Deregulation and Its Effects on Telecom Companies' Financial Performance

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This paper discusses the effects of telecom deregulation on the financial performance of listed telecom companies, particularly Philippine Long Distance Telephone Company (PLDT) and Globe Telecom, Inc. (Globe). For purposes of comparing financial performance, the years covered in the study were grouped into three: 1970-1986 representing the period when PLDT was a virtual monopoly, 1987-1995 representing the period when the telecom sector was being deregulated, and 1996-2013 representing the deregulated period. The study shows how PLDT struggled after deregulation and how it fared afterwards. It also shows Globe's volatility in its operating performance after deregulation. The study also shows how deregulation can improve the offering of telecom services based on the increases in subscribers and keep the surviving players profitable.

1 Introduction

Until 1986, PLDT was operating as a virtual monopoly. With the passage of the new Constitution in 1987, President Corazon Aquino started opening the telecom sector to other players. In the same year, the Department of Transportation and Communications (DOTC) issued DOTC Circular No. 87-188, which intended to rationalize and guide the orderly and competitive development of the telecom sector (Mirandilla, 2011). In 1989, the National Telecommunications Commission (NTC) granted an international gateway facility certificate of public convenience and necessity (IGF CPCN) to Philippine Global Communications, Inc. (Philcom) and Eastern Telecommunications Philippines, Inc. (ETPI).²

The opening of the telecom sector was further enhanced with the signing of Executive Order (E.O.) Nos. 59 and 109 in 1993 by President Fidel Ramos and the approval of Republic Act (R.A.) 7925 in 1995.

On February 24, 1993, President Fidel V. Ramos signed E.O. No. 59 (Prescribing the Policy Guidelines for Compulsory Interconnection of Authorized Public Telecommunications Carriers in Order to Create a Universally Accessible and Fully Integrated Nationwide Telecommunications Network and Thereby Encourage Greater Private Sector Investment in Telecommunications). As the title of the executive order suggests, this was meant to encourage interconnection among telecom carriers.³

The second executive order signed by President Ramos in the same year was E.O. 109 or Policy to Improve the Provision of Local Exchange Carrier Service (1993). The main objective of this executive order is to improve the provision of telecommunication service in unserved and underserved areas in the country.⁴

On March 1, 1995, President Ramos signed R.A. 7925 or The Public Telecommunications Policy Act of the Philippines (1995). This law aims to open the sector to more private players and improve the provision of more telecom services at fair and reasonable rates. It also prohibits a telecom company from engaging in both telecommunications and broadcasting.⁵

After the telecom sector has been opened to more players, it is interesting to find out how PLDT and the new players performed.

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¹ See References.

 $^{^2}$ To operate a telecom company, a congressional franchise has to be secured by passing a republic act. A certificate of public convenience and necessity (CPCN) or provisional authority has to be secured from the National Telecommunications Commission (NTC).

³ Refer to Appendix 1 for the salient provisions of E.O. No. 59.

⁴ Refer to Appendix 2 for the salient provisions of E.O. No. 109.

⁵ Refer to Appendix 3 for the important objectives and policies of Republic Act 7925.

2 Objectives

This paper is focused on the analysis of the operating performance of PLDT and Globe Telecom, Inc. (Globe), the largest telecom players in this country. It also looked into the operating performance of the other telecom players such as Digitel and Piltel, a subsidiary of PLDT.

Deregulation means "the reduction or elimination of government power in a particular industry, usually enacted to create more competition within the industry." Deregulation, as used in the context of this paper, refers to the opening of the sector to more players. In the case of the telecom sector, this started during the term of President Corazon Aquino when other private companies like Philippine Global Communications, Inc. (Philcom) and Eastern Telecommunications Philippines, Inc. (ETPI) were allowed to expand their operations.

It must be noted that while the sector was liberalized, NTC is still around to monitor if the tariff rates charged by the telecom companies for their services are fair and reasonable.

Any private entity operating a business normally strives for a monopoly position as this can increase profitability. While this situation may be good for the entity, this may not be good for the consumers, as the monopolistic player does not have much incentives to operate efficiently. PLDT had been operating as a monopoly until 1986. It is interesting to find out how PLDT fared before and after it faced competition.

3 Brief History of PLDT and Globe

3.1 PLDT

Philippine Long Distance Telephone Company (PLDT) was incorporated on November 28, 1928. PLDT was the result of a merger of four telephone companies under US ownership (PLDT Annual Report, 2005).⁷

By virtue of Act No. 3436, the Philippine Legislature granted PLDT a franchise and the right to engage in telecommunications in the country. In 1967, General Telephone and Electronics Corporation of New York sold their controlling stake in PLDT to a group of Filipino businessmen. ⁸

In the 1970s, PLDT was nationalized under the Marcos administration. During this period, PLDT was not paying corporate income taxes.

In 1986, after the EDSA revolution, PLDT was re-privatized as Antonio "Tonyboy" Cojuangco, assumed post as PLDT chief. In 1987, the company started paying corporate income taxes.

