualified. Telecommunications companies have unanimously judged the SAS as a failure. The program tried to ensure that new entrants would not ignore the rural areas, with the requirement of one rural line to every ten urban lines. However, the urban-rural pairing

As fixed line subscribers were experiencing a tough time calling subscribers of other networks, mobile telephony subscription started to pick-up. In fact, the unforeseen development of substitution fixed line telephones with mobile phones, as competition among the mobile phone companies led to the provision of affordable services, innovative packages, and the introduction of prepaid services—also caused the slowdown of fixed line subscription, and thus the failure of the SAS.

The use of mobile phones, which at the start of the 1990s was only affordable to those with high incomes, became accessible to lower income groups through the prepaid method introduced in 1999 by Globe Telecommunications. Figure 2 nicely captures this development, where the point of sharp growth in the mobile market started during 1999. Such tremendous growth in the industry, with CAGR from 2000 to 2005 of 32.5% was a result of intense competition among three effective mobile players: Smart, Globe, and Sun Cellular—which in turn led to reduction in mobile tariffs.

The best measure of consumer benefit brought about by liberalisation is the declining prices in cost of mobile services, which Tables 7 and 8 in Annex 2 demonstrate. Table 7 documents comparative cellular services costs in selected ASEAN countries from 1995 to 2005. Clearly, the cost of cellular services has declined in the Philippines as the table shows. Mobile cost data in 2005 sourced from company websites are presented in Table 8. As can be seen in this table, in 2005, there are no more connection fees for mobile subscription. One can choose between prepaid and postpaid packages, depending on one's budget. Voice calls are charged at a flat rate of between 10-13 cents per minute for on-net voice calls, while those calls off-net are charged between 11-15 cents per minute. Local SMS are charged between 1 to 2 cents while international SMS are charged between 8-15 cents. Meanwhile, IDD calls are charged between 30 to 40 cents per minute to all destinations, while lower rates apply to the top 10 or 15 destination countries.

Table 9 in Annex 2 provides data on fixed line telecommunications cost in selected ASEAN countries from 1991 to 2001. Interestingly, the cost of a fixed line phone, whether for residential or business use has not declined in the Philippines. Rather, 2006 data from PLDT's company website states that for a residential line, the connection fee is US$59.98 (composed of a US$39.98 connection fee and a US$20 contribution under the Marcos initiated subscriber investment plan or SIP) while monthly fees total US$12.10. Meanwhile, the cost of a fixed line connection for a business is US$110 (US$70 connection fee and US$40 for SIP) and a monthly subscription fee of US$25.20. In effect, the cost of owning a fixed line has actually gone up in the past 10 years in the Philippines! The cost of owning a fixed line along with the cumbersome paper requirements and waiting time add to reasons why most Filipinos have shifted to the use of mobile phones.

**The Special Case of SMS**

One interesting phenomenon in the Philippines brought about by the pervasiveness of mobile phones is the country's love affair with text messaging.

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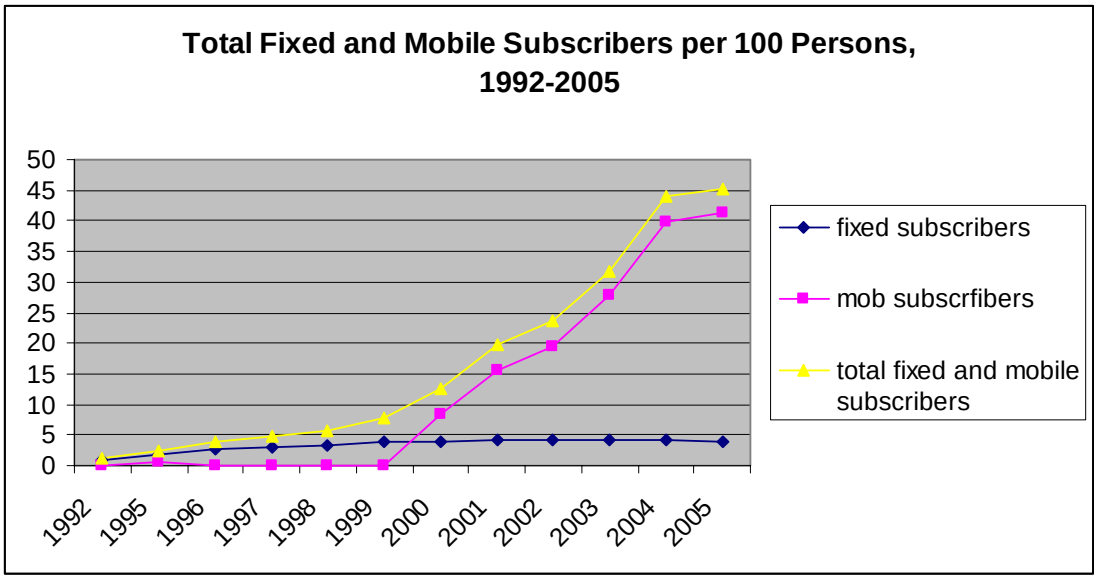
of area assignments led to the creation of incongruous areas of operation and a lack of economies of scale for new market entrants, with only PLDT operating a national network until 1999. Thus, new telcos were at the mercy of PLDT with regards to interconnection.

**Figure 3**




Source: NTC

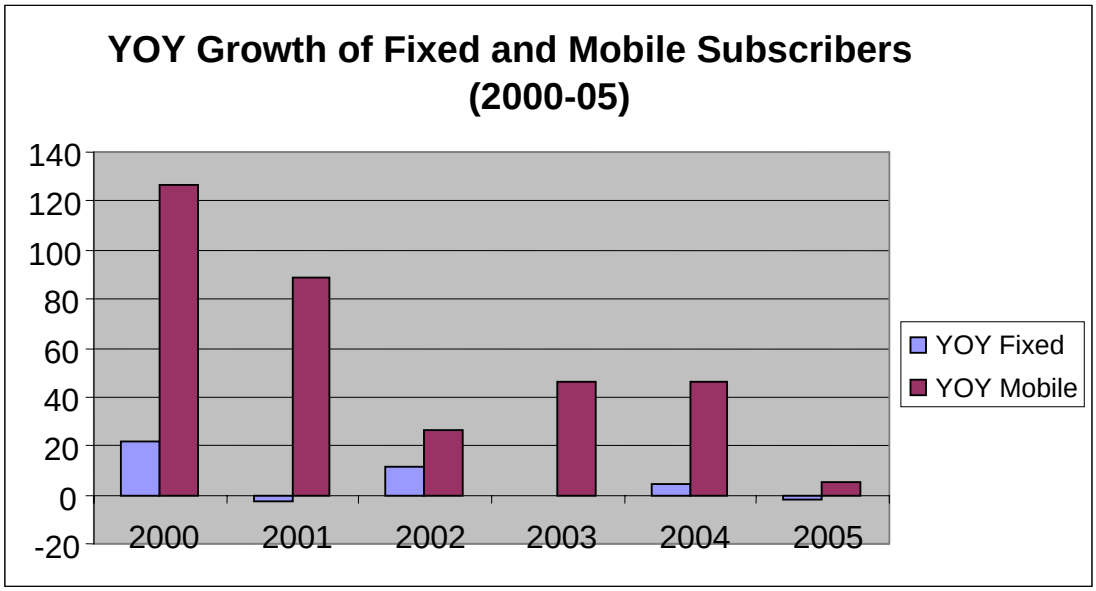
The first mobile phones introduced in the 1990s used analogue technologies. Their uptake was slow because of the high cost of services and handset as well as poor billing and cloning problems. This situation led many Philippine telcos to shift to 2G technologies. By 1999, GSM became the dominant technological standard used in the country.

Short Messaging Service (SMS) or texting was first introduced in 1994 by Globe Telecoms as a free service to attract new subscribers. The use of SMS and mobile phones, however, did not take off until 1999 when Globe Telecoms introduced prepaid mobile services, which allowed subscribers to use a mobile phone without the cumbersome requisite of paying monthly bills.[26] In its prepaid service model, texting was a free added feature.

Figure 3 captures the growth in total teledensity in the country, starting from 1993, the year of liberalisation. The diagram graphically demonstrates how fixed line growth has reached a plateau and has started to decline, with mobile telephony driving growth in teledensity starting in 1999. Figure 4 also captures this, where YOY growth of fixed lines was negative in 2001 (-2.8) and 2005 (-2). Figure 3 also shows the remarkable growth in mobile phone density starting in 1999, leading to a 2005 mobile teledensity of 41.30, with every 2 out of 5 Filipinos owning a mobile phone. However, both Figures 3 and 4 show that growth in the mobile sector has also slowed down, with YOY growth slowing down to 5.5 percent in 2005. This slowdown is growth in mobile subscribers base is due to Globe and Smart's efforts to weed-out non-revenue generating subscribers, leading to a higher churn in subscriber base.

[26] In 2005, Smart Telecoms reported a subscriber base of 20,408,621, of which 20,128,543 (98.6 percent) were prepaid subscribers while only 280,078 (1.4 percent) were post-paid subscribers. See *PLDT Annual Report 2005: Broadbanding the Future.*

**Figure 4**




Source: Calculated from NTC data

Up until June 2004, PLDT and Globe defined a prepaid cellular subscriber as someone who activates and uses the SIM card in his handset, which has a pre-stored airtime credit. A prepaid account is disconnected if the subscriber does not reload within four months after full usage or expiry of the first reload. Currently, PLDT defines an active prepaid subscriber as one who activates and uses his SIM card and reloads at least once a month during the month of initial activation or in the immediate succeeding month. Thus, if a customer activated a SIM card in March but had not reloaded by April 30, this customer would not be counted as a subscriber. This tightening of definition of a subscriber came about because of the practise of SIM-swapping among subscribers who avail of promotional activities from mobile telcos, swapping one operator's SIM with another. This has led to subscriber bases getting bloated with transient subscribers.[27] Thus in May 2005, both Globe and PLDT terminated their SIM swapping promotions and thus, their churn rates have increased, leading to slower subscriber base growth, as reflected in Figures 4 and 5.

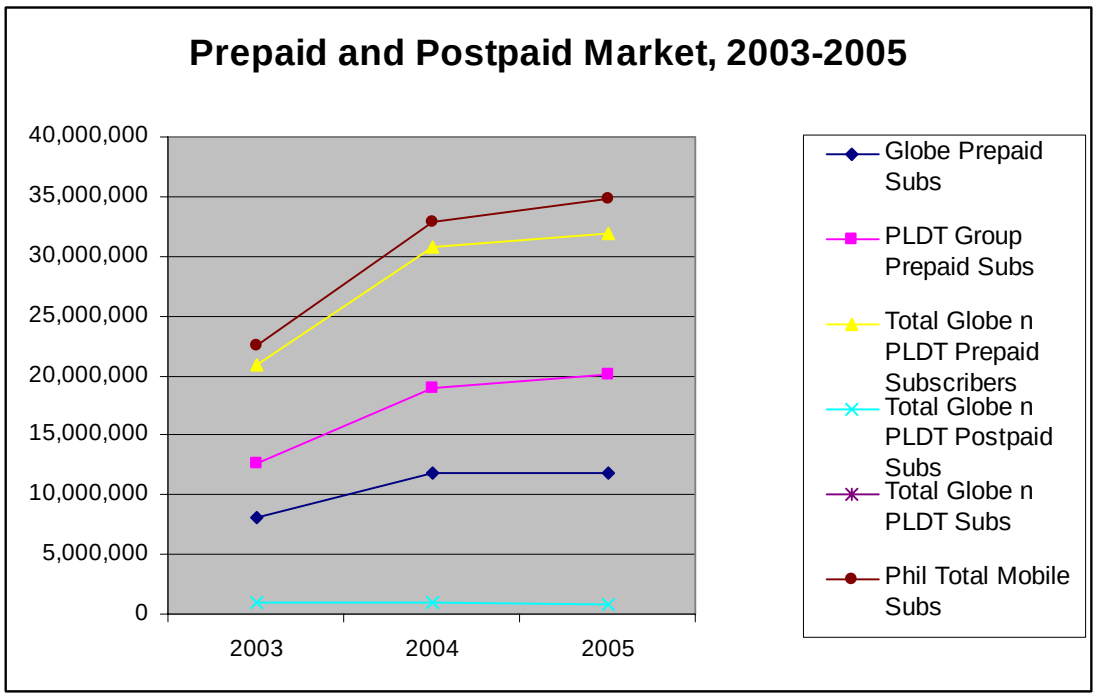
Meanwhile, Figure 5 illustrates how the mobile market is dominantly composed of prepaid subscribers, composing over 90 percent of the total mobile telephone subscribers, as company data during 2003 to 2005 of the top two companies, Smart and Globe, shows.

As mobile teledensity rose, it became clear that Filipinos were not using their mobiles for voice calls. Rather, they were using their phones to send text messages. Figure 6 shows the volume of text or SMS from the number one company, the PLDT Group (which includes Smart and Piltel), which grew from 3.9 billion in 2000 to 43.6 billion SMS in 2005. Analysts estimate that texting exceeds voice traffic by a factor of 10 to 1, with mobile phone companies now earning about half of their revenues from non-voice services. For instance, in its 2005 financial report, Smart, the leading mobile telco, earned P36.8 billion (US$707 million) from data services, exceeding revenues from voice services which totalled P34.3 billion (US$ 659 million).[28] This is illustrated in Figure 7 for

[27] PLDT and Globe Annual Reports 2005.
[28] See See *PLDT Annual Report 2005: Broadbanding the Future.*

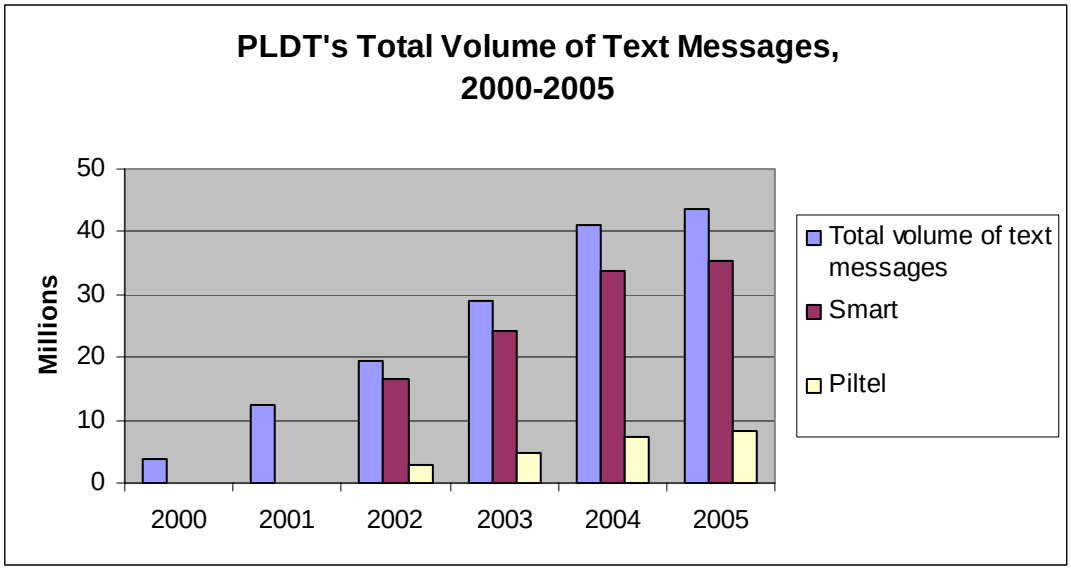
the PLDT Group, where data revenues have caught up with voice revenues starting in 2004. As for the texting component of cellular data revenue, Figure 8 illustrates the growth in PLDT's texting revenues, growing from US$260M in 2002 to US$584 in 2005.

