

12-3-2011

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## Recommended Citation

Golding, Paul; Tennant, Vanesa; and Virtue, Terry - Ann, "Telecommunications in Jamaica: Monopoly to Liberalized Competition to Monopoly (2000 – 2011)" (2011). *GlobDev 2011*. 13.

<http://aisel.aisnet.org/globdev2011/13>

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# **Telecommunications in Jamaica: Monopoly to Liberalized Competition to Monopoly (2000 – 2011)**

**(Research Paper)**

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## **Abstract**

This paper examines the period between 2000 and 2011 in the Jamaican telecommunications industry as it evolved from being a monopoly to vibrant competition to an emerging monopoly in eleven years. The process could be termed the ‘boomerang effect’. In 1999, the government of Jamaica decided to liberalize the telecommunications industry which was completed in 2003. With liberalization the incumbent, Cable and Wireless Jamaica (C&WJ) (renamed LIME), encountered competition from new entrant Digicel in the mobile segment and Flow in the landline and internet segment. Digicel quickly supplanted C&WJ in the lucrative mobile market. In 2008, Digicel entered the El Salvador and Honduras markets which are dominated by American Movil. In apparent retaliation, American Movil entered the Jamaican market and relentlessly targeted Digicel in their biggest market, vowing to supplant them as number one. In March 2011, in a move which surprised analyst, Digicel Jamaica signed an agreement with rival American Movil (trade name, Claro) to acquire Claro Jamaica and in return Digicel would sell its businesses in El Salvador and Honduras to American Movil. The unexpected deal threatens to create a new monopoly in Jamaica. The paper highlights several issues including the powers of the regulatory bodies in dealing mergers and acquisition, network effects, sustaining competitive advantage, international competition and technology standards.

## **Introduction**

Prior to 1999 the Jamaican telecommunications sector was dominated by Cable and Wireless Jamaica, (C&WJ) which changed its name in 2008 to LIME (Landline Internet Mobile, Entertainment). In 1988 the company was granted five exclusive licenses each for 25 years, which would be valid until 2013, with options for extensions for a further 25 years. The licenses made C&WJ the sole provider of the island's domestic and international telephone service and guaranteed an after-tax rate of return of 17.5% - 20%. The Minister responsible for telecommunications had the authority to establish minimum standards of service quality, and the company was mandated to consult and seek ministerial approval on a variety of regulatory and policy issues including network expansion plans. The ministry however, had limited regulatory capability and was apparently satisfied with the status quo therefore C&WJ basically regulated itself with limited government supervision.

The Jamaican Government (GoJ) in an effort to develop a competitive and vibrant telecommunications industry and to move Jamaica towards knowledge-based connected society, embarked on an effort to liberalize the telecommunications industry. This led to the phased liberalization of the sector in September 1999. The GoJ and Cable and Wireless signed a Heads of Agreement for the liberalization of the sector to be phased over three years. While not much was said in the media the decision required that the GoJ pay Cable and Wireless a substantial fee for the buy out of the licenses and the 25 year options. Full liberalization was completed on March 1, 2003. This made Jamaica the first of the English-speaking Caribbean island to embark on a path of market liberalization in telecommunications.

When the Jamaican Telecommunications Industry was deregulated there was high demand for new licenses. From 2001 to 2005, about 200 entities received close to 400 licences to provide services in areas such as: International Service Providers (Internet), Domestic Carriers, International Voice and Data Transmitters, ISP Cable Providers, and Domestic Voice. The mortality rate has been high. Today, only about 20 of those firms (10 per cent) are operational, and several are in different forms than when they applied for licences. Of the remaining 90 per cent, industry sources said many never got off the drawing board; some tried and failed, others consolidated and still others are continuing to research the market to identify the right niche for their service offerings.

Liberalization of the telecommunications market commenced with the granting of two new carrier licences for the provision of domestic mobile voice, data, and information services. These licences were awarded on the basis of auctions held in December 1999 and January 2000. The auctions were financially successful, contributing US\$92.5 million to the Jamaican treasury or just under US\$40 per capita. Each mobile entrant used a different technology for its mobile network. Mossel (which operates under the trade name Digicel) commenced service in April 2001 using Global System of Mobile (GSM) Communications; later that year Oceanic Digital Jamaica (now Claro) commenced operation deploying Code Division Multi Access (CDMA); while C&WJ, who had been offering mobile services in Jamaica since 1991, employed Time Division Multi Access (TDMA). CWJ subsequently switched from TDMA to GSM, similar to Digicel except that they operate on different frequencies.

All mobile licences were for a period of 15 years. New entrants had a licence condition requiring a build-out of their networks to provide 90% coverage of the Island within five years of granting the licence. The mobile licences, under which the C&WJ operated, however had no network build-out obligations.