In 1998, First Pacific Group led by Manuel Pangilinan acquired a significant stake in PLDT. In 2000, NTT Communications Corporation of Japan became PLDT's strategic partner with its 15% interest in the voting stocks of PLDT. It was in the same year that PLDT acquired 100% of Smart Communications, Inc. In 2011, PLDT completed its acquisition of a controlling interest in a competitor, Digital Telecommunications Phils, Inc., from JG Summit Holdings, Inc (JGSHI). As a result of this deal, PLDT had to issue additional common shares to JGSHI.

As of December 31, 2012, the three largest stockholders of PLDT are as follows: First Pacific Group and its Philippine affiliates, 26%; NTT Communications Corporation and its affiliates, 20%, JGSHI group, 8%.

Through its Smart, Sun Cellular and Talk N' Text brands, PLDT accounted for about 68% of the wireless phone market in 2012 with 69.9 million active subscribers (Montecillo, 2013). PLDT also reported a consolidated net income of PHP35.4 billion and a return on equity of 23.8% in 2012. These numbers were far better as compared to the consolidated net loss of PHP2.5 billion and a return on equity (ROE) of (1.95%) in 2000.

⁶ Definition of deregulation retrieved from http://www.investopedia.com/terms/d/deregulate.asp

⁷ See References.

⁸ From "A Short History of PLDT and Its Foreign Ownership Problem Part I". Retrieved from http://telcotroll.com/?p=3156

⁹ See References.

3.2 Globe

Globe's franchise to operate wireless long distance message services in the Philippines was granted by virtue of Act No. 3495 passed by Congress in 1928. The franchise was given to Robert Dollar Company, a corporation organized in California, USA. This company was subsequently incorporated in the Philippines as Globe Wireless Limited. In 1934, the franchise and privileges of Robert Dollar Company were all transferred to Globe Wireless Limited by virtue of Act No. 4150 (Chan, 2013). 10

Through Republic Act 4630, Globe Wireless Limited was renamed Globe Mackay Cable and Radio Corporation (GMCR) in 1965. Through this Act, the services offered by the company was expanded to include international communications systems. The company's operations were closed during the martial law, but before its franchise expired in 1980, the company was given a new franchise under Batas Pambansa 95.11

In 1991, GMCR was merged with Clavecilla Radio Corporation. By virtue of Republic Act 7229, the merger of the two companies was approved by Congress with GMCR as the surviving entity. 12

In August 1998, SEC approved the change in GMCR's name to Globe Telecom, Inc. (Globe).

In 2001, Globe's merger with Islacom was completed. Islacom was the first to launch digital mobile communications using global system for communication (GSM) technology in the Philippines in 1994. GSM technology allows subscribers to send text messages.¹³

In 2013, Globe started the acquisition of Bayantel through a debt-equity swap which would allow Globe to control 56.6% of Bayantel (Agcaoli, 2014).¹⁴

4 Methodology

In doing this paper, the following procedures were conducted:

- 1. Reviewed the applicable rules and laws that led to the deregulation of the telecom industry in the Philippines. These laws are DOTC Circular No. 87-188, E.O. No. 59, E.O. No. 109 (1993) and R.A. 7925 (1995).
- 2. Reviewed the financial statements of PLDT from 1970-2013 and of Globe from 1991 to 2013, with focus on the income statements. The financial statements of Piltel from 1995 to 2002 and of Digitel from 1997 to 2010 were also reviewed. In the case of Piltel, its third quarter 2011 financial statements were also reviewed. Piltel was merged with PLDT in the fourth quarter of 2011. Income statements provide information regarding the operating performance of a company.
- 3. Compared the operating performance of PLDT and Globe before, during, and after the deregulation. The financial ratios computed were the following:
 - a. Operating profit margin. This profitability ratio provides information regarding the extent of earnings generated from the core business of the company. In computing the operating profit margin, the other revenues and expenses and financing costs were excluded.
 - b. Net profit margin. This ratio measures the percentage of net income earned for every peso of revenue generated by the company. This is after interest expense and other revenues and expenses are considered.
 - c. Return on equity. Return on equity measures the profits earned by the stockholders. For the purpose of this paper, this is computed for the parent stockholders. In computing the return on equity, the following adjustments were made to the net income and equity:
 - For the income attributable to the common stocks, the share of the minority interest and the preferred stock dividends were deducted from the total consolidated net income.
 - For the equity, the value of the minority interest and the preferred stocks were deducted from the total equity.

¹⁰ See References.

¹¹ From "Public Relations strategies of Globe and Touch Mobile". Retrieved from

http://imyertumblrina.tumblr.com/post/18602000872/public-relations-strategies-of-globe-and-touch-mobile ¹² Ibid.

¹³ Ibid.

¹⁴ See References.