**Figure 5**



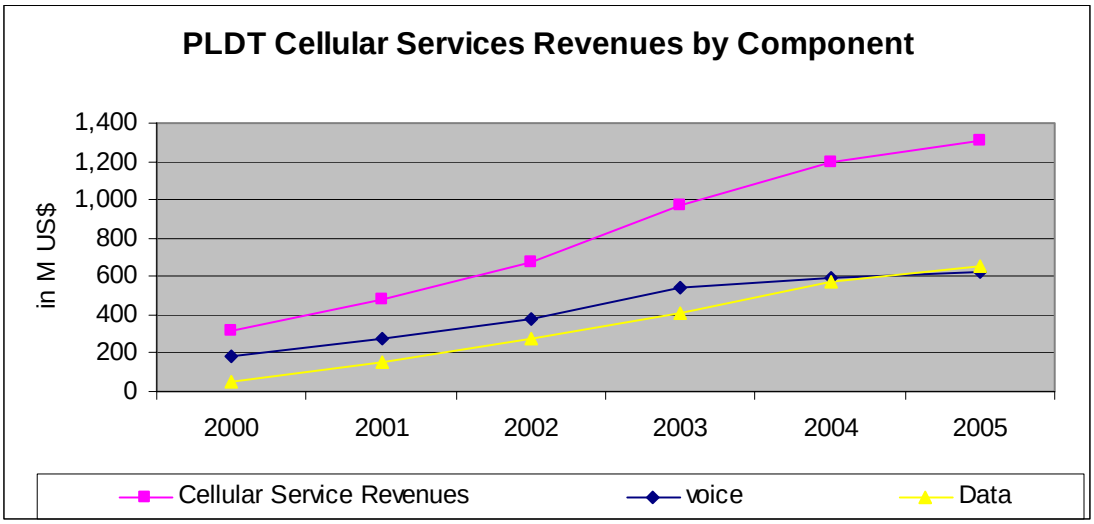

Source: PLDT 2000-2005 Annual Reports

**Figure 6**



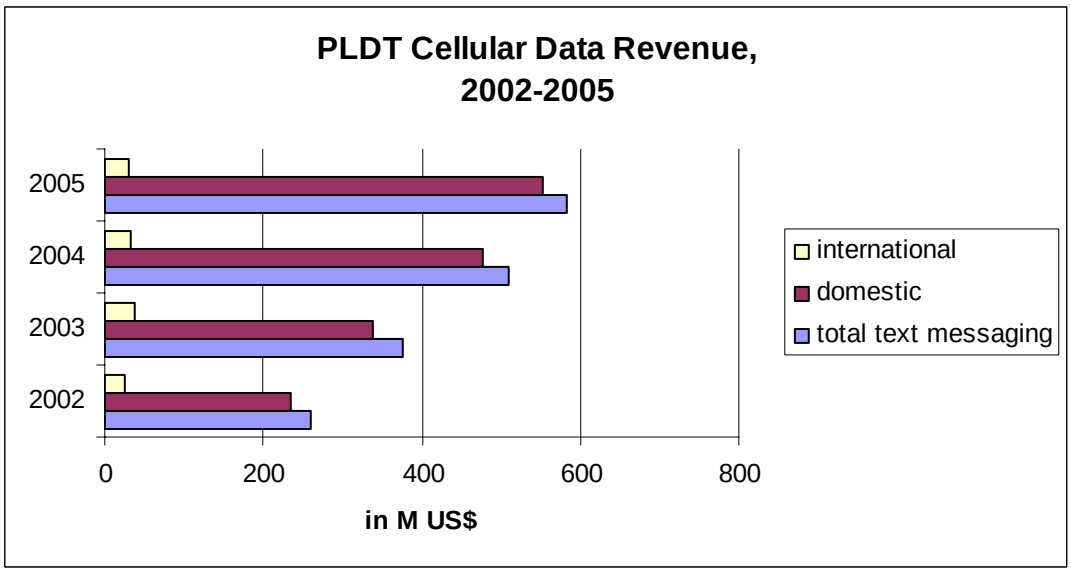

Source: PLDT 2000-2005 Annual Reports

**Figure 7**




Source: PLDT 2000-2005 Annual Reports

**Figure 8**




Source: PLDT 2000-2005 Annual Reports

During the first quarter of 2001, Meryll Lynch reported an average of 65 million texts sent each day by the approximately 7.2 million mobile phone users. In 2002, Nokia estimated that the 10 million cell phone users in the Philippines transmitted about 100 million text messages a day.[29] Both these estimates give an average of 10 text messages sent per subscriber per day.[30] The latest data from the National Telecommunications Commission, the industry's regulator, shows that by the end of 2005, the 41 million

[29] Raul Pertierra et al., *Txt-ing Selves: Cellphones and Philippine Modernity*. Manila: De La Salle University Press, Inc., 2002 at http://www.finlandembassy.ph/texting6.htm. The authors also cite reports that the Philippine Postal Office since 2001 has experienced a decline in the amount of posts and letters it handles during Christmas and Valentines Day by as much as 50 percent because it seems that people now send their greeting via a text rather than sending a card.

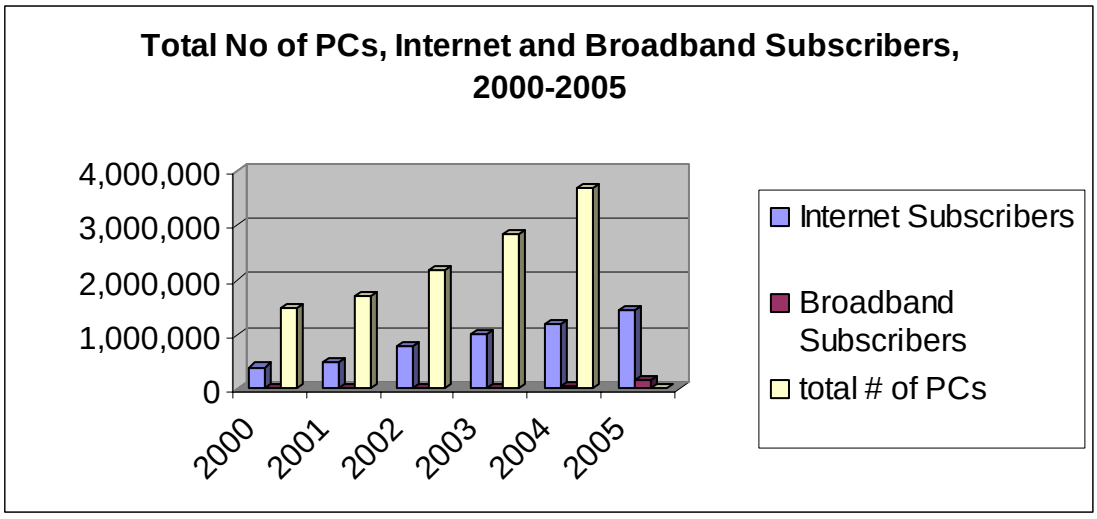
[30] A June 2003 survey found that 94 percent of mobile telephone subscribers use their phones for text messaging, of which 70 percent send about 10 messages per day and about 14 percent send between 10-20 messages per day. See *Philippine Daily Inquirer*, 21 June 2003

mobile phone users sent an average of 250 million text messages per day or an average of 6 messages per person each day.[31]

What explains the tremendous growth in texting? First of all, texting is cheaper than voice calls. After its free introductory phase, mobile telcos billed each message at US 2 cents each while voice calls cost between US 9-15 cents per minute. Postpaid subscribers, depending on their plan, currently have a set number of free SMS after which they are billed US 2 cents each. The same is true for prepaid subscribers—depending on the amount of credit they load on their phone, they get a set amount of free SMS after which, they have to pay the same rate per message. On top of these, promotions launched as early as 2004 for prepaid services include unlimited SMS during varying time periods of two, five, or 30 days, depending on a flat fee. Secondly, Filipinos are said to be culturally sociable and are always in touch with their family members and friends. Texting has become the cheapest way to do so. Thirdly, texting is said to allow for more privacy than a phone conversation because while sending a message in a public space, the person next to you will not have to hear the "conversation" taking place on the phone. Finally, texting has been a boon to the countless overseas Filipino workers (who compose about 10 percent of the total population) and their families who now have an inexpensive way to keep in touch without needing to pay the expensive cost of overseas calls.[32]

Thus, in a country where computer and internet penetration remains very low, as Figures 9 and 10 show, text messaging is the equivalent of email and instant messaging. It has now become a vital and indispensable tool for daily communication whether for social relations, corporate or government transactions. More importantly, texting has emerged as a formidable political weapon, which can be used for information dissemination, political mobilisation and an alternative arena for political participation. On the downside however, it can also be used to send misinformation, disinformation, rumours, and propaganda to more people, more quickly than ever before.

**Figure 9**

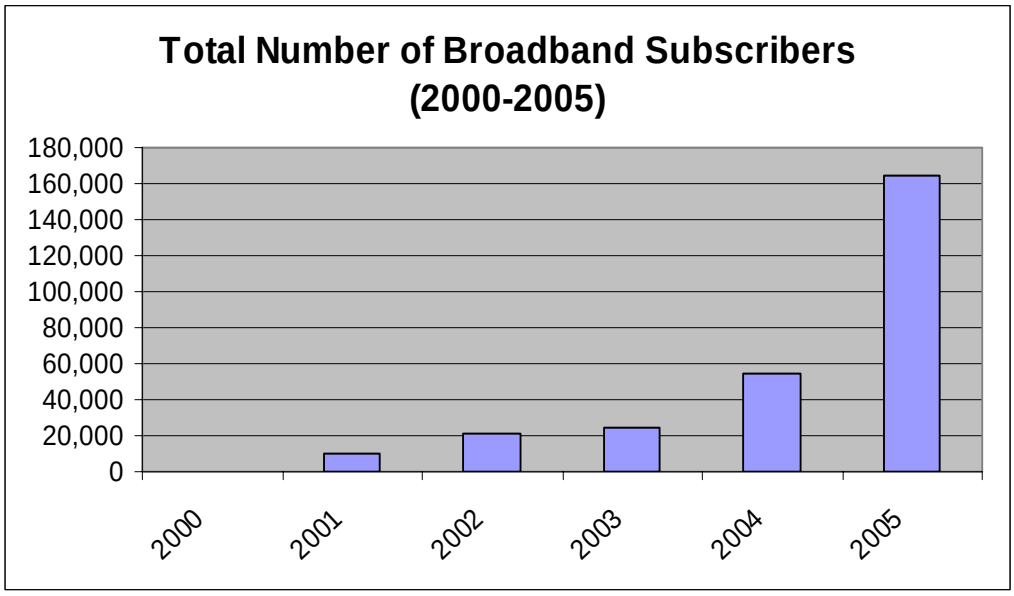



Source: NTC, NSO, DOTC, and WDI online

[31] At US 2 cents per message, this means that telcos earn, on an average, about US$5 million on simple text messaging alone each day! *Manila Times* 3 August 2006. This calculation, of course, excludes cost of service provision.

[32] For the sociocultural effect of texting, see Raul Pertierra et al., *Txt-ing Selves: Cellphones and Philippine Modernity*. Manila: De La Salle University Press, Inc., 2002.

**Figure 10**




Source: ITU and WDI online

Text messaging and its political impact became popular worldwide as Filipinos used it to mobilise political support to rally against then President Joseph Estrada in 2001. The quick mobilisation of over a million people led to Estrada's removal from power five days after the start of the mass rallies. "People Power 2" as it is called in the Philippines is now being dubbed as the *first e-revolution*, where messages sent through mobile phones spread like wildfire due to its convenience, confidentiality, and instant connectivity, prompting people to amass to show distaste for a corrupt president.[33] Of course, as any observer of Philippine politics is aware, the same tool can be used for less lofty purposes—such as coup rumours and destabilisation plans—which are afflicting the current Administration.

From there on, however, various text messaging applications have been developed: texting government agencies to report crimes, polluting vehicles, or corrupt practices; the use of SMS to book a movie ticket or an airline ticket; its use to guide rescue operations as was demonstrated in the December 2005 calamity in Leyte as well as sending remittance money and passing on credit from one phone subscriber to another.

No wonder the Philippines has earned the moniker "Text Capital of the World." Due to this, some analysts have pointed out that in the Asia Pacific, aside from Korea and Japan, the Philippines, despite its low income, is most ready for 3G and other broadband applications because of its population's agility and adeptness in using their mobile phones for data applications. Indeed, the majority of Filipinos do not merely see their mobile phones as telephones but more as data devices to send text messages, access information, play games, and other entertainment services. With the issuance in December 2005 of 3G licences the two main players Smart and Globe have started building their 3G networks.[34] 3G technology promises Internet surfing on cell phones, e-mails, video conferencing, banking, shopping, TV shows, games and music – anywhere, anytime, with Internet connections estimated to be 40 times faster than current speed in wireless phones. The

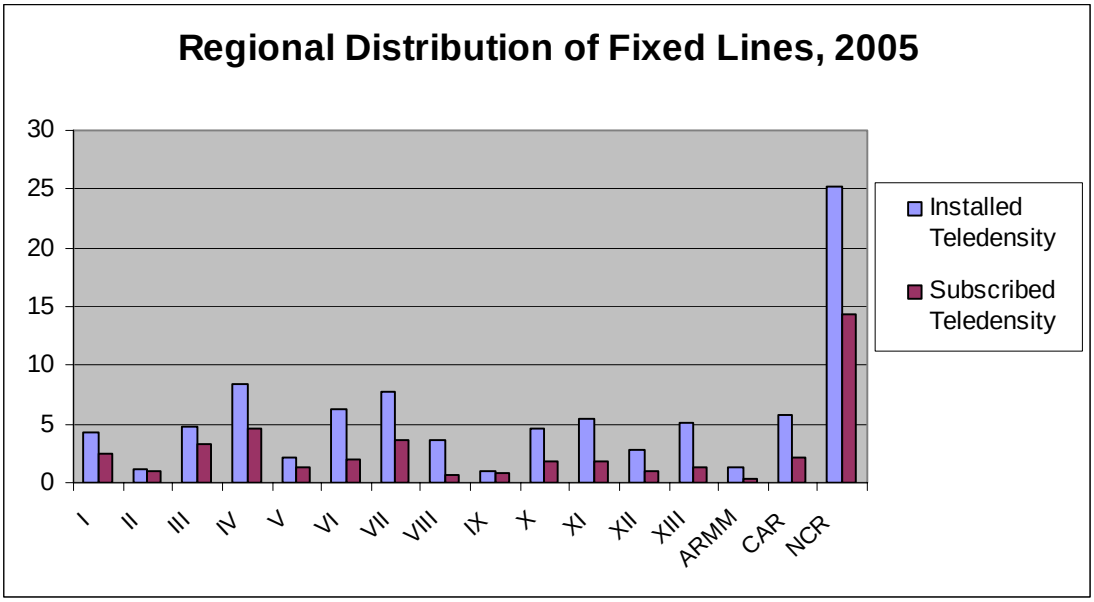
[33] The joke is that Estrada was removed from power by coup-de-text. "Manila logging most text messages" at http://www.dailyherald.com/special/philippines/part2c.asp 17 April 2005.
[34] *Philippine Daily Inquirer* 29 December 2005.

dominant player, PLDT, has announced that with the industry "moving past its rapid growth phase," there is a need to shift into broadband and data services.[35] Already Smart, PLDT's wireless service provider, claims to have rolled out 3G services with the speed of 114 kbps to 2 Mbps to 830 cell sites covering 142 cities and towns as of June 2006.[36] Yet, unless costs of service and handsets go down, texting will remain the main mode of communication for many Filipinos.