- 4. Compared the telephone lines on service provided before and after the deregulation. For purposes of comparing the numbers, the period 1970-2013 was divided into three groups:
 - a. 1970 to 1986 This period covers the years when PLDT was a virtual monopoly. During this period, PLDT was exempted from corporate income taxes.
 - b. 1987 to 1995 This period covers the years when the telecommunication industry was being deregulated.
 - c. 1996 to 2013 This covers the deregulated years.
- 5. Compared the growth rates of the combined revenues of PLDT, Globe and Digitel with the GDP growth rates in the country. This comparison was made to find out if the revenue growth rates were positively correlated with the GDP growth rates. The real GDP growth rates using Year 2000 as the base was used. The real combined revenue growth rates were computed based on the inflation rate using Year 2000 as the base year. The correlation coefficient of real growth rates of the telecom companies' combined revenues with the real GDP growth rates was computed.

5 Findings

Profitability ratios for PLDT and Globe, the two major telecom players in the Philippines, were computed. Such profitability ratios were also computed for Digitel from 1996 to 2010. Digitel was merged with PLDT in the fourth quarter of 2011.

5.1 PLDT

The profitability ratios of PLDT from 1970 to 2013 are shown in Table 1 while the profitability ratios of Globe from 1991 to 2013 are shown in Table $5.^{15}$

As shown in Table 1, PLDT reported the highest average ROE of 22% during the period 1996-2013. This number was slightly higher than the average ROE of 21% reported for the period 1970-86. However, if the incomes during the 1970-86 period were to be subjected to a corporate tax rate of 30%, the average ROE for this period would go down to 13%.

Table 1. Average	Profit Margins and	ROE of PLDT

Period	Operating Profit Margin	Net Profit Margin	ROE
From 1970 to 1986 (without taxes)	42%	22%	21%
From 1970 to 1986 (with taxes)	42%	15%	13%
From 1987 to 1995	40%	25%	20%
From 1996 to 2013	31%	16%	22%
From 1996 to 2013 (excluding 1998 to 2003)	35%	24%	33%

In terms of net profit margin, the highest reported average was for the 1987-95 period which was 25%. During this period, net profit margin ranged from 20% to 29% (see Exhibit 1). The net profit margins for the period 1987-95 were higher than those of the 1970-86 period mainly because of financing cost. As a percentage of revenues, financing cost accounted for an average of 24% in the 1970-86 period while it was a little less than 10% for the 1987-1995 period. As a percentage of revenues, financing cost for the period 1996-2013 period was slightly higher than 10%.

Both ROE and net profit margins for the period 1996-2013 would substantially increase if the numbers for the period 1998-2003 were to be excluded. During this period, Piltel, a wireless phone subsidiary of PLDT, incurred substantial operating losses because of a change in technology. Piltel which used to be the dominant player in the wireless phone industry in the Philippines suddenly found its analog technology outdated. With its analog technology, its subscribers cannot send text messages which started becoming popular in the second half of 1990s. Globe Telecom, through its subsidiary,

¹⁵ Only data from 1991 was secured by the author for Globe.

Islacom,¹⁶ first introduced the global system for mobile communications (GSM) which allowed subscribers to send text messages. This change in technology led to a substantial decline in the subscribers of Piltel which at that time was also saddled with huge amount of debt. Piltel started reporting operating losses in 1997 (see Table 2).

Table 2. Piltel Net Income, 1995-2004

Year	Net Income	Year	Net Income
1995	822	2000	(5,199)
1996	710	2001	(21,864)
1997	(621)	2002	(21,829)
1998	(4,121)	2003	(3,350)
1999	(3,893)	2004	9,750

Piltel's financial problems got worse after 1997. In 2001, Piltel reported a net loss of PHP21.86 billion and another PHP21.83 billion in 2002 due to the write-off of its obsolete telecom equipment. This explains why PLDT's consolidated net incomes were low during those years in spite of the growing profitability of SMART, another telecom subsidiary of PLDT (see table 3).

Table 3. Consolidated Operating Performance of PLDT, 1997-2004

	Operating Income	Net Income
Year	(In Millions of PHP)	(In Millions of PHP)
1997	15,071	7,698
1998	9,845	(1,454)
1999	12,937	1,229
2000	10,799	(2,502)
2001	16,643	1,066
2002	20,786	3,070
2003	26,211	1,461
2004	47,541	27,959

PLDT was able to address the financial problems of Piltel in 2004 when most of Piltel's debt were assumed by SMART. Eventually, Piltel became a subsidiary of SMART. To generate revenues, Piltel was allowed to use the facilities of SMART and offered the "Talk and Text" brand, which became popular to the masses.

If the 1998-2003 operating performance were to be excluded from the computations, PLDT's average annual net profit margin and ROE for the 1996-2013 period would have been higher at 24% and 33%, respectively.

As of December 31, 1986, PLDT had 856,014 fixed landlines. By December 31, 2013, PLDT had 2,069,419 fixed landlines (see Exhibit 2). The average annual increase in the number of fixed landlines in the 1970-86 period was 38,265 (see Table 4). This number was slightly higher than the average annual increase during the deregulation period 1987-1995, but much smaller than the annual average increase of 48,476 for the 1996-2013 period.

On top of the fixed landline subscribers, the PLDT group had 70,045.627 wireless phone subscribers, 961,967 fixed line broadband subscribers, and 2,453,826 wireless broadband subscribers as of December 31, 2013 (see Exhibit 2).

As a result of the increases in the subscribers' base, PLDT's net income increased from PHP1.9 billion in 1986 to PHP35.45 billion in 2013. This 2013 net income was lower than the record-high consolidated net income of PHP40.3 billion reported in 2010.

¹⁶ Islacom was eventually renamed Innove Communications, Inc.

Table 4. Increases in Fixed Landline Subscribers

Period	Increase in Fixed Landlines	Average Increase Per Year
From 1970 to 1986	612,235	38,265
From 1986 to 1995	340,846	37,872
From 1995 to 2013	872,559	48,476

5.2 Globe

As shown in Table 5, Globe's average profitability ratios were negative for the 1991-95 period. While Globe's net profit margin was positive at 14% in 1991, it became negative from 1992 to 1997 (see Table 6). Globe returned to positive profits in 1998. Since then, Globe's profit margins have always remained positive despite their volatilities.

Table 5. Average Profit Margins and ROE of Globe

	Operating Profit Margin	Net Profit Margin	ROE
From 1991 to 1995	-26%	-19%	-3%
From 1996 to 2013	19%	8%	13%

Table 6. Profit Margins and ROE of Globe, 1991-2013

Year	Net Income	Operating Profit Margin	Net Profit Margin	ROE
1991	52.46	24%	14%	17%
1992	(88.54)	-17%	-31%	-21%
1993	(80.74)	-42%	-27%	-4%
1994	(78.62)	-55%	-25%	-2%
1995	(155.38)	-39%	-24%	-4%
1996	(750.87)	-34%	-39%	-16%
1997	(870.17)	-29%	-33%	-14%
1998	22.90	6%	0%	0%
1999	939.52	18%	10%	7%
2000	1,548.83	23%	8%	8%
2001	4,305.42	27%	12%	10%
2002	6,844.63	35%	15%	14%
2003	9,952.64	32%	20%	21%
2004	11,396.24	31%	20%	21%
2005	10,314.51	30%	18%	20%
2006	11,754.67	34%	20%	21%
2007	13,277.02	36%	20%	24%
2008	11,275.88	32%	17%	23%
2009	12,568.87	30%	20%	27%
2010	9,744.63	22%	13%	21%
2011	9,831.81	21%	12%	21%
2012	6,857.01	15%	8%	15%
2013	4,960.25	12%	5%	12%

After reporting a net income of PHP23 million in 1998, Globe Telecom reported significant increases in net income over the years until 2007. Globe's profitability is largely attributed to its

subscribers' base, which increased from 55,000 in 1996 to more than 38 million in 2013. Globe's subscribers are mostly wireless based.

While revenues had been growing, Globe Telecom was not spared from the adverse effects of competition. Its 2013 consolidated net income of PHP4.9 billion was 63% down from the record-high net income of PHP13.3 billion reported in 2007 (see Table 6). As of December 31, 2013, Globe had more than 38 million wireless phone and broadband subscribers.

Competition heightened when Sun Cellular — a wholly owned subsidiary of Digital Telecommunications Phils, Inc. (Digitel) and a much smaller player compared to PLDT and Globe Telecom — waged a price war in 2004 when it had offered 24/7, which allowed its subscribers within the network to have unlimited calls and texts. Subsequently, this became the norm for the other networks that eventually hit their profitability.

5.3 Digitel

In 1993, Digitel was awarded an exclusive contract by the Department of Transportation and Communication (DOTC) to manage, operate, develop and rehabilitate some telecom facilities of DOTC. The following year, it was granted a franchise to provide local and international telecom services nationwide.¹⁷

Shown in Table 7 are Digitel's operating performance from 1996 to 2010. Digitel was merged with PLDT in 2011.

Table 7. Profit Margin	is and ROF of Digite	1 1996-2010
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Year	Net Income (In Millions of PHP)	Operating Profit Margin	Net Profit Margin	ROE
1996	703	33.44%	58.16%	7.11%
1997	801	23.93%	44.06%	7.50%
1998	603	23.20%	19.71%	5.35%
1999	5	13.66%	0.12%	0.04%
2000	5	25.30%	0.10%	0.04%
2001	67	20.62%	1.03%	0.59%
2002	29	20.88%	0.52%	0.26%
2003	(1,287)	-8.56%	-19.89%	-13.27%
2004	(2,052)	-3.79%	-28.00%	-40.41%
2005	(1,590)	1.79%	-19.16%	-55.58%
2006	(963)	-10.63%	-12.61%	-50.76%
2007	1,170	-41.11%	14.07%	38.16%
2008	(1,978)	6.73%	-17.43%	-181.59%
2009	260	7.32%	1.85%	19.25%
2010	527	7.44%	3.18%	1183.04%