**Rural-Urban, Income Divide on Access and Utilisation**

This section now looks at the spatial and income divide in access and utilisation of ICTs in the Philippines.

**Figure 11**




Source: NTC

Figure 11 illustrates the regional distribution of fixed lines in the country, with installed fixed lines being concentrated in urban areas, most notably the National Capital Region where Metro Manila is located, while poorer provinces have very low infrastructure availability. For instance, the NCR has an installed fixed line density of 25.16 and a subscribed teledensity of 14.35. Meanwhile, the ARMM only has 1.38 lines installed, and the entire region only having a teledensity of 0.36.

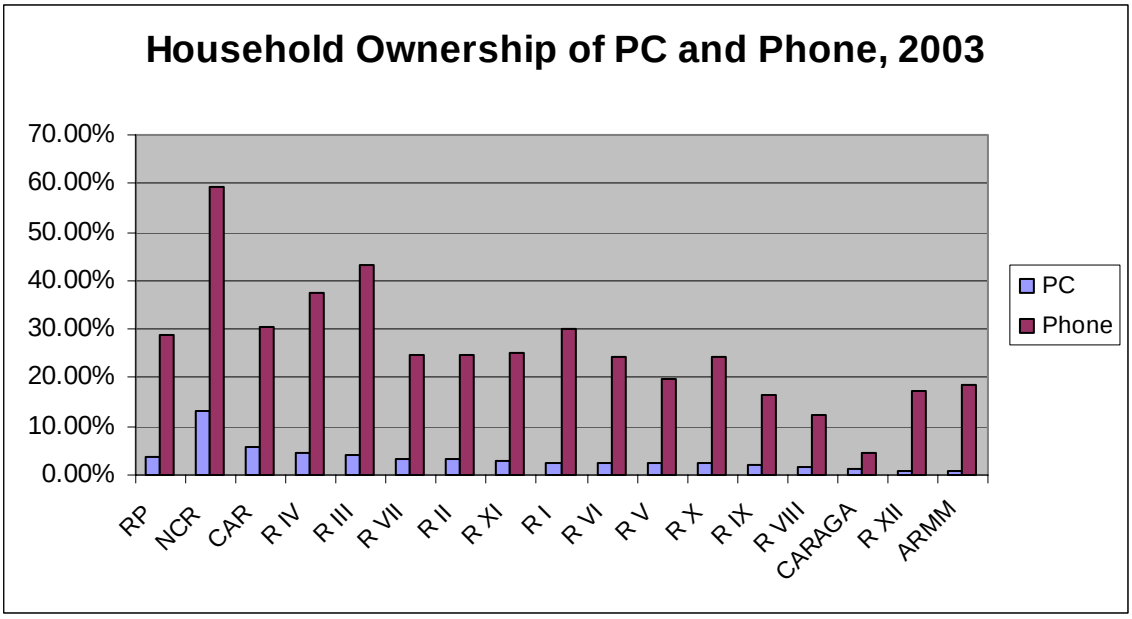
With regards ownership of telephones and PCs, the 2003 Family Income and Expenditure Survey (FIES) of the National Statistics Office (NSO)—the latest available data-- found that 28.9 percent of Philippine households owned either a fixed line or a mobile phone while only 3.9 percent owned a personal computer. As can be expected and as Figure 12 illustrates, phone and PC ownership is concentrated in the richest urban areas, with the National Capital Region having a higher than the national average level of ownership of 59 percent of households owning a telephone while 13 percent owns a PC.

[35] PLDT reports that it has 109,000 broadband subscribers along with 6,600 wireless Internet subscribers as of end of 2005. Sales growth in the telecoms market has been slowing after six years of rapid expansion, with firms focusing on cost-cutting and targeted marketing to prop up profits and attract new customers. PLDT reports broadband and wireless data that fits the DOI. See *Philippine Daily Inquirer*, 8 August 2006.
[36] PLDT Press Release, 8 August 2006 at http:/www.pldt.com.ph

Meanwhile, the CARAGA Region has 4.61 percent and 1 percent of households owning a phone and PC respectively

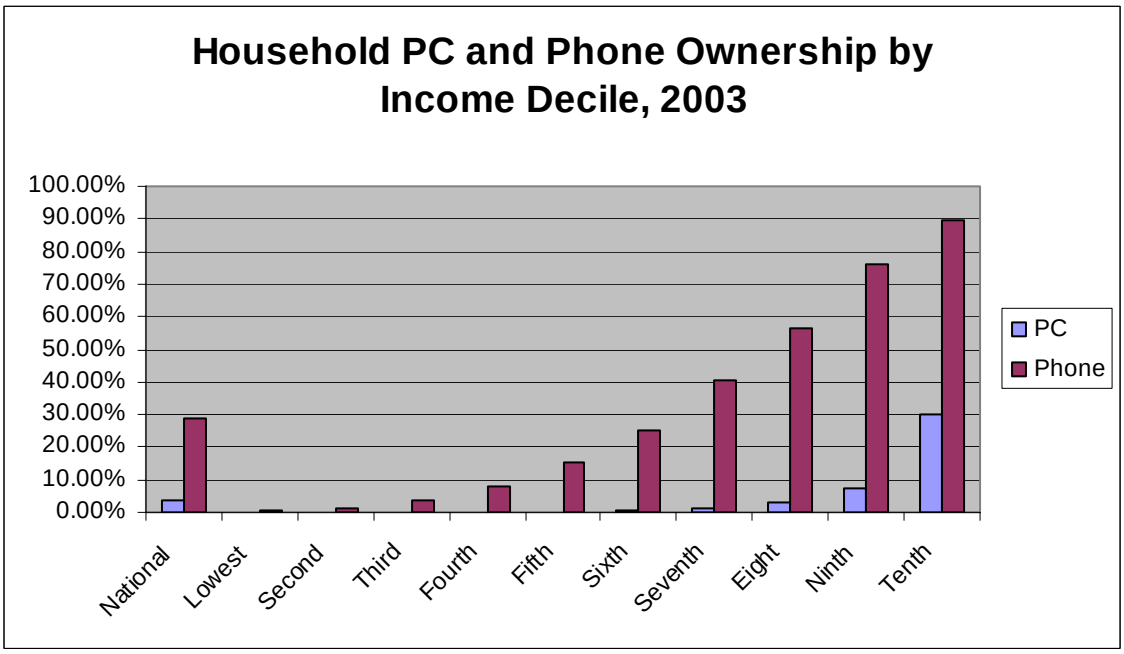
Figure 13 provides a breakdown of household ownership of PC and Phones by income decile in 2003, with higher income group households naturally having a higher percentage of telephones and pc ownership, with almost non-existent of PC ownership for the lowest three income deciles; although about 4 percent of these households own a telephone.

**Figure 12**



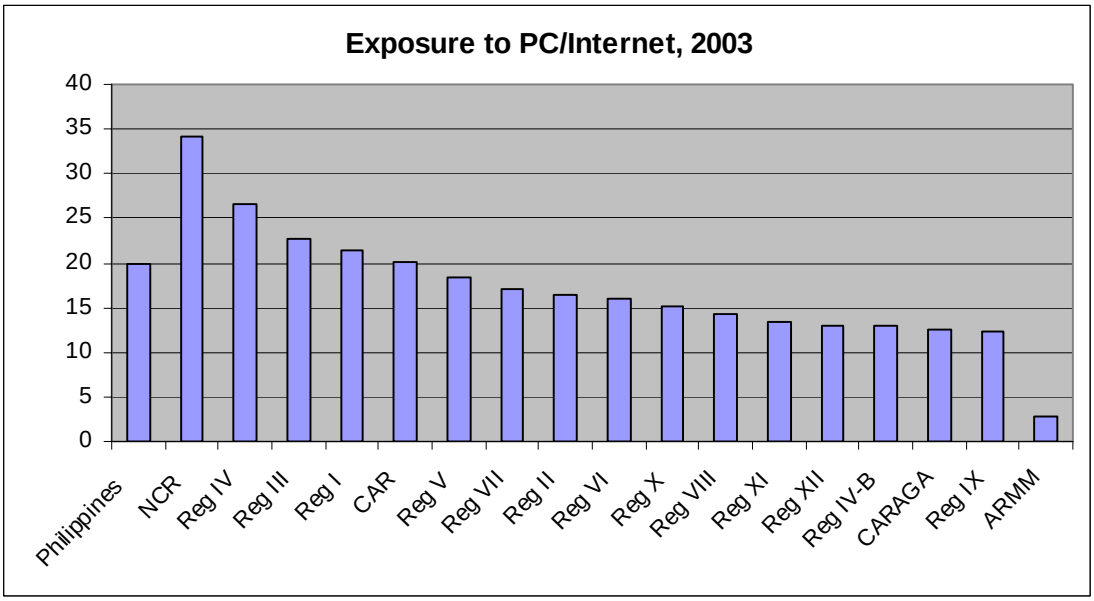

Source: NSO FIES 2003

**Figure 13**




Source: NSO FIES 2003

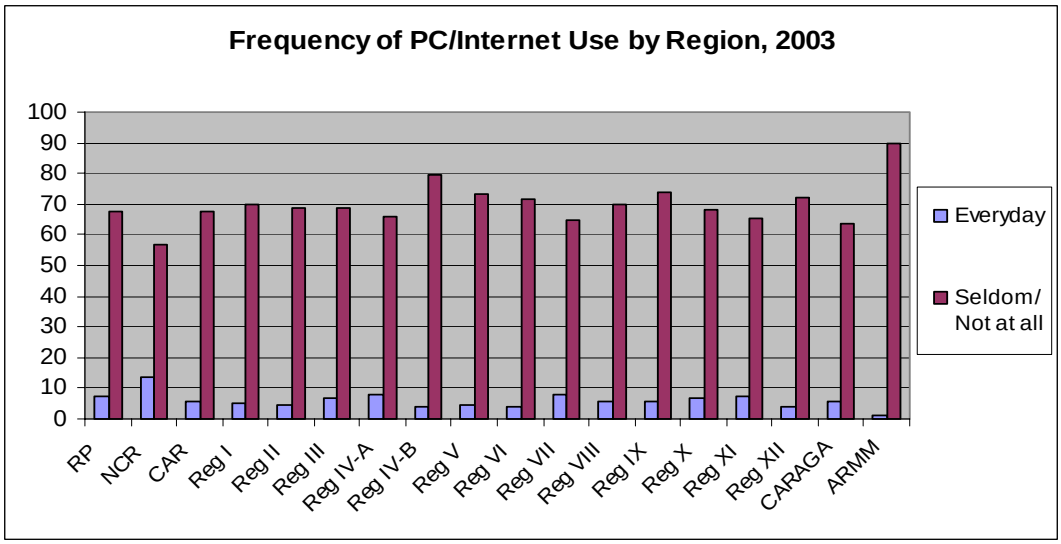
**Figure 14**




Source: NSO FLEMMS 2003

With regards exposure to a PC or internet, the NSO's 2003 Functional Literacy, Education and Mass Media Survey (FLEMMS) found that around 20 percent of Filipinos were regularly exposed to personal computers. NCR respondents had the highest regular exposure to PCs at 34 percent, while ARMM respondents had the lowest exposure at around 3 percent.[37] The data are depicted in Figure 14.

**Figure 15**



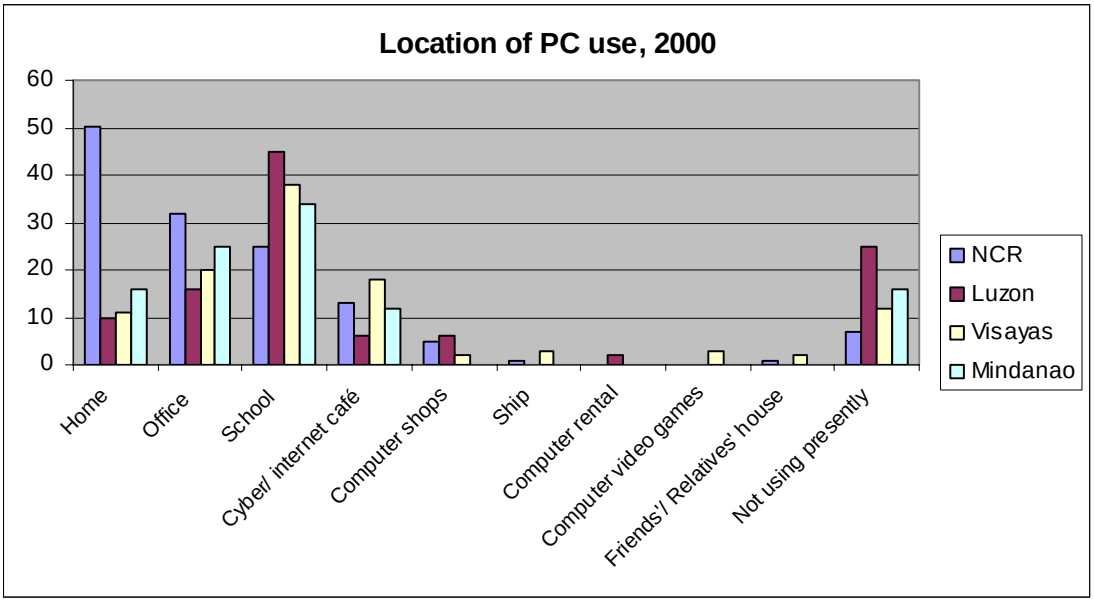

Source: NSO FLEMMS 2003

Figure 15 illustrates 2003 data, again from the NSO's FLEMMS, which found that only 7 percent of households nationally use a computer or the internet everyday, while 67.5 percent seldom use the pc or the internet, or not at all. Figure 15 also captures the

[37] The survey asked respondents "'What types of media were you regularly exposed to during the past week (of the survey interview date)?' The choices were newspaper, television, radio, magazine, TV,internet, and others.

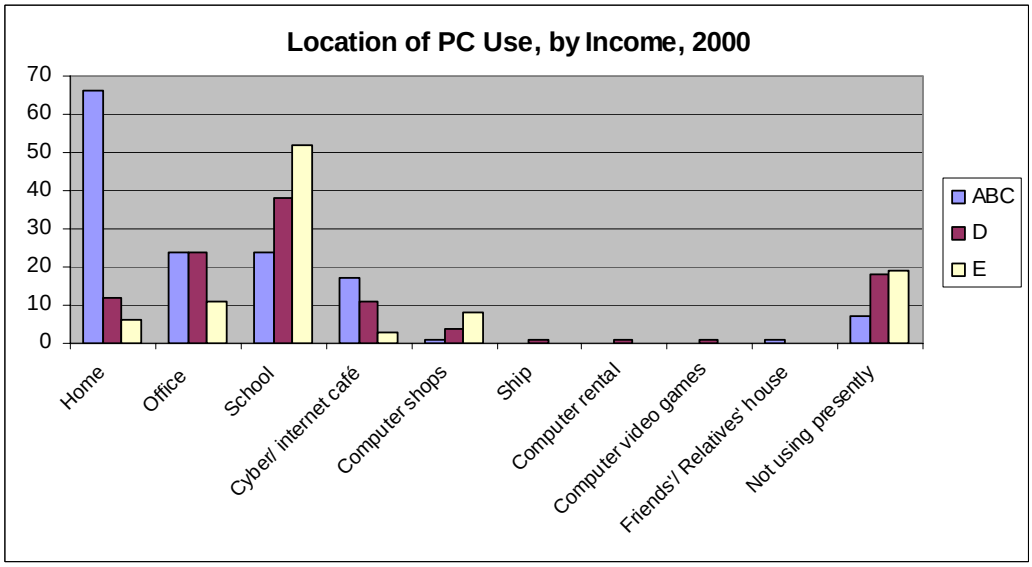
urban-rural divide in pc and internet use, with about 90 percent of households in ARMM seldom using the pc or internet or not at all. The highest everyday usage of a pc or the internet occurs in the NCR, with about 13.6 percent of the households doing so.