In its initial year of operations, Digitel's revenues were mostly dependent from its landline subscribers. In August 2003, The National Telecommunications Commission (NTC) approved the assignment to one of Digitel's subsidiaries the public authority to construct, install, operate, and maintain a nationwide cellular mobile telephone system (CMTS) using global system for mobile (GSM) and/or code division multiple access (CDMA) technology. ¹⁸

As previously stated, Digitel launched its 24/7 unlimited call and text messaging to its subscribers in 2004. While this strategy allowed Digitel to grab market from its competitors, it was not without a price. As shown in Table 7, net profit margin of Digitel went down to -28% in 2004. The operating

¹⁷ From Note 1 of the Notes to Financial Statements, Digitel 1997 Annual Report.

¹⁸ From Note 1 of the Notes to Financial Statements, Digitel 2004 Annual Report

losses in the subsequent years decreased the company's equity. For the period 1996-2010, the highest reported stockholders' equity of Digitel was reported in 2002 at PHP11.385 billion. Because of operating losses, this amount went down to as low as PHP45 million in 2010, the year prior to its merger with PLDT. This PHP45 million stockholders' equity also explains the 1,183% ROE in 2010 when the company reported a net income of PHP527 million.

The 2007 operating performance is also interesting to note. Digitel had an operating profit margin of -41% that year, but its net profit margin was 14%. This positive net profit margin was due to three factors which were not related to the core business of the company: PHP 5.15 billion foreign exchange gain, PHP2.08 billion other income, and PHP1.2 billion market valuation gain on investment.

5.4 Comparison of Telecom Companies' Financial Performance

Prior to deregulation, PLDT never operated an operating loss except in 1998 and 2000, when its net profit margin declined to -3% and -4%, respectively. On the contrary, the new players in the sector such as Globe and Digitel only started reporting profits after the sector was liberalized in 1995. While PLDT suffered some losses in 1998 and 2000 and its profits were down around this 1998-2003 period, the company had also managed to register profits, in terms of absolute amounts and in terms of ROE, that it had never registered before.

Globe reported a record high net income of PHP13.3 billion in 2007, but its profitability had been slowly declining since then.

Digitel managed to post positive profits just two years prior to its merger with PLDT since it was allowed by NTC to provide cellular mobile telephone system services (CMTS) in 2003. Digitel's profitability suffered when it launched its 24/7 unlimited calls and text messaging. This marketing strategy, however, established Digitel as a major player in the industry. As shown in Table 7, Digitel's operating profits were negative from 2003 to 2007. Unlike PLDT and Globe which enjoyed first mover advantage, it was difficult for Digitel to register profits.

Telecom operation is capital intensive and this implies that more revenues have to be generated to cover high operating costs such as depreciation expense. Because of high operating costs, profits are very sensitive to changes in revenues. Profits are magnified when revenues increase but the reverse is also true when revenues go down.

In 2010, the year before Digitel was acquired by PLDT, its revenues was PHP16.5 billion while its depreciation expense for that year was PHP4.3 billion. In the same year, PLDT reported PHP158 billion revenues while Globe reported PHP65 billion. The sector is also characterized by high advertising and promotion cost. Digitel spent more than PHP1 billion for advertising and promotion in 2010 while PLDT and Globe spent PHP5.3 billion and PHP4.3 billion, respectively.

The following reasons are possible explanations why both PLDT and Globe thrived after deregulation:

- 1. First mover advantage. Both PLDT and Globe were established companies by the time the telecom sector was liberalized in 1995. This allowed them to have enough subscribers' base to profit. By the time Digitel offered its 24/7 package in 2004, Filipinos were already either subscribers of PLDT (through Smart and Piltel) or Globe. While it was cheap to get a new service provider, most subscribers decided to keep their existing service providers. It was not unusual to have more than one service provider.
- 2. Sizable financial resources. Both companies are parts of much bigger conglomerates which allow them to fund new technologies in the telecom sector.
 - Both PLDT and Globe have been investing heavily on their telecom equipment. For 2013 alone, PLDT spent more than PHP28 billion in capital expenditures. In 2012, capital expenditures was more than PHP36 billion. Since 2006, its annual capital expenditure had not fallen below PHP20 billion.
 - Globe spent more than PHP35 billion in capital expenditures in 2013 and more than PHP26 billion in 2012. These capital expenditures allow telecom players to improve their technology and offer more and hopefully, better quality telecom services to their customers.
- 3. Expanded services and wider coverage areas. Both PLDT and Globe have congressional franchises to offer telecom services at the national level. While multi messaging service (MMS)

- remain a major source of revenues, both companies also offer other forms of services such as digital subscriber line (DSL) and broadband services.
- 4. Economy of scale. Because both companies have large subscribers' base, they can afford to enjoy economies of scale which new players with limited subscribers cannot enjoy.

Whether PLDT and Globe will enjoy another period of high profitability also depends on the degree of competition and new technologies. The third quarterly report of PLDT and Globe in 2014 show different results. PLDT's net income for the nine-month period ending September 30, 2014 of PHP27.98 billion is more than 3% lower than the PHP28.95 billion reported in the same period last year. Furthermore, PLDT announced that the target net income for PLDT in 2014 is adjusted downwards to PHP37 billion, from an original forecast of PHP39.5 billion due to more intensified competition.

Globe, on the other hand, reported PHP10.5 billion net income for the same nine-month period which is 198% higher than the net income reported in the same period in 2013. It must be noted, however, that Globe's annual net income started going down since 2007 when it hit its all-time high net income of PHP13.28 billion. It went down to PHP4.96 billion in 2013.

5.5 Correlation of Telecom Revenues with Real GDP Growth Rates

A correlation of the real growth rates in the combined revenues of PLDT, Globe and Digitel with the real Philippine GDP growth rates using the Year 2000 as the base year was made from 1996 to 2013. The year 1996 was used as the starting point because the data available for the Digitel's revenues start only in 1995. For 2011, only Digitel's revenues up to the third quarter was added to those of Globe's and PLDT's because the company was already merged with PLDT in the fourth quarter.

A correlation coefficient of -0.50 was computed suggesting that the real growth rates in the consolidated revenues of the three telecom companies were negatively correlated with those of the real GDP growth rates. The negative correlation was not high. Shown in Table 8 are the real growth rates of telecom companies' combined revenues and the real GDP growth rates from 1996 to 2013.

Table 0 I	Dool Dovonuo	Crowth Dates or	nd GDP Growth Rates

Year	Real Revenue Growth Rates	Real GDP Growth Rate
1996	12.93%	5.80%
1997	19.40%	5.20%
1998	26.62%	-0.60%
1999	16.89%	3.40%
2000	19.44%	0.00%
2001	23.20%	3.00%
2002	13.60%	4.50%
2003	22.82%	4.90%
2004	4.01%	6.40%
2005	-3.79%	5.00%
2006	-3.65%	5.30%
2007	5.37%	7.10%
2008	-4.20%	3.70%
2009	4.83%	1.10%
2010	0.66%	7.30%
2011	-3.65%	3.60%
2012	-3.95%	6.80%
2013	2.35%	7.20%

Note that for this 1996-2013 period, there were six years where the signs of real revenue growth rates were opposite those of the real GDP growth rates. This provides a possible explanation of the negative correlation.

A correlation coefficient of -0.08 was also computed for the real PLDT' revenue growth rates from 1971 to 2013 with the real Philippine GDP growth rates using the year 2000 as the base year. This very low correlation coefficient suggests that the real revenue growth rates of PLDT for this period were not correlated with the real GDP growth rates.

This lack of significant correlation can be possibly explained by the confluence of the following factors: low telephone density, technology which provides cheap telecom services, and the use of cell phones for entertainment.

- Technology life cycle. Both PLDT and Globe enjoyed high profits when the GSM technology was introduced in the market. This technology has its own life cycle which may not necessarily coincide with the country's GDP.
- 2. Low telephone density prior to deregulation. Before deregulation, the country's telephone density was very low and was limited to landlines. When the wireless phone technology was introduced and cheap telecom services were offered, the telephone density in the country went up. Almost everyone in the country now owns a cellphone, regardless of economic status.
- 3. Use of cell phones for entertainment. Cell phones are not just means for communicating, but they also serve as means for entertainment. Filipinos use cell phones regardless of what is happening in the economy. They are used for listening to music, social networking, games, and watching movies, among others.

5.6 Other Issues

With the merger of Digitel with PLDT, which has basically reduced the telecom sector to a duopoly, concerns have been raised regarding the quality of service and the tariff rates that will be charged by both PLDT and Globe. To monitor the quality of services provided by the players, the National Telecommunications Commission (NTC) started publishing since 2012 "Quarterly Quality of Service Benchmarking Report" that compares the quality of service of the leading telecom companies. NTC can do it for voice calls were the following are monitored: dropped calls, blocked calls, signal level, quality of signal, and call set-up time. Unfortunately, NTC is not equipped to monitor other services provided by the telecom companies such as those related to broadband services. Regarding the tariff rates, NTC is monitoring the average revenue per user (ARPU) and ROE of telecom players to ensure that customers are protected and that telecom players do not generate excessive profits.

Deregulation motivated players to innovate and offer more services to the public at more affordable prices as compared to the period prior to deregulation. International calls would cost US\$2.00 per minute prior to deregulation. It now costs US\$0.40 per minute. Players are also forced to offer buffet pricing for most of the services they offer to attract new subscribers and keep existing subscribers.

Competition motivates players to improve services at more affordable rates to minimize churn rate.¹⁹ This is how customers benefit from deregulation.