**Figure 16**




Source: Social Weather Station, 2001

**Figure 17**




Source: Social Weather Station, 2001

Given that household ownership of personal computers is very low, Figure 16 captures the only available data on location of PC use, based on a 2000 survey by the Social Weather Station (SWS). The top 4 mentioned locations were school, office, homes, and internet cafes. In the NCR region, about 50 percent of those who use PCs access them at home, while respondents from the rest of the country identify their offices and school as the location of PC use.

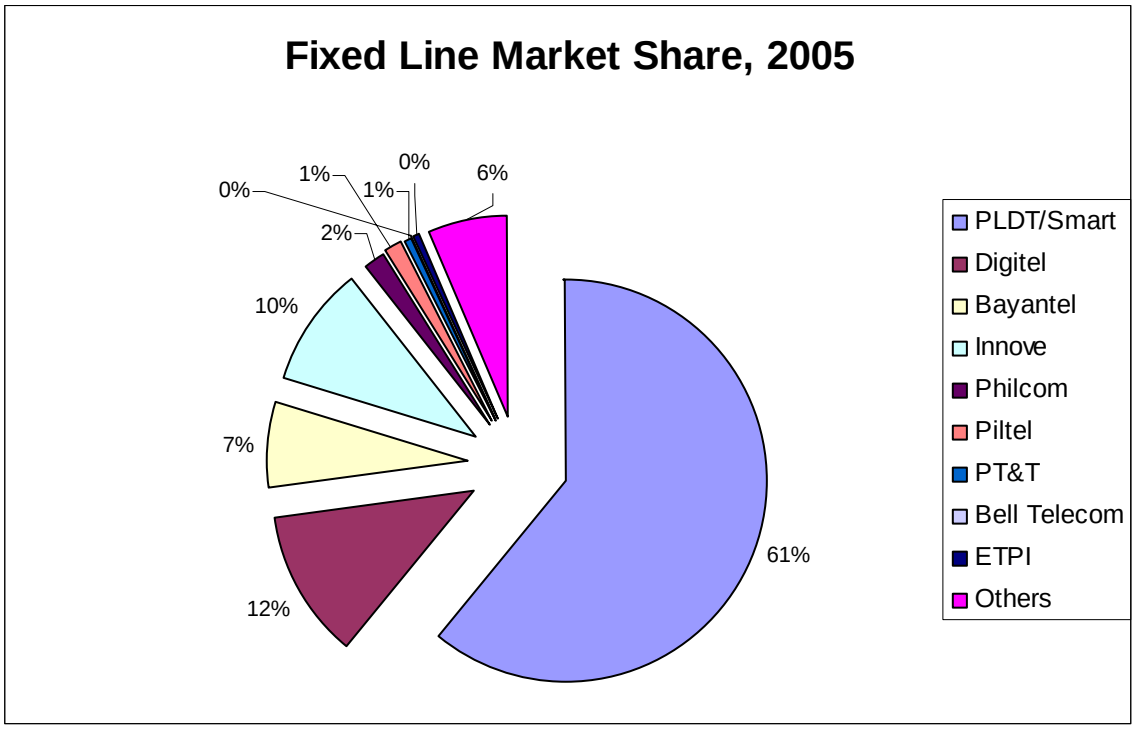
Figure 17 illustrates the same data on location of use according to income based on the 2000 SWS Survey. Majority of those who use the PC in the ABC income group do so at home, while those from income class D identify their office, school, and internet cafes. The poor who use PCs categorised as part of income group E identify their school, office, internet café, and computer shops as the location of their pc use—meaning their access to PCs is from public access points.

**Market Shares and Financial Data**

This section now turns its attention to sector performance indicators based on market shares and financial data.

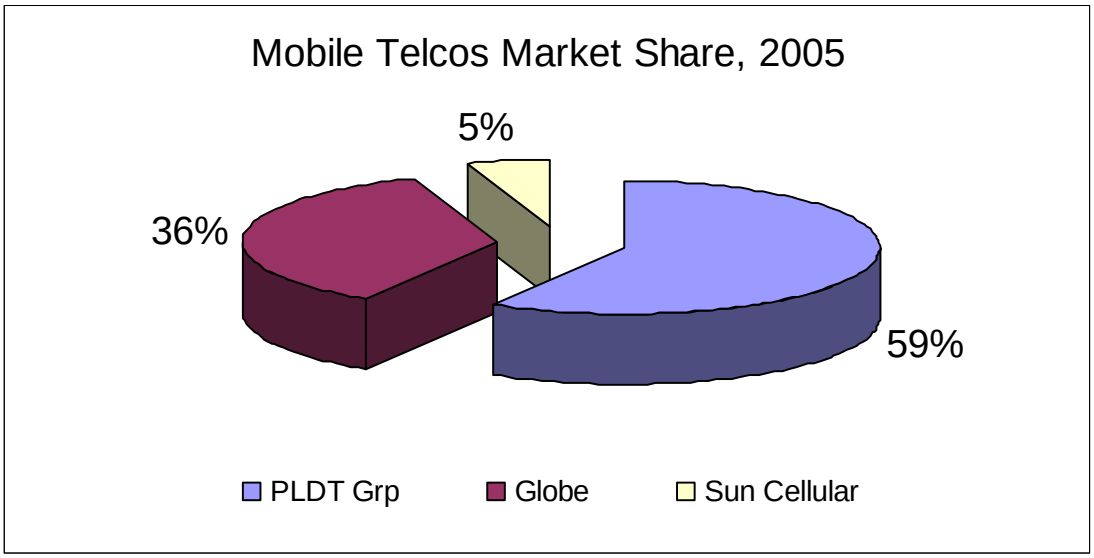
Figure 18 shows the fixed line market share in terms of subscribers in 2005 of fixed line telcos. While there are many players active in the fixed line market, PLDT continues to control 60 percent of the total subscribers. Meanwhile, of the new players, Digitel controls 12.20 percent of the market, Innove (Globe's fixed line subsidiary, which was a result of Globe and Islacom's merger) has 9.80 percent, Bayantel has 6.7 percent, and small telephone operators (PAPTELCOs) have 6.4 percent market share. This figure also supports the conclusion made earlier on the failure of the SAS to break PLDT's market control.

**Figure 18**




**Source: NTC**

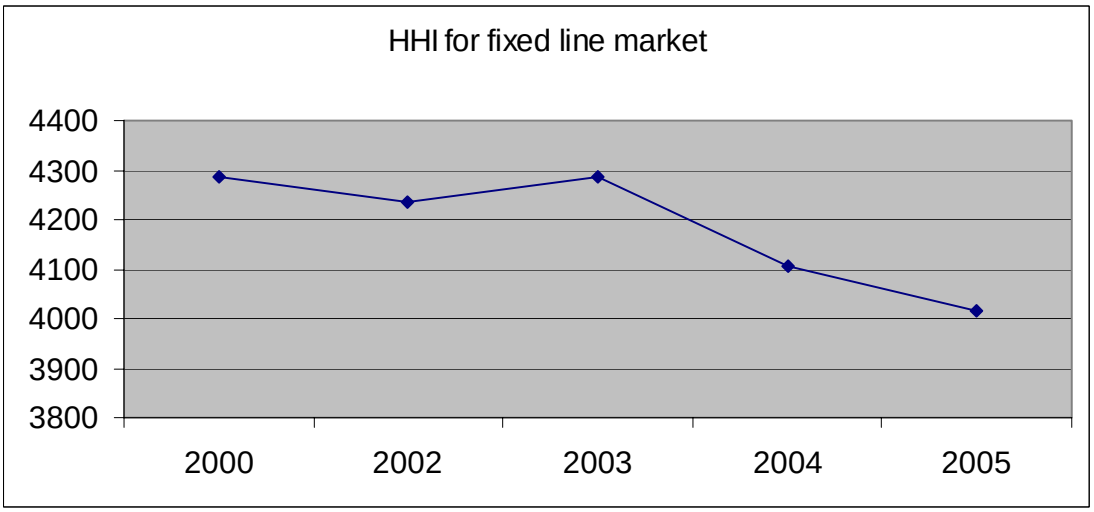
**Figure 19**




**Source: NTC**

Figure 19 illustrates the breakdown of the market share in terms of subscribers of mobile telcos in 2005. The PLDT group, composed of Smart and Piltel, has 59 percent of the mobile subscribers while Globe controls 36 percent. Meanwhile, new comer Sun Cellular, Digitel's mobile subsidiary which launched its services in 2003, has gained 5 percent market share by 2005. The figure illustrates that there is competition among three players in the mobile sector, although the PLDT Group continues to dominate the sector. This is the result of the merger in 1998 of PLDT and Smart, which were then the number one fixed line and mobile player respectively. This merger created a more concentrated market, despite the presence of other players.

**Figure 20**

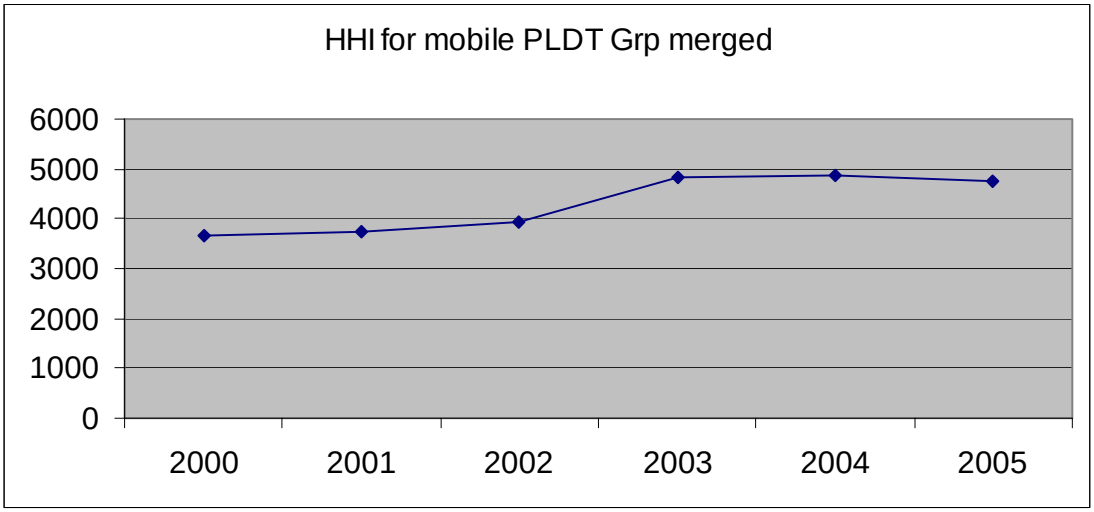



Source: Calculated from NTC data

Figures 20 and 21 illustrate the HHI for both fixed line and mobile markets, from 2000 to 2005. Both Figures show that despite the presence of about 9 active players in the fixed line sector and three players in the mobile sector, market shares based on subscribers are highly concentrated, with PLDT dominating both sectors. Figure 20 demonstrates that HHI for fixed line has gone down from 4300 to 4000 in 2005, but nevertheless is still a

very concentrated market. Meanwhile, the concentration in the mobile market as measured by HHI shows that competition is declining with HHI increasing from 3660 in 2000 to 4760 in 2005, as seen in Figure 21.

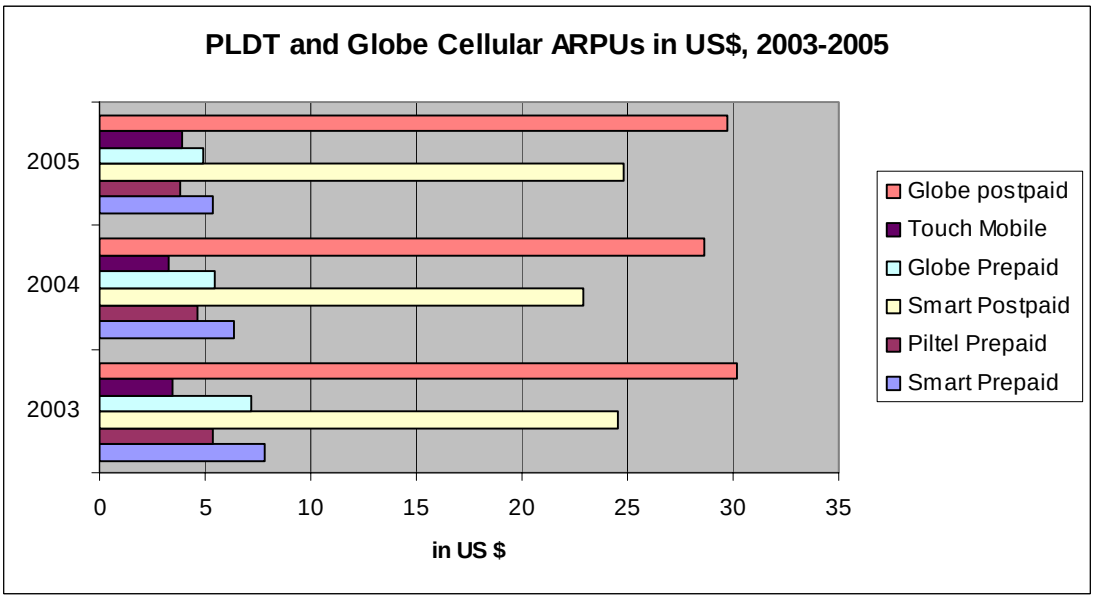
**Figure 21**




Source: Calculated from NTC data

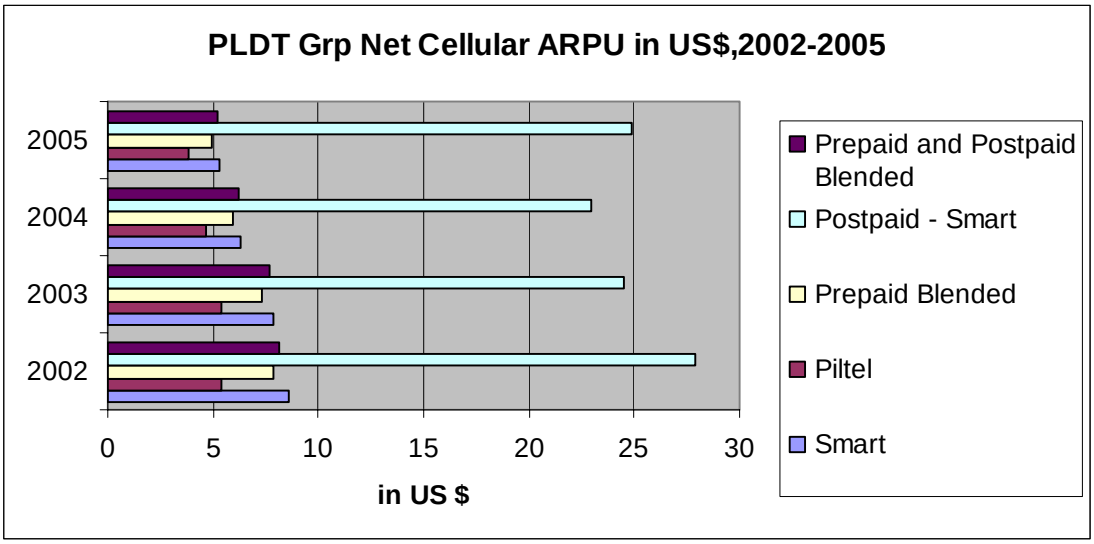
Turning now to financial data for the number on and two mobile players, PLDT Group and Globe, Figure 22 shows that Globe's postpaid ARPU has slightly declined to US$29.70 while its two prepaid services (Globe Prepaid and Touch Mobile) average US$4.90 and US$3.90 respectively. Meanwhile in 2005, PLDT's Smart Postpaid ARPU is slightly lower compared to Globe at US$24.80, but Smart prepaid ARPU is slightly higher at US$ 5.3, while Piltel's is lower compared to Touch Mobile at US$3.8. The figure also shows that both Globe and PLDT ARPUS have been declining in 2005, compared to 2003. This development (declining ARPUs) is more clearly seen in Figures 23 and 24, which captures the disaggregated ARPUs of PLDT Group and Globe, respectively.

**Figure 22**




Source: PLDT and Globe Annual Reports 2003-2005

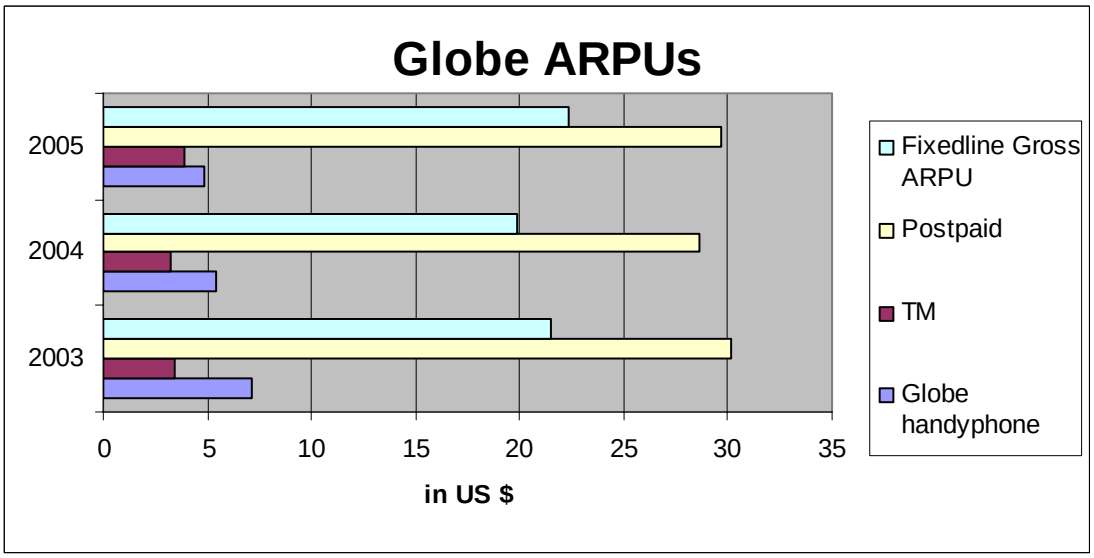
**Figure 23**




Source: PLDT Annual Reports 2002-2005

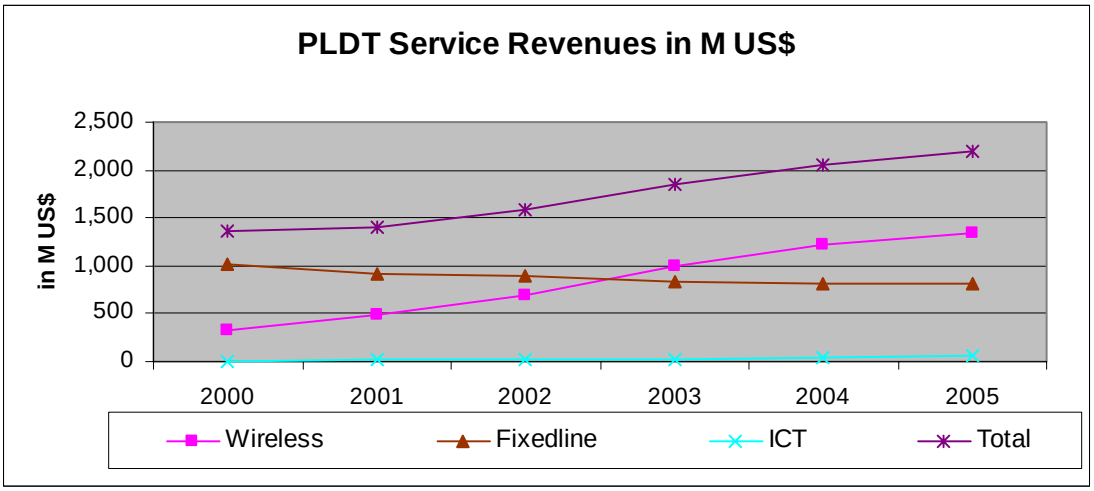
In particular, Smart's and Piltel's Prepaid ARPU have declined from US$7.80 and $5.40 in 2003 to US$5.30 and US$3.80 respectively in 2005. In the same manner, Globe's and Touch Mobile's Prepaid ARPU declined from US$7.20 and US$3.40 in 2003 to US$4.90 and US$3.90 in 2005 respectively. This is the same story with Smart's and Globe's postpaid ARPUs, declining from US$24.50 and US$30.20 in 2003 to US$24.80 and US$29.70 in 2005 respectively.

**Figure 24**



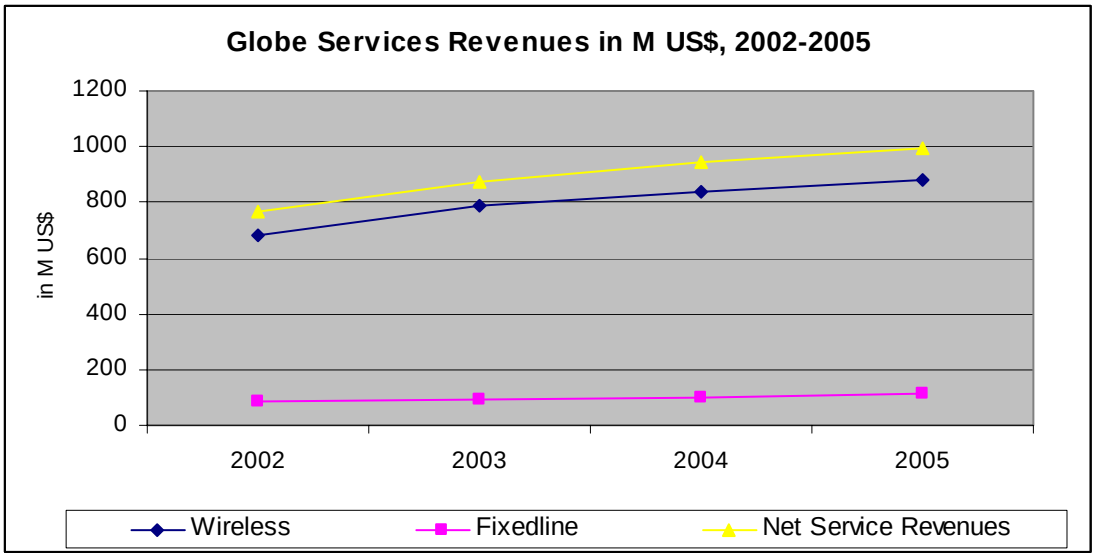

Source: Globe Annual Reports 2003-2005

**Figure 25**




Source: PLDT Annual Reports 2000-2005

**Figure 26**

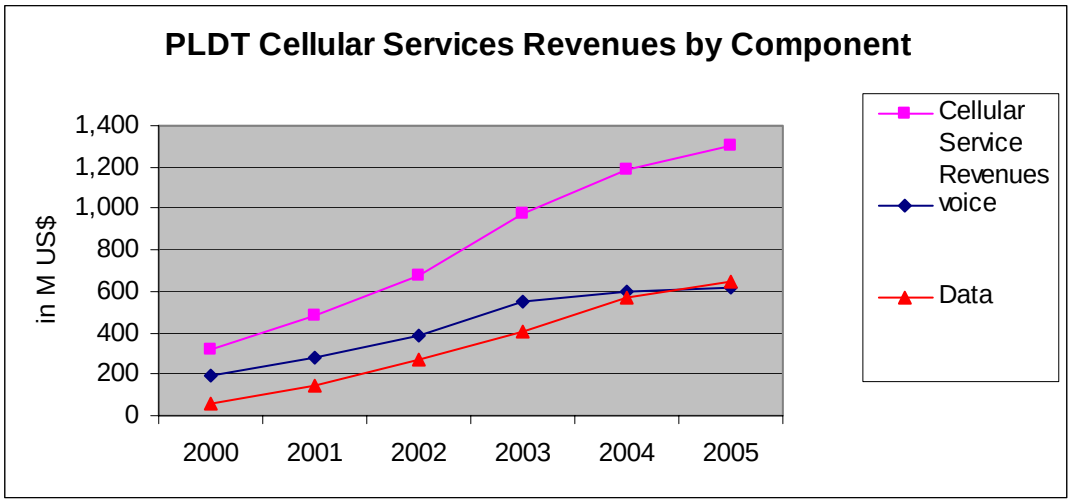



Source: Globe Annual Reports 2002-2005

Figures 25 and 26 illustrate the breakdown of service revenues by component for the top two players, PLDT and Globe. Figure 25 captures how PLDT's sources of service revenues have shifted from being dominantly composed of fixed line revenues to cellular or wireless revenues, starting in 2003. This simple graph illustrates the shift in the company's revenue mix, from being heavily reliant on its fixed line segment to now being driven by revenues from wireless. Fixed line revenues fell from US$1023 Million in 2000 to US$806 Million in 2005. Meanwhile, wireless revenues have grown from US$325.4 million in 2000 to US$1342 Million in 2005

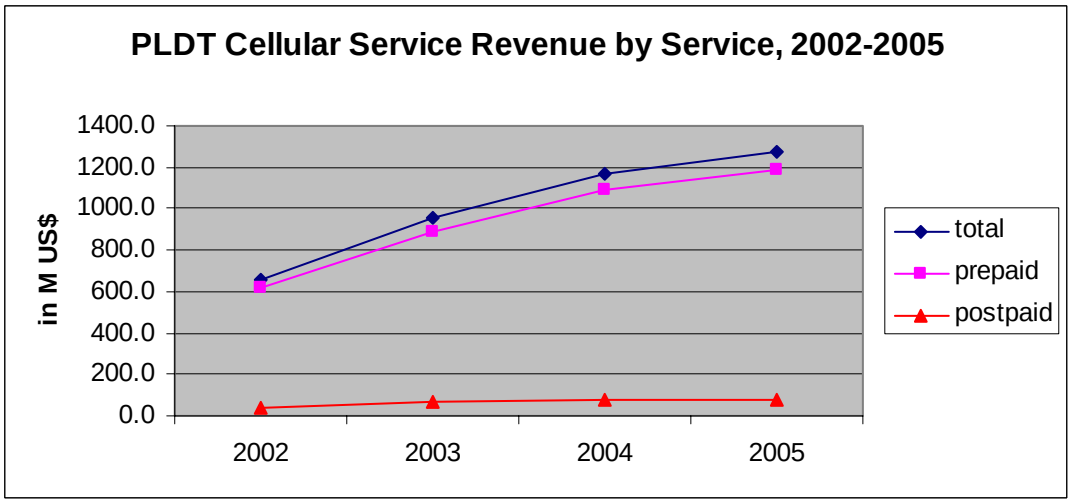
Figure 26 shows the breakdown of services revenue for Globe from 2002-2005. The figure illustrates the growth in company revenue, with a fixed line income slowly growing from US$89 million in 2002 to US$117 million in 2005. The main source of services revenue for Globe is its wireless service, which has grown from US$ 682 million in 2002 to US$880 million in 2005.

**Figure 27**




Source: PLDT Annual Reports 2000-2005

**Figure 28**

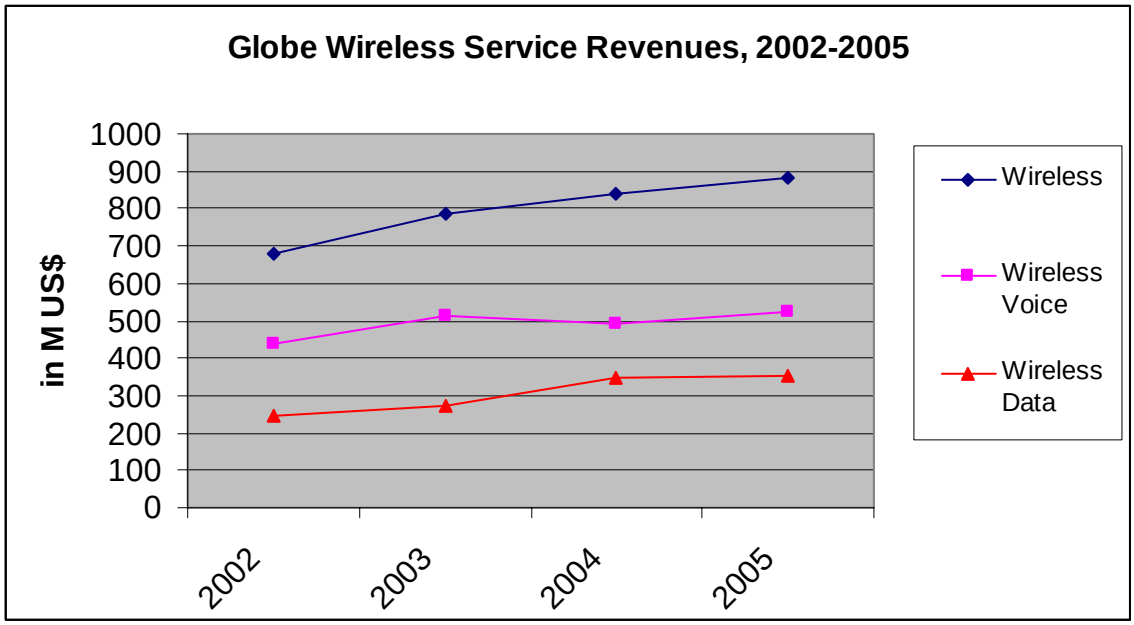



Source: PLDT Annual Reports 2000-2005

Figures 27 and 28 provide PLDT's Cellular Services Revenues broken down by component and service type. Figure 27 illustrates the growth of cellular service revenues by component from 2000 to 2005. The figure demonstrates the growth in cellular voice revenues from US$188 million in 2000 to US$622.4 million in 2005, as well as the faster growth in cellular data revenues, growing from US$54.6 million in 2000 to surpass voice data in 2005, reaching US$650.45 million.

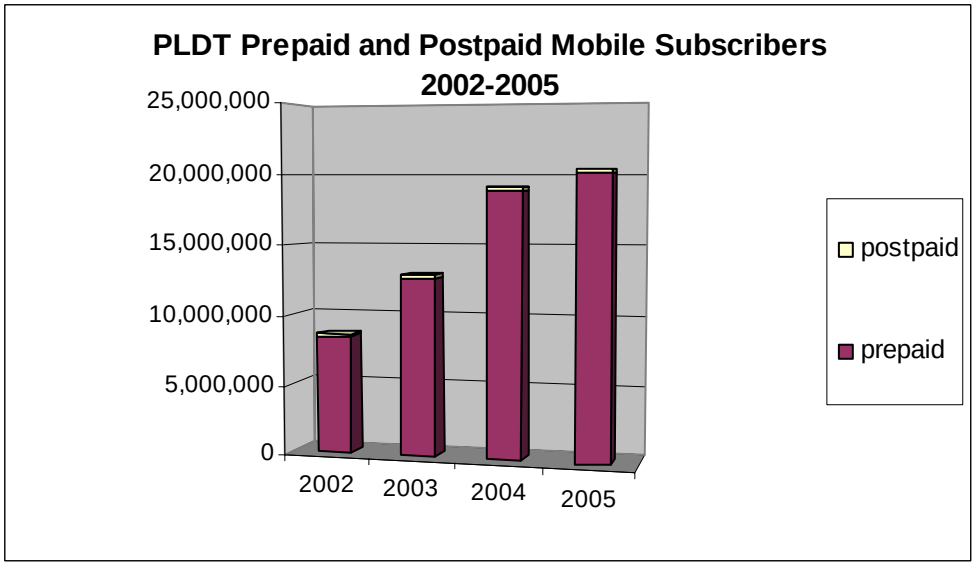
Figure 28 provides PLDT Cellular Service Revenues by Service from 2002- 2005, where clearly postpaid service has been the driver of growth, expanding from US$620.1 million in 2002 to US$1191.4 million in 2005. Meanwhile, postpaid revenues have grown slightly, from US$36.3 million to US$81.4 million in 2005.