6 Concluding Remarks

Based on the periods covered in the study, the findings suggest that deregulation has been financially beneficial to PLDT and Globe, which have survived the competition. Both companies went through tough times before they got to where they are today, and they are still facing challenges as technology evolves and as market preferences change. The popularity of smart phones and ipads, the proliferation of free wifi and bundled internet packages, and the growing social networks may adversely affect the revenues generated from text messaging.

Deregulation has also benefitted customers. Services have become more available at reduced prices. The consolidation in the telecom industry did not diminish the rivalry between the two major players. To date, both companies have continued innovating their products and services which is good for consumers. Whether this situation will persist in the future or not remains to be seen.

¹⁹ Churn rate is the annual percentage rate of existing subscribers moving to other telecom service providers.

To ensure that there is enough competition in the sector, the government should consider coming up with policies or laws that will encourage more players such as relaxing restrictions on foreign ownership. This will keep the more established players to be always on their toes.

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Exhibit 1
Profitability Ratios of PLDT, 1970 - 2013

Year	Operating Profit Margin	Net Profit Margin	ROE
1970	39%	22%	15%
1971	39%	20%	16%
1972	38%	15%	14%
1973	41%	22%	21%
1974	40%	23%	21%
1975	39%	25%	23%
1976	40%	27%	24%
1977	39%	31%	25%
1978	40%	29%	22%
1979	40%	28%	20%
1980	39%	24%	19%
1981	40%	16%	13%
1982	42%	13%	8%
1983	46%	16%	17%
1984	50%	13%	23%
1985	48%	16%	27%
1986	49%	31%	44%
1987	42%	20%	23%
1988	42%	28%	30%
1989	40%	21%	22%
1990	41%	24%	26%
1991	46%	28%	28%
1992	38%	29%	17%
1993	39%	24%	13%
1994	36%	23%	11%
1995	33%	23%	11%
1996	40%	22%	11%
1997	42%	22%	12%
1998	21%	-3%	0%
1999	23%	2%	3%
2000	18%	-4%	-2%
2001	24%	2%	2%
2002	26%	4%	2%
2003	24%	1%	0%
2004	39%	23%	63%
2005	37%	28%	48%
2006	36%	28%	35%
2007	39%	26%	33%
2008	41%	24%	34%
2009	36%	25%	42%
2010	35%	25%	43%
2011	28%	20%	21%
2012	24%	22%	24%
2012	4 T /U	LL /U	4170

 $\label{eq:Exhibit 2} \textbf{Number of Fixed Lines, Wireless and Broadband Subscribers of PLDT, 1970-2012}$

Year	Fixed Lines	Wireless	Broadband Subscribers	
			Fixed Lines	Wireless
1970	243,779			
1971	283,393			
1972	313,778			
1973	338,467			
1974	368,476			
1975	404,272			
1976	441,037			
1977	469,749			
1978	496,266			
1979	519,642			
1980	585,514			
1981	676,808			
1982	732,742			
1983	763,930			
1984	787,820			
1985	820,271			
1986	856,014			
1987	866,084			
1988	926,006			
1989	986,072			
1990	1,046,481			
1991	1,097,287			
1992	700,515			
1993	873,233			
1994	984,740			
1995	1,196,860			
1996	1,521,102	309,670		
1997	1,749,283	623,186		
1998	1,785,388	1,168,090		
1999	1,953,071	1,482,107		
2000	1,999,922	3,515,293		
2001	2,097,366	6,223,170		
2002	2,118,340	8,599,306		
2003	2,185,951	12,947,197		
2004	2,152,027	19,208,232		
2005	1,842,507	20,408,621		
2006	1,776,647	24,175,384		
2007	1,724,702	30,041,030	264,291	314,80
2008	1,782,356	35,224,604	432,583	563,33
2009	1,816,541	41,328,641	559,664	1,054,74
2010	1,822,105	45,636,008	643,048	1,377,95
2011	2,166,295	63,696,629	842,273	2,086,09
2012	2,063,794	69,866,458	887,399	2,359,02
2013	2,069,419	70,045,627	961,967	2,453,82

Source: Annual Reports, 1970-2013

Appendix 1

Salient Provisions of Executive Order No. 59

Prescribing the Policy Guidelines for Compulsory Interconnection of Authorized Public Telecommunications Carriers in Order to Create a Universally Accessible and Fully Integrated Nationwide Telecommunications Network and Thereby Encourage Greater Private Sector Investment in Telecommunications