**Figure 29**




Source: Globe Annual Reports 2002-2005

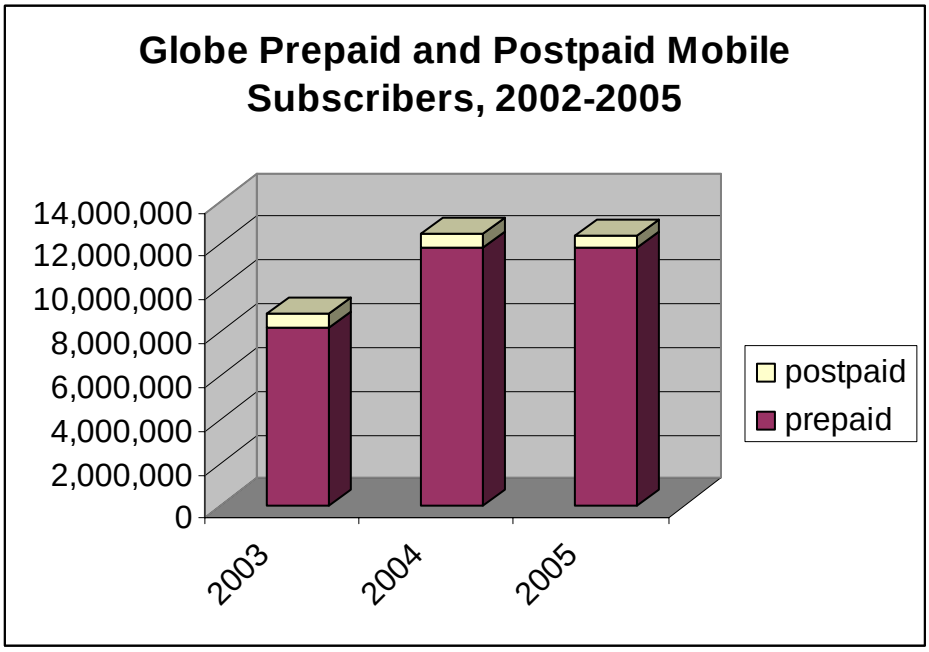
**Figure 30**




Source: PLDT Annual Reports 2000-2005

Figure 29 illustrates the growth and breakdown of Globe's Wireless Service Revenues from 2002 to 2005. Wireless services revenues have expanded from US$681.6 million in 2002 to US$889.3 million in 2005, with wireless voice services revenues contributing more to the total wireless revenues, although at a declining rate, from US$438 million in 2002 to US$525.6 million in 2005. Revenues from data meanwhile are growing to comprise a bigger chunk of total wireless revenue, increasing from US$243.5 million in 2002 to US$354.7 million in 2005. Thus, while Globe's wireless revenues are still dominated by voice, but at a declining percentage in contrast to data revenues starting 2005, PLDT's wireless data revenues have already surpassed wireless voice revenues.

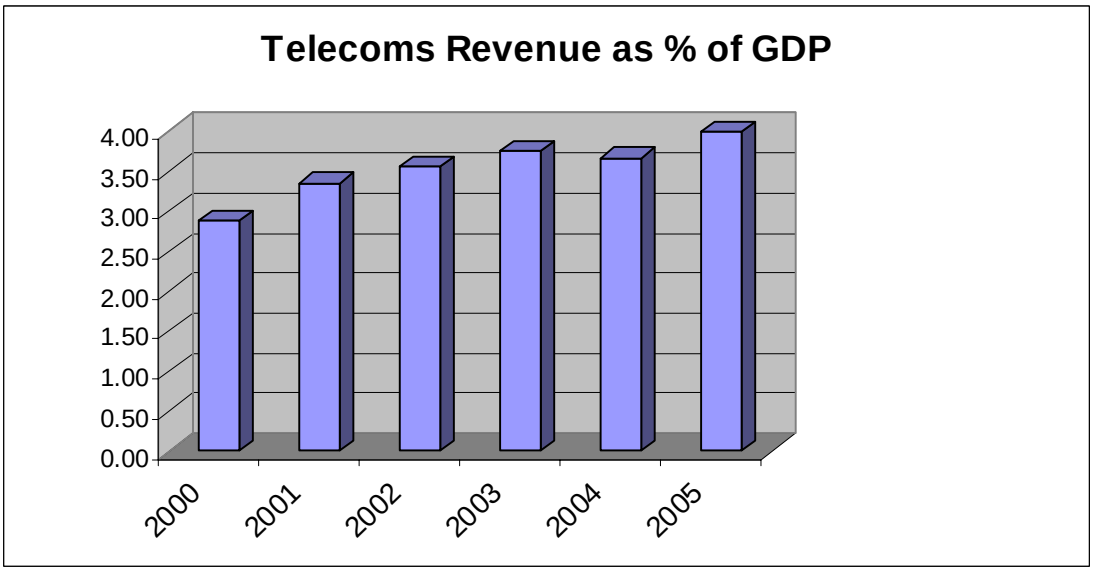
**Figure 31**




Source: Globe Annual Reports 2000-2005

Figures 30 and 31 illustrate the breakdown of PLDT and Globe's prepaid and postpaid mobile subscribers base. Figure 30 shows that PLDT Group's cellular subscribers have ranged from between 98 to 99 percent from 2002 to 2005, with about 8.4 million prepaid subscribers in 2002 out of a total of 8.59 million subscribers. This composition did not change in 2005, where of its 20.4 million subscribers, 20.1 million are prepaid. Postpaid subscribers have grown slightly from 176,648 in 2002 to 280,078, but nothing compared to prepaid subscribers growth.

**Figure 32**




Source: WDI online

Figure 31 demonstrates the breakdown by service of Globe's subscriber base. In comparison to PLDT, Globe has a slightly bigger chunk of its subscribers in the postpaid service, comprising 7.7 percent (685,026) in 2003, declining to 4.8 percent (594,142) in

2005. Its prepaid subscribers totalled 8.17 million in 2003 and grew to 11.8 million in 2005.

Finally, Figure 32 demonstrates the telecoms sector's contribution to country as a percentage of the GDP, which has grown from 2.9 percent in 2000 to 4 percent in 2005.

**Summary**

Over a decade of liberalisation in the Philippine telecoms sector has produced an environment where 74 local exchange carriers, 14 inter-carrier service, 11 international gateway facility and 7 cellular telephony providers operate.[38] However, HHI measures show that while there are many industry players, both the fixed and mobile markets are highly concentrated. This situation points to the need for the regulator to ensure that dominant market positions are not abused—something that the regulator is currently contemplating with the issuance of a consultative document on Significant Market Power regulations.

From a country with a teledensity of less than one telephone for every 100 persons from 1970 to 1990, the introduction of competition in the industry has led to fixed line density of 4.0 and a mobile phone density of 41.3 in 2005. As of end of 2005, the National Telecommunications Commission (NTC) reported that Filipinos sent an average of 250 million text messages a day, leading analysts to call the country the "Text Capital of the World."

Tables 7 and 8 in Annex 2 have demonstrated the costs of mobile services have gone down, while the cost of fixed line services has actually gone up.[39] Fixed line's higher cost, along the difficulty of interconnection, the hassles of waiting for a phone line connection and the paperwork involved have all attributed to Filipinos shifting to the use of mobile phones. In fact, as indicators in this section has shown, mobile revenues have grown tremendously and have overtaken fixed line revenues, even in the number one company, PLDT, whose revenues in 2000 was dominated by fixed line income. This however has changed since 2003 when wireless revenues surpassed its fixed line revenues.

With regards to mobile telephony, subscriber growth is driven by the prepaid method, with about 98 percent of the market relying on this type of service. Meanwhile data revenues are on the rise, and again in the case of PLDT, have already surpassed surpass wireless voice service revenues.

Finally, the Philippines ICT sector as can be seen above is driven by the use of mobile phones. However, PC, internet and broadband penetration is still very low.

[38] For analytical purposes in this section, Smart and Piltel are counted as part of the PLDT Group, and Globe Handyphone and Touch Mobile (formerly Islacom) are counted as part of the Globe company, thus effectively having only three players in the cellular mobile phone segment. Extelcom only has about 10,000 subscribers remaining while the seventh licensee, Bayanltel has not yet launched its cellular service

[39] It has to be noted however that these numbers are absolute numbers and have not been corrected for inflation and currency fluctuations.

## Philippines Telecommunications Regulatory Environment

This section first review the regulatory agencies and the state of regulation in the Philippines, laying the ground before presenting the findings of the Telecommunications Regulatory Environment (TRE) survey conducted with an informed panel, to assess their perception of the effectiveness of regulatory performance during June 2005 to June 2006. A third section analyses and interprets the outcome of the TRE survey.

### The National Telecommunications Commission

The National Telecommunications Commission (NTC) was created on 23 July 1979, to supervise and regulate telecommunications, broadcasting, and the radio spectrum. The NTC was a quasi-judicial body under the supervision and control of the Ministry of Transportation and Communications (which was laterwas renamed Department of Transportation and Communications, DOTC), The latter was designated as the primary policy-making body of the executive branch of government, while the NTC was the industry regulator.

Being a quasi-judicial body, EO 546 stated that the NTC's decisions could only be challenged in the Supreme Court. In reality however, its regulatory powers were weak because it lacked funding, was ill equipped, and did not have sufficient staff members who could adequately carry out its regulatory function and induce a rich and influential monopolist to provide quality service and fulfil its social obligations. Compared to PLDT, a profitable company that could afford to hire the best engineers and accountants, the NTC was badly under-staffed.

In a 1990 study, Jacinto Gavino described the NTC as an ineffective regulator for a number of reasons.[40] First, the President appointed the Commissioner and the Deputy Commissioners, and no policy governed their terms of office. Thus, regulatory decisions were captive to, or at least heavily influenced by, political pressures. Second, the NTC lacked technical and commercial expertise to enable it to properly regulate the industry. This was due to low budgetary allocations to the agency, which were determined by Congress. The NTC collected license fees from telephone and broadcasting companies that were under its regulatory jurisdiction, but all of its collections were transferred to the central treasury.

A third problem was regulatory capture by the regulated. The NTC was reliant on PLDT for information, which it had no way of verifying. Its personnel lacked equipment, technical expertise, and training, and relied on information that was submitted by the regulated, or foreign consultants.[41] Fourth, the legislation that governed the regulation of telecommunications was outdated, insufficient, and too general. Given the NTC's technical and manpower deficiency, its task of regulation to protect the public's interest had become difficult, if not impossible. In addition to this, the laws did not give the NTC concrete enforcement powers to ensure that regulated companies obeyed its policies. There were already bills on the NTC and the industry pending in Congress, but they were not given priority. Gavino argued that "the government must decide on the level of priority

[40] Gavino, Jacinto, "A Critical Study of the Regulation of the Telephone Utility: Some Options for Policy Development," PhD Dissertation, College of Public Administration, University of the Philippines (1992).
[41] Gavino, 1992, p. 108.

it will give telecommunications, given the high demand, and translate these to new policies to give the NTC more independence."[42]

The need to enact a law to professionalise and reorganise the NTC was the only solution to the problems that were besetting the agency. As early as 1989, two important bills on telecommunications, one on the proposed policies and industry structure for Philippine telecommunications (Senate Bill 1353 and House Bill 32327)[43] and the other on the reorganisation of the NTC (House Bill 20989[44]) were filed in Congress.[45] However, they did not have priority status and were not enacted. Gavino correctly concluded that the success or failure of regulatory reform would not rest with the regulatory body itself, but in the broader political processes.

The 1995 Republic Act (RA) 7925, which set out the national policy and principles on telecommunications, appointed the NTC as the principal administrator of the law, and assigned the DOTC the responsibility of developing a long-term national development plan for the industry. The law distinguished between development plan-making and policy setting, which were assigned to the DOTC, and the regulatory function, which the NTC would conduct. This distinction helped to clarify areas of responsibility, but a closer look at the list of functions expected of the NTC reveals a serious problem in the post-liberalisation scenario, where it was saddled with new responsibilities without a commensurate provision for an increase in its financial allocation or a reorganisation of its structure. In addition, RA 7925 left many regulatory issues unresolved, most of which were technical in nature.

RA 7925 strengthened the two-step process of entry into the industry. First, firms had to secure a legislative franchise from Congress and then a Certificate of Public Convenience and Necessity (CPCN) from the NTC. Before the issuance of a CPCN, the NTC had to issue a Provisional Authority (PA) to allow a company to operate until such time that it demonstrated its technical and financial capacity and that there was sufficient demand for its services.[46]

Also, RA 7925 altered the ceiling of a 12 percent rate of return on investments as the maximum allowable profit. Section 17 empowered the NTC to establish rates and tariffs that were "fair and reasonable, [and] provide[d] for the economic viability of telecommunications firms, and a fair return on their investments considering the prevailing cost of capital in the domestic and international markets." The NTC was authorised to establish a floor or ceiling on tariffs when there was ruinous competition, a monopoly, a cartel, or a combination of these in restraint of free competition. However, the law was silent on what "fair and reasonable rate of return" meant.

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[42] *Ibid*., p. iii.

[43] Senate Bill 1353, and its House counterpart, House Bill 32327, entitled "An act to promote the development of Philippine telecom and the delivery of Public Telecom services," were filed on 19 October 1989 and emphasised the idea that telecommunications development was a private sector function, thus calling for deregulation, a clarification of the NTC's responsibilities and independence, and the unbundling of the rates that were charged by telephone companies to make them more transparent.

[44] House Bill 20989, "An act to reorganize and strengthen the NTC," advocated minimum regulation to encourage private sector participation in telecommunications development.

[45] *NTDP*, July 1993 p. 3.

[46] However, firms that were interested in offering radio paging and value added services were exempted from acquiring a congressional franchise and were only required to register with the NTC, provided that they did not construct their own telecommunications infrastructure.

A related issue was the access charge that companies had to pay to each other for interconnection. Section 18 provided that access charge or revenue-sharing arrangements between all interconnecting carriers had to be negotiated between the parties, and that the agreement between the parties had to be submitted to the NTC. If the parties failed to arrive at an agreement within a reasonable period, then the NTC was empowered to resolve the dispute. Thus, the NTC would set the end-user tariff for telecommunications services while the access charge or revenue sharing scheme would be negotiated between the two interconnecting firms. The law further provided that the NTC should ensure equity, reciprocity, and fairness among the parties concerned when approving the rates for interconnection, taking into consideration the costs of the facilities needed to complete the interconnection, the need to cross-subsidise local exchange carriers to enable them to fulfil the primary national objective of increasing telephone density, and the need to ensure a rate of return on the total local exchange network investment that was at parity with those earned by other segments of the telecommunications industry.[47] Finally, Section 19 of RA 7925 mandated the establishment of a Uniform Charter of Accounts for all companies as the basis of establishing rates and tariffs.

Given the weakness of the regulatory body and the existence of bills in Congress that called for the reorganisation and strengthening of the NTC, it is curious that strengthening the NTC was never mentioned in a law that added to the expected functions of the body. Another important issue that RA 7925 failed to address was technological convergence. RA 7925 stated that "no single franchise shall authorize an entity to engage in both telecommunications and broadcasting, either through the airwaves or by cable."[48] Although this provision was designed to prevent one company from monopolizing telecommunications and broadcasting, it nevertheless barred firms from maximising their use of available technology.

Thus, while liberalisation opened the telecommunications industry to competition, the new telecommunications law left many issues unresolved, making regulation more difficult, and with the net effect of benefiting the dominant player, PLDT. One can only wonder how much more improvement in the sector and the overall economy could have taken place have better regulatory reforms been implemented.

**Telecommunications Regulatory Environment**

This section now discusses the current telecoms regulatory environment in the Philippines with regards the six aspects of market entry, regulation of scarce resources, interconnection, regulation of anti-competitive practices, tariff regulation and universal service obligation. These are presented as factual background in relation to the TRE perception survey. Meanwhile, Annex 2 lists the NTC's regulatory issuances from June 2005 to June 2006, which is the time frame for the survey.

[47] RA 7925, Section 18.
[48] RA 7925, Section 4-j.

Market Entry

Entry into the Philippine telecommunications market was a heavily regulated affair that involved a two-step process. A new company that intended to operate in a public utility sector such as telecommunications had first to secure a congressional franchise, as provided for in the country's 1987 Constitution.[49] Foreign ownership of a telecommunication company was capped at 40 percent and the life of a franchise was at most 50 years. Having a bicameral Congress, the franchise bill must be approved by both houses of Congress, which means a company must invest a considerable amount of time in securing one.

After obtaining a franchise, the company had to apply to the NTC for a Certificate of Public Convenience and Necessity (CPCN) for the type of service that it aimed to offer. Through the CPCN, the NTC assigns the area of operation, determines the allowable rate that could be charged for a service, and manages the allocation of radio spectrum or frequency. This two-step process is cumbersome, normally takes a long time, and had been abused by PLDT in the past when it constantly filed objections to new applications. To secure a legislative franchise, a bill had to be filed in both houses of Congress and then undergo three readings, including public hearings, during which delays due to opposition usually took place. It also meant that Congress had control over who obtained a franchise.

Aside from the extent of time involved in acquiring a franchise, obtaining a CPCN from the NTC was also a lengthy process, which involves public hearings before the NTC issues its decisions. Delays usually took place when a competitor opposed the new entrant. Beyond Congress and the NTC, the court system was there to contend with when an opponent was really bent on preventing a new entrant.

Thus, rules for market entry are clearly stated and known in the Philippines as described above. However, the current process is a cumbersome two-step process. Recently, the regulator decided that Value Added Service (VAS) providers who do not need to build their own networks do not need to secure a franchise from Congress and would only need to secure a license from the NTC to operate. Again in 2005, the regulator demonstrated its capacity to rule in favour of public interest when it ruled that VOIP service is a type of VAS which only requires a license from the NTC.

Meanwhile, in December 2005, the NTC issued four 3G licenses to Smart, Globe, Digitel and CURE (companies with existing congressional franchise), through a beauty contest.

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[49] Article 12, Section 11 of 1987 Constitution on the National Economy and Patrimony states that: "No franchise, certificate, or any other form of authorization for the operation of a public utility shall be granted except to citizens of the Philippines or to corporations or associations organized under the laws of the Philippines at least sixty per centum of whose capital is owned by such citizens, nor shall such franchise, certificate, or authorization be exclusive in character or for a longer period than fifty years. Neither shall any such franchise or right be granted except under the condition that it shall be subject to amendment, alteration, or repeal by the Congress when the common good so requires. The State shall encourage equity participation in public utilities by the general public. The participation of foreign investors in the governing body of any public utility enterprise shall be limited to their proportionate share in its capital, and all the executive and managing officers of such corporation or association must be citizens of the Philippines."

Scarce Resources

RA 7925 states that "radio frequency spectrum is a scarce public resource that shall be administered in the public interest and in accordance with international agreements and conventions to which the Philippines is a party and granted to the best qualified. The government shall allocate the spectrum to service providers who will use it efficiently and effectively to meet public demand for telecommunications service and may avail of new and cost effective technologies in the use of methods for its utilization." In Section 15 of the same law, it states that the allocation of radio frequency spectrum allocation and assignment shall be subject to periodic review and its use is subject to reasonable spectrum user fees. Where demand for specific frequencies exceeds availability, the NTC shall hold open tenders for the same and ensure wider access to this limited resource.

The NTC's **Memorandum Circular No.: 3-3-96** provides the overall guidelines with regards the review, allocation and assignment of the country's radio spectrum. It states that the Nantional Radio Frequency Allocation Table is a publicly available document and which shall be reviewed every two years. Any review, re-allocation, and revision of the radio spectrum allocation shall be conducted in consultation with the industry and/or affected parties with the end in view of optimizing the use of the radio spectrum. The National Radio Frequency Allocation Table shall be in accordance with the International Table of Radio Frequency Allocation issued by the International Telecommunications Union (ITU), consistent with national priorities and demand for frequency usage.

The NTC allocates available radio frequencies to telcos based on what is required to satisfy demand for customer access for the next ten (10) years on justified target demand and the result of radio frequency planning study. Any reallocations made in the radio spectrum must take into consideration allocations of frequencies for customer access services, broadcast services, maritime, aeronautical and other safety services, military and government radio stations / networks operated to promote or served national interest. Finally, the NTC rules that any frequency allocation shall be technology neutral, although users of the radio spectrum are encouraged to use state of the art technologies and to use minimum channel bandwidth and power output without sacrificing efficiency and service reliability.

In 2005, the allocated the following frequencies for 3G use: 825-845 Megahertz (Mhz), 870-890 MHz, 1880-1900MHz, 1920-1980MHz, 2110-2170MHz, and 2010-2025 MHz. The 825-845 and 870-890 Mhz frequency bands are currently assigned to existing mobile phone operators in the country. In addition in 2006, it held three public hearing with regards the reallocation of certain frequencies for broadband wireless access.

Interconnection

As detailed above, Executive Order 59 made interconnection mandatory. However, RA 7925 muddled the process by not clearly specifying the role of the regulator in the interconnection regulatory process between two telcos. This has made interconnection one of the thorniest issues and continues to be problematic as it is negotiated between two players. The NTC can only come into the negotiation if there is a deadlock. As has been pointed out, the telecoms law was silent on how long should negotiations go on, thus favouring the incumbent or dominant telco.

Currently, the NTC is working on interconnection templates (reference interconnection offers) in order to hasten the interconnection process.

Tariff Regulation

RA 7925 also altered the basis of allowable rates of return or the level of profits that a company could have, abolishing the 12 percent ceiling on profits that CA 146 imposed. Instead, the law provided that the NTC would establish rates to provide for the economic viability of telecommunications entities and fair returns on investments, considering the prevailing cost of capital in the domestic and international markets.[50]

RA 7925 has fully deregulated telecoms services tariff in the Philippines. Currently, the regulator comes into the picture on tariff regulation because of complaints brought to the regulator when pricing are deemed anti-competitive.

In 2005, the regulator supported the entry into the market of a third player, Sun Cellular by ruling that its promotion offer (called 24/7) of unlimited calls and texting on-net was not anti-competitive as claimed by Smart and Globe, which collectively controlled 96 percent of the market.

Regulation of anti-competitive practices

RA 7925 provides mandates the NTC to foster a healthy competitive environment where telecommunications carriers are free to make business decisions and to interact with one another in providing telecommunications services, with the end in view of encouraging their financial viability while maintaining affordable rates. The law tasked the NTC to foster fair and efficient market conduct by protecting telcos from unfair trade practices of other carriers as well as consumers against misuse of telecommunications entity's monopoly or quasi-monopolistic powers by, but not limited to, the investigation of complaints and exacting compliance with service standards from such entity.

In its attempt to further promote competition in the Philippine telecommunications market, the NTC published a consultative paper last December 2005, which discussed the merits of introducing four pro-competition policies, notably: (1) imposing obligations on carriers with significant market power (SMP); (2) mandating local loop bundling; (3) requiring carriers to allow for resale of their services; and (4) changing the basis of price regulation form ex ante to ex post.

On 24 August 2006, the NTC released a consultative document focusing on the proposal to impose obligations on carriers with SMP. The consultative document discussed the rationale behind the imposition of SMP obligations and the critical processes for implementing SMP obligations, which include: (1) defining markets to be used as basis for regulatory intervention; (2) determining if one or several operators in the defined markets have the degree of market power that merit regulatory intervention; (3) identifying appropriate SMP obligations to achieve policy objectives; and (4) determining conditions that justify withdrawal of regulation.

[50] Republic Act 7925, Section 17.

New players are said to welcome the ruling but the PLDT Group has officially opposed it.

Universal Service Obligation

Embedded in RA 7925, the legal framework covering the telecommunications industry, is the principle of cross-subsiding unprofitable segments of the business (i.e., services in rural areas) with revenues from the more profitable segments of the business (international long distance, long distance, or cellular business). Some economists raise doubt about the viability of such a regulatory regime given the declining international accounting rates.[51] Indeed reforming the system of cross subsidy is crucial to resolving the issue of achieving universal access as well as establishing a cost-based access and interconnection regime.

Aside from the above provision and the Service Area Scheme which aimed to increase telecommunications access based on fixed lines availability, that has been assessed above, the Philippines does not really have a clear USO policy. . Currently, the Commission on ICT (CICT) is undertaking a program of providing public access points for unserved or underserved areas.[52]

**Table 10**
**Breakdown of Respondents**

| Category of respondents | Number of Respondents Approached | Total Responses | Percentage |
|---|---|---|---|
| Telcos/ASP/VAS/Equipment suppliers | 41 | 19 | 36.5 |
| Academics/consultants | 33 | 16 | 30.8 |
| Journalists/TUG/civil society | 21 | 12 | 23.1 |
| Financial Institutions/Market Analysts | 5 | 2 | 3.8 |
| former regulators/other gov agencies | 10 | 3 | 5.8 |
| TOTAL | 110 | 52 | 100 |

**TRE Survey**

Figure 33 provides the breakdown of the panel of informed respondents on the telecommunications sector. Of the 110 people approached, 52 responded, which are

[51] Abrenica and Llanto, 2003, p. 268. The international accounting rate or termination rate is the fee paid by an originating international carrier to the receiving carrier for completing or terminating a call. PLDT has traditionally relied on this segment of telephone service for its dollar earnings, as there are more incoming than outgoing international calls. However, the rate has been declining. On February 1 2003, it had declined to 8 cents per minute for calls to landlines and 12 cents per minute for mobile calls. See *Philippine Daily Inquirer*, 20 February 2003.

[52] Created in 2004, the CIC is tasked to become the primary policy, planning, coordinating, implementing, regulating and administrative entity of the executive branch of government that will promote, develop and regulate strategic ICT systems and reliable and cost efficient communication facilities and services. However, the bill to turn the CICT into an executive department is pending in Congress. Currently, it only acts as an interim agency in charge of coordinating and implementing various national ICT programs of the government.

detailed by Figure 39. Meanwhile, the numerical breakdown of respondents is presented in Table 10.

**Figure 33**

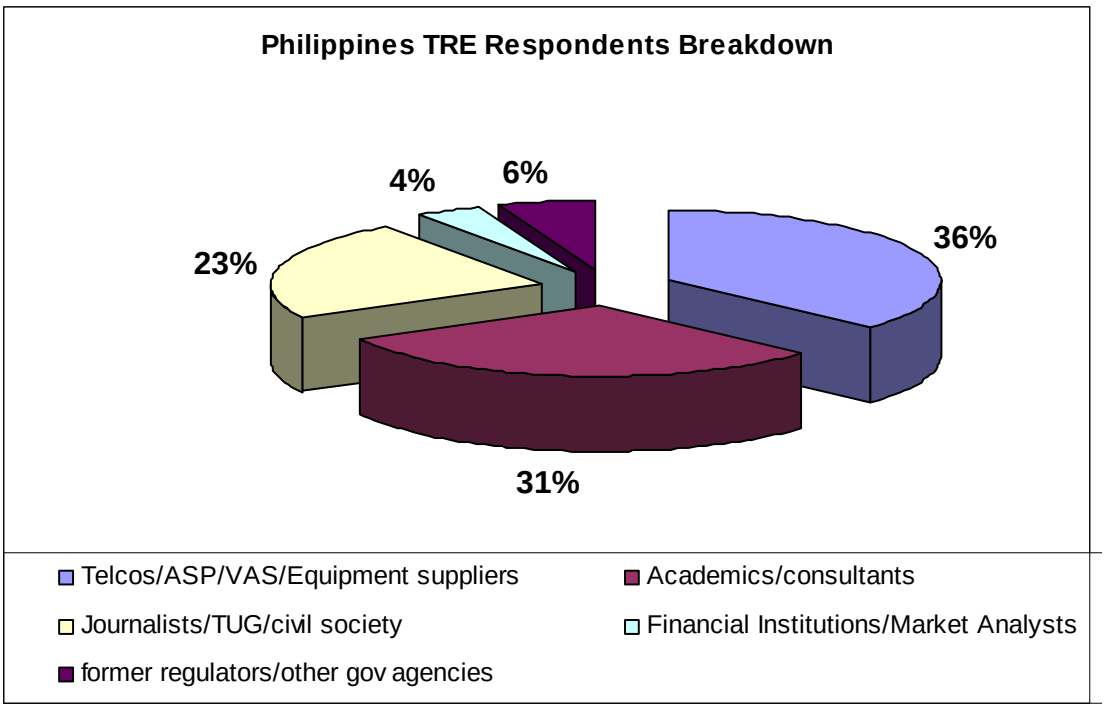
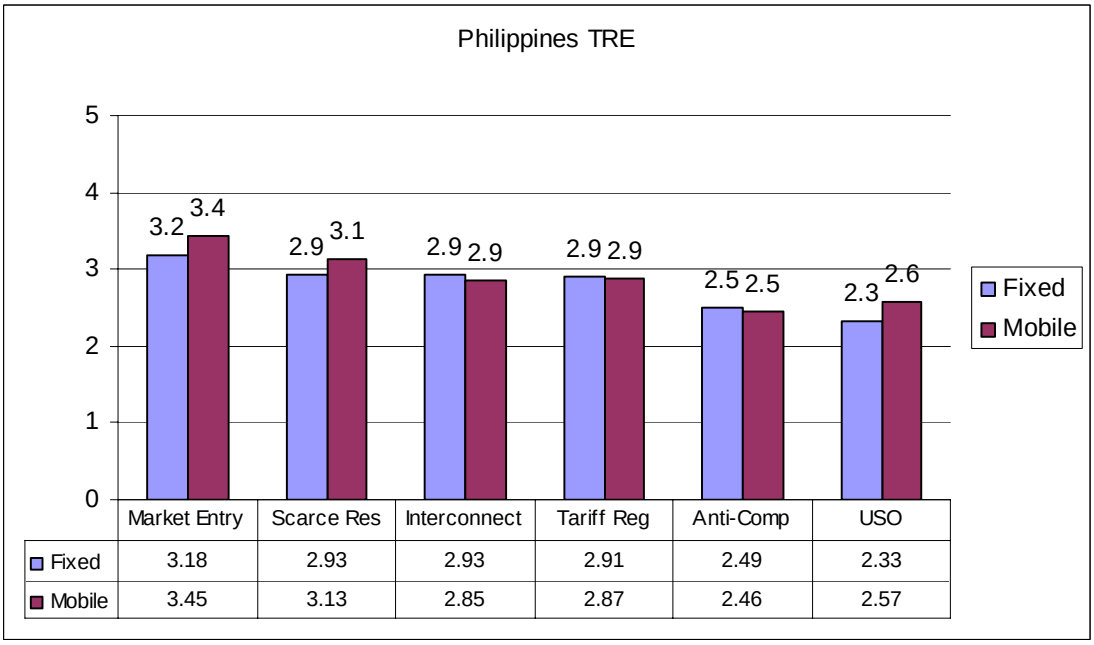



**Figure 34**
**TRE Outcome**




| | Market Entry | Scarce Res | Interconnect | Tariff Reg | Anti-Comp | USO |
|---|---|---|---|---|---|---|
| Fixed | 3.18 | 2.93 | 2.93 | 2.91 | 2.49 | 2.33 |
| Mobile | 3.45 | 3.13 | 2.85 | 2.87 | 2.46 | 2.57 |

## Analysis and interpretation

Figure 34 illustrates the outcomes of the TRE perception survey response in the Philippines.