- NTC shall expedite the interconnection of all NTC authorized public telecommunications carriers into a
 universally accessible and fully integrated nationwide telecommunications network for the benefit of
 the public.
- 2. Interconnection between NTC authorized public telecommunications carriers shall be compulsory.
- 3. Interconnection shall permit the customer of either party freedom of choice on whose system the customer wishes his call to be routed regardless which system provides the exchange line connecting to the local exchange.
- 4. Interconnection shall be mandatory with regard to connecting other telecommunications services such.
- Interconnection shall be negotiated and effected through bilateral negotiations between the parties involved subject to certain technical/operational and traffic settlement rules to be promulgated by the NTC.
- 6. In the implementation of this Executive Order, the NTC may, after due notice and hearing, impose the following penalties in case of violation of any of the provisions hereof:
 - a. Imposition of such administrative fines, penalties and sanctions as may be allowed or prescribed by existing laws.
 - b. Suspension of further action on all pending and future applications for permits, licenses or authorizations of the violating carrier or operator and in which particular case, the NTC shall be exempted from compliance with the provisions of Executive Order No. 26 dated 7 October 1992 on the period for the disposition of cases or matters pending before it.
 - c. With the approval of the President, directive to the appropriate government financial or lending institutions to withhold the releases on any loan or credit accommodation which the violating carrier or operator may have with them.
 - d. Disqualification of the employees, officers or directors of the violating carrier or operator from being employed in any enterprise or entity under the supervision of the NTC.
 - In appropriate cases, suspension of the authorized rates for any service or services of the violating carrier or operator without disruption of its services to the public.

Appendix 2

Salient Provisions of Executive Order No. 109

Policy to Improve the Provision of Local Exchange Carrier Service

- 1. The objective of this policy is to improve the provision of local exchange service in unserved and underserved areas as defined by the National Telecommunications Commission (NTC), thus promoting universal access to basic telecommunications service.
- 2. The Government shall pursue the policy of democratization in the ownership and operation of telecommunication facilities and services.
- 3. Until universal access to basic telecommunications service 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.
- 4. Authorized international gateway operators shall be required to provide local exchange service in unserved and underserved areas, including Metro Manila, within three (3) years from the grant of an authority from the NTC, under the following guidelines:
 - a. Authorized gateway operators shall provide a minimum of three hundred (300) local exchange lines per international switch termination.
 - b. At least one (1) rural exchange line shall be provided for every ten (10) urban local exchange lines installed.
 - c. The establishment of Public Calling Offices at the rural barangay level shall be given an appropriate credit by the NTC towards the obligation to provide local exchange service. The above figures are derived from the following factors: number of exchange lines, number of international switch-terminations, traffic, grade of service and demand.
 - d. No permit for an international gateway facility shall be granted an applicant unless there is a clear showing that it can establish the necessary foreign correspondences.
 - e. Carriers already providing local exchange service in accordance with Section (a), (b) and (c) shall be authorized to operate an international gateway subject to applicable laws.
- 5. The subsidiaries of a public telecommunication carrier operating an authorized international gateway shall not be allowed to operate another gateway in accordance with Executive Order No. 59 (1993).
- 6. Authorized international gateway operator may also be authorized to provide Cellular Mobile Telephone System (CMTS) service and other non-basic telecommunications service which are possible source of subsidy for local exchange carrier service.
- 7. Authorized providers of other non-basic telecommunications service which are possible sources of subsidy shall be required to provide local exchange carrier service in accordance with guidelines, rules and regulations prescribed by the NTC.
- 8. All telecommunications service networks shall be interconnected in a non-discriminatory manner in accordance with Executive order No. 59 (1993) and its implementing guidelines.
- 9. The internal subsidy flows shall be made explicit in the financial reporting system of the telecommunications service providers.
- 10. Any violation of the Executive Order shall be subject to the same penalties provided for in Section 13 of Executive Order No. 59 (1993).

Appendix 3

Important Objectives and Policies of Republic Act 7925

The Public Telecommunications Policy Act of the Philippines

- 1. To develop and maintain a viable, efficient, reliable and universal telecommunication infrastructure using the best available and affordable technologies, as a vital tool to nation building and development.
- 2. To give priority to improving and extending telecommunication services to areas not yet served.
- 3. To allocate the spectrum to service providers who will use it efficiently and effectively to meet public demand for telecommunications service.
- 4. To ensure that rates and tariff charges shall be fair, just and reasonable.
- 5. To let private enterprises provide telecommunication services.
- 6. To foster a healthy competitive environment, one in which telecommunications carriers are free to make business decisions and to interact with one another in providing telecommunications services.
- 7. To encourage a fair and reasonable interconnection of facilities of authorized public network operators and other providers of telecommunications services to achieve a viable, efficient, reliable and universal telecommunications services.
- 8. To give all the assistance and encouragement to Philippine international carriers in order to establish interconnection with other countries so as to provide access to international communications highways on a competitive basis.
- 9. To provide an administrative process that is stable, transparent and fair, giving due emphasis to technical, legal, economic and financial considerations in the regulation of telecommunications entities.
- 10. No single franchise shall authorize an entity to engage in both telecommunications and broadcasting, either through the airwaves or by cable.
- To encourage ownership of public telecommunications entities to as wide a number of people as possible, preferably to its customers, in order to encourage efficiency and public accountability and to tap personal savings.