In general, regulation of the mobile sector received higher scores than the fixed sector, on all aspects of regulation, signalling that the informed panel are happier with the performance of the regulator in regulating the mobile than the fixed line sector.

The highest scores on the mobile sector is recorded on market entry, where despite the fact that there are effectively only three players (even though seven were licensed to offer mobile services), the highest level of competition is felt, with various types of service promotions being highly publicised. The survey score on regulation of scarce resources in the mobile sector was 3.1, the second highest score, again reflecting general happiness with this aspect. The lowest scores on the mobile sector are recorded in the regulation of anti-competitive practices (2.46) and on USO regulation (2.57). The low score in anti-competitive regulation is probably due to the high profile complaints of the number 1 and no.2 player, Smart and Globe against the new entrant, Sun Cellular's promotion of unlimited text and voice calls for its subscribers, within its own network. While the NTC decided in favour of Sun Cellular, interconnection between Sun and the two major players was difficult. In addition, the issue was highly publicised, thus the high profile knowledge of the need to regulate anti-competitive practices.

On the fixed sector, the lowest score was registered in regulation of USO, which was also one of the lowest in the mobile sector. This perception of ineffectiveness of USO regulation is borne by the fact that there is really no clear or consistent policy with regards USO in the country.

## Summary and Conclusions

Market liberalisation in the Philippine telecommunications industry has led to the entry of many players into the fixed line and mobile sectors of the industry. However, as market shares and revenue data shows, PLDT continues to dominate the fixed-line market. Meanwhile, its subsidiary Smart dominates the mobile market. However, the presence of Globe and Sun Cellular has kept the mobile market highly competitive.

PLDT's maintenance of its market leadership can be explained by at least two reasons. First, despite EO 59 mandating interconnection, RA 7925 did not issue a clear role for the regulator during the process of interconnection. Thus, PLDT was able to use interconnection to slow down the growth of its competitors. Over a decade after liberalisation interconnection is still an issue between PLDT and the other players as well as among the new players themselves. Presently, the NTC is working towards issuing a reference interconnection offer (RIO) template to facilitate the issue, given that a legislated authority to intervene is not forthcoming. A second explanation as to how PLDT emerged as number one in both fixed and mobile sectors is because a merger between PLDT and Smart was allowed to take place in 1998.

Nevertheless, market opening led to many players providing choice in the fixed, mobile, and VAS segments—redounding to more choices and lower prices for consumers—at least at the mobile segment-- though with better-regulated competition, prices can still go down and quality of service can much room for improvement.

Competition is tight in the mobile market with 3 effective players. The entry in 2003 of Sun and its 24-7 promo in 2004 saw its share of subscribers rise from 200,000 at

the start of the promo to 1.8 million at the end of 2005. Both Smart and Globe protested to the NTC that Sun's unlimited on-net voice and text promotion was anti-competitive but the NTC ruled otherwise. With the NTC decision, mobile phone companies responded by also providing lower tariffs and unlimited texting offers. This, in turn, led to subscriber gains. In fact, the declining ARPUs of Globe and Smart points to the increasing level of competition in the mobile market.

Section 2 of this report demonstrated that available fixed line telephony has grown due to the Service Area Scheme. However, bad interconnection, high cost, and the rise of prepaid services and texting made subscribers move to prepaid mobile services. Mobile telephony ownership, coverage, and accessibility are high in the Philippines, while internet, PC, and broadband penetration and use remains very low. In place of emails and instant messaging, Filipinos have developed a culture of using their mobile phones for texting and keeping in touch, instead of merely using their phones for voice calls.

The NTC has always been criticised as a weak institution, lacking capacity and independence. Yet its decision to allow the continuation of Sun Cellular's 24/7 promo and its ruling in 2005 on VOIP as a value-added service showed that the regulator can decide in favour of consumer interests. With regards the VOIP ruling, telcos responded by bringing down the cost of IDD calls as a pre-emptive move against VOIP providers—which in turn benefited consumers. Thus, despite its weakness and limited resources, the NTC is doing its best given what it has. It has also learnt its lessons when it issued a ruling in 2001 on a new pricing regulatory regime for wholesale services.[53] Thus, the NTC is now issuing memorandum circulars (MC) piece meal so that if players legally-challenge aspect of the MC, then an entire regulatory regime is not stunted but only one aspect of it. This, it seems, is the only way for the NTC to regulate an industry where players are politically influential, and when it cannot get a law passed to get political and fiscal independence.

The TRE survey has reinforced the general perception that the regulatory environment is generally ineffective, with overall scores in all 5 components receiving low scores, ranging between 2.5 and 3 (ineffective to neutral). Nevertheless, informed perception of the TRE show higher scores for the mobile sector, while the fixed sector got lower scores. With regards the mobile sector, the respondents gave highest marks on market entry, while USO and regulation of anti-competitive practises were seen as ineffective. The same pattern emerged in the fixed line sector, although with lower scores compared to the fixed line sector. Most of the respondents to the TRE survey root the ineffectiveness of the regulatory body on the political environment that impinges on the regulator's performance. As early as 1989, a bill on strengthening the NTC was filed in Congress but it was never passed to become a law.[54] Given this context, regulator has to make do with its existing authorities, though they are incommensurate to its mandated

[53] This particular guideline provided for access pricing reform and per second billing. Telcos opposed the new regime and sued the NTC and got a Temporary Restraining Order (TRO) to stop the NTC from implementing the new regulatory regime, when in fact the telcos mainly or only opposed the per second billing. This legal challenge threw back NTC's efforts at introducing competitive regulations.

[54] In fact, there is also confusion as to which administrative body the NTC should be placed under, being moved from the DOTC to the newly created CICT in 2004, only to be moved back to DOTC during the political crisis that hit the Arroyo government in July 2005. At the end of November 2006, the NTC Commissioner has resigned, allegedly due to political fall-out that has nothing to do with the telecommunications industry.

functions and tasks. Currently, the NTC is in the process of issuing piece meal regulatory rulings on interconnection, Significant Market Power, network unbundling and ex-post regulation, with the support of a USAID-funded technical project.

## List of Figures

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## References


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# Annexes

**Annex 1**

**Telecommunications Regulatory Issuances (June 2005 to June 2006)**

| Issuance | Title |
|---|---|
| Memorandum Circular (MC) 03-03-2005-A<br>Issued: July 3, 2006 | Amendment to the Rules and Regulations on Broadcast Messaging Service dated March 15, 2005 |
| 30 May 2006 | Public hearing on proposed amendments to Memorandum Circular on Broadcast Messaging Service (MC 0303 2005) |
| NTC Revised Rules and Procedures | Rules governing pleading, practice, and procedure |
| No date on document | Application for VAS Registration |
| No date on document | Requirements for New VAS Applications and for VoIP Applications |
| December 16, 2005 | NTC Consultative Document On the Development of a Competition Policy Framework For the Information and Communications Technology Sector |
| Memorandum Order<br>No. 3-11-2005<br>Issued: November 23, 2005 | Guidelines for the Registration of Voip Service Providers and Resellers |
| MC No. 05-08-2005<br>Issued: August 23, 2005 | Voice over Internet Protocol (VoIP) as a Value Added Service (VAS) |
| MC NO. 06-08-2005<br>Issued: August 23, 2005 | Frequency Band Allocations for Broadband Wireless Access |
| MC No. 07-08-2005<br>Issued: August 23, 2005 | Rules and Regulations on the Allocation and Assignment of 3G Radio Frequency Bands |
| Memorandum and Revised Draft MC<br>Issued: June 10, 2005 | On the Allocation and Assignment of 3G Licenses and Radio Frequency Bands |
| No date on document | Explanatory Memorandum and Memorandum Circular for Voice over Internet Protocol (VoIP) |
| No date on document | Explanatory Memorandum and NTC Memorandum Circular on Frequency Band Allocations for Broadband |

| | |
|---|---|
| | Wireless Access (BWA) |
| No date on document | Explanatory Memorandum and Revised Memorandum Circular on the Allocation and Assignment of 3G Licenses and Radio Frequency Bands |
| No Date | Warning Against Text Scam Messages |

## Annex 2

### Table 7
### Cellular Telecommunications Cost in Selected ASEAN Countries in US$,1995-2005

| Country | Analog Tariff , 1995 | | | Digital Tariff, 1995 | | | 1999 | | | | 2001 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Per Min local | | | | 3 min local call | | | Cost of |
| | CF | MS | 3-min Local Call | CF | MS | 3-min Local Call | CF | MS | Peak | Off-Peak | CF (sim) | Card Value | Peak | Off-Peak | Free SMS | local SMS |
| Malaysia | 19 | 22.9 | 0.34 | .. | .. | .. | 121 | 15.29 | 0.08 | 0.04 | 47 | 13.2 | 0.43 | 0.31 | .. | 0.04 |
| Philippines | 57 | 4.5 | 0.91 | .. | .. | .. | 37 | 14.67 | 0.17 | 0.15 | 12 | 5.9 | 0.47 | 0.24 | 33 | 0.02 |
| Indonesia | .. | .. | . | .. | .. | .. | 20 | 6.49 | 0.03 | 0.03 | 7 | 9.7 | 0.44 | 0.38 | .. | .. |
| Singapore | 7 | 31.7 | 0.42 | 7 | 31.7 | 0.42 | 6 | 23.90 | 0.12 | 0.12 | .. | 5.6 | 0.31 | 0.31 | 40 | 0.03 |
| Thailand | 40 | 19.8 | 0.36 | 40 | 19.8 | 0.36 | 97 | 12.09 | 0.07 | 0.07 | 9 | 11.3 | 0.41 | 0.41 | .. | 0.07 |

| Country | 2005 Per min Local Call | | | Cost of a local SMS |
|---|---|---|---|---|
| | CF | Peak | Off-Peak | |
| Malaysia | 2.66 | 0.15 | 0.12 | 0.03 |
| Philippines | 2.67 | 0.14 | 0.07 | 0.02 |
| Indonesia | .. | 0.11 | 0.08 | 0.03 |
| Singapore | 25.10 | 0.13 | 0.13 | 0.03 |
| Thailand | 4.86 | 0.12 | 0.12 | 0.07 |

Note: CF = Connection Fee
MS = Monthly Subscription
.. = No Data

Sources: *Various ITU Reports, 1993-2005*

**Table 8**
**Comparative Table of Prepaid and Medium and High-End Postpaid Tariffs of PLDT, Globe and Sun Cellular, 2005**

| | Smart/Piltel | Globe/Touch Mobile | Sun Cellular |
|---|---|---|---|
| Low-end (prepaid) | Smart 258, P15 (US$0.30) for unlimited texting on-net for 1 day, P30 (US$0.60) for 2 days, P60 (US$1.20) for 4 days; P1 per text to other networks ; P15 (30 cents) for international text; P6.50 (US$13 cents) per min of on-net voice calls , P7/min (US$14 cents) for off-net voice calls, US0.40 cents per minute of IDD to all destinations | Touch Mobile on net calls- first 2 minutes charged at P5.50 (US 11 cents); 3rd minute onwards charged at P1 (US 2 cents), so 3 minute on-net =P12 (US 24 cents), 4 min= P13 (US26 cents); 5 min P14 (US 28 cents) and so on; TM to Globe, others, landline or NDD = P6.50/min (US 13 cents); IDD = US$0.40 cents | 24/7 promo, Oct 2004; P250 (postpaid) or P250 (US$5) for 30 days or P100 (US$2) for 10 days of unlimited text and calls on next; P6.50 (US 13 cents) per minute call to Globe and Smart; P7.50 (US 15 cents) to other networks |
| medium | Smart Gold Plans range from P500 to P3500, consumable or regular with free texts and min; P6 (11 cents) per min of onet call, P7.50 (15 cents) per min off-net calls; 2 cents per SMS, 40 cents per min for IDD calls | G-Flex and G Plans -postpaid plans ranging from P500 (US$10) to P2500 (US$50); P6 (11 cents) per min of onet call, P7.50 (15 cents) per min off-net calls; 2 cents per SMS, 40 cents per min for IDD calls | postpaid plans ranging from P350 (US$7) to P3500(US$70); P6 on net, P6.50 off net, 1 cent for on-net SMS, 2 cents for offnet SMS, 30 cents for IDD per min; international SMS P9 (8 cents) |
| High-end | Smart Infinity plans for P5000 (US$100), regular or consumable plans; P3.50 (7cents) per minute on net voice calls, P4.50 (9 cents) for off-net calls per minute, 1 cent per SMS, 40 cents for IDD calls | G Max and G Platinum - postpaid ranging from P3500 (US$70), P5000 (US$100), P7000 and P10,000 (US$200); P3.50 (7cents) per minute on net voice calls, P4.50 (9 cents) for off-net calls per minute, 1 cent per SMS, 40 cents for IDD calls | for P3500 (US$70) postpaid plan, P5 per min on net call, P5.50 per min of off-net call,1 cent for on-net SMS, 2 cents for offnet SMS, 30 cents for IDD per min; international SMS P9 (8 cents) |

Source: Company Websites

**Table 9**
**Fixed Line Telecommunications Cost in Selected ASEAN Countries in US$**
**1991-2001**

| | 1991 | | | | 1995 | | | | 1999 | | | | 2001 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Country | Residential | | Business | | Residential | | Business | | Residential | | Business | | Residential | | Business | |
| | CF | MS | CF | MS | CF | MS | CF | MS | CF | MS | CF | MS | CF | MS | CF | MS |
| Malaysia | 18 | 7.3 | 18 | 12.7 | 19 | 7.6 | 19 | 13.3 | 13 | 5.3 | 13 | 9.2 | 13 | 4.7 | 13 | 5.3 |
| Philippines | 11 | 8.6 | 13 | 23.6 | 13 | 10.1 | 16 | 23.1 | 8 | 9.0 | 7 | 20.5 | 20 | 11.9 | 24 | 24.9 |
| Indonesia | 169 | 4.1 | 154 | 4.1 | 311 | 9.1 | 400 | 13.8 | 38 | 2.9 | 57 | 5.0 | 24 | 2.0 | 34 | 3.2 |
| Singapore | 46 | 4.8 | 58 | 7.2 | 56 | 5.9 | 71 | 8.8 | 47 | 5.1 | 47 | 7.6 | 17 | 4.7 | 17 | 7.0 |
| Thailand | 145 | 3.9 | 145 | 3.9 | 133 | 4.0 | 133 | 4.0 | 89 | 2.6 | 89 | 2.6 | 75 | 2.3 | 75 | 2.3 |

Note: CF = Connection Fee
MS = Monthly Subscription

Sources: Various *ITU Reports, 1993-2002.*