## **The Market**

### ***Flow***

Columbus Communications Inc. (CCI) was incorporated in Barbados in 2004 and is headed by Jamaican/Canadian billionaire Michael Lee Chin. CCI is a diversified telecommunications company whose core operating business is providing cable television services, high speed internet access, digital telephone and internet infrastructure services (retail) and, the development of an undersea fiber optic cable network as well as the sale and lease of the telecom capacity provide by the network (wholesale). The company operates in over 21 countries in the Caribbean and Latin America. Its subsidiaries include:

- Americas Region Caribbean Optical-ring System (ARCOS). With more than 14,000 km of active undersea fiber optic cable, the ARCOS network combined with its new undersea link to Trinidad that was recently placed into service and its affiliate companies sub-sea networks in The Bahamas (Caribbean Crossing) and Jamaica (Fibralink). This positions CCI as the leading undersea broadband fiber-optic cable network provider connecting the U.S., Mexico, Central America and the Caribbean.
- FibraLink Jamaica is an international telecommunications company that owns and operates a sub-sea fiber optic network that links Jamaica with the ARCOS network.

Flow Jamaica is a member of the CCI and offers corporate and residential customers with a range of communications services as well as broadband internet and cable television, via a fiber optic network. The company's product offerings represent the convergence of voice internet and cable. The company started its roll out in the capital city of Kingston and is currently offering services in all major towns in Jamaica. In the cable and broadband residential market the company has expanded rapidly by a series of controversial acquisitions of smaller cable operations.

Flow offers what it calls its Triple Play services to residential consumers: digital cable TV, digital landline and broadband internet access. Services offered to corporate customers include, high-speed VLAN, collocation, dedicated IP services, and international private lines. Flow has the highest capacity broadband network in the country with 320 Gbps capability with excess capacity of approximately 75%. Since the entry of Flow in 2005 the cost of ADSL and other broadband services have fallen in excess of 60%.

### ***Digicel***

Digicel is a privately held firm owned by Denis O'Brien a Boston College educated, Irishman. Forbes magazine in 2010 estimated his net worth at US\$4.2B placing him 254 on the Forbes rich list. He is the second richest man in his home country. He maintained a base in Jamaica and considered Jamaica the home country for Digicel. In 2010, he commenced the building a US\$65M headquarters in downtown Kingston, (the capitol city) an area that has been blighted by urban flight. The headquarters is expected to house 1,000 employees and politicians and real estate agents are expecting that this will be a catalyst for growth and renewal in the downtown business district.

In April 2001, when Digicel launched its GSM mobile service in Jamaica, the company anticipated reaching the 100,000 customer plateau by the end of its first year in operation. Instead, it hit the 100,000 mark a mere 100 days after launch. Never before in the country's history of mobile telecommunications had such tremendous growth been seen in a network, as Digicel broke record after record on its way to surpassing its major competitor as the mobile provider with the largest customer base in the island.

To give an idea of Digicel's pace of growth, it took LIME, its major competitor approximately 10 years to reach the 400,000, customer mark. In comparison, it took Digicel about 13 months to reach the same figure. Digicel's customer base in 2010 was over 2.1 million customers in a population of 2.8 million. The company currently commands approximately 75% of the mobile market share in Jamaica.

Digicel raised the bar where an acceptable level of network coverage was concerned. Jamaicans living in rural parishes finally had a genuine option for mobile communications. With an island-wide network of over 1,000 cellular towers spread across all 14 parishes, Digicel firmly established itself as the mobile provider with the premier network coverage across the country.

The company's approach of affordable phones, a user-friendly approach and mass marketing earned Digicel a leading place in the market that it astutely defended. Along the way, the company made its name synonymous with Jamaican sports and musical events and, according to critics, has created brand awareness that will be difficult to lose. Digicel used Jamaica as a catalyst for a foray across the Caribbean and Central America, to become the fastest-growing telecoms company in the region, operating in 23 territories and a turnover of over US\$1 billion.

### ***Claro/MiPhone***

The company currently known as Claro started operations in 2001 and the owners were Centennial Communications (51% share), and Oceanic Digital Communications (49% share). In late 2002 Centennial Communications sold its 51% share to Oceanic Digital Communications for an undisclosed sum (rumored to be J\$1). With Oceanic Digital Communications in 100% control, the company was rebranded as MiPhone and saw the introduction of a new management team with mostly North American executives.

Research data confirmed that the company was lagging behind Digicel and LIME primarily because of coverage not being available outside of main metropolitan areas. The company secured a loan of US\$30M and proceeded to build out its network island wide. The project was plagued by a combination of inefficiencies, cost overruns and the granting of approval from Parish Councils (elected local government officials who are responsible for among other things building regulations) to erect cell towers. MiPhone was eventually only able to establish itself in major towns across the country.

Five years later, in 2007, after rebranding and refocusing on the small niche of mobile users the company sold its operations to America Movil, the parent company of Claro for a reported US\$70M. At the time of the sale, MiPhone reportedly had 100,000 customers with that number holding steady for three years. The company also operated as a reseller offering virtual mobile network operations (VMNO) license to several companies including MegaPhone, World Phone, Peoples Telecom and Gotel Communications. These companies added another 200,000 subscribers which switched to the new Claro brand.

### ***Claro and Digicel***

Although MiPhone/Claro and Digicel purchased their mobile license at the same time the companies' strategic approach was a study of contrast and may have reflected their global view. Digicel had an Irish owner reflecting a European view and MiPhone an American owner. Digicel's entry into the market was immediate with the Irish principals on the ground in Jamaica and was personally involved in negotiations regarding interconnection fees, spectrum allocation and other regulatory matters. MiPhone's market entry was delayed; they initially did not have a presence in Jamaica and relied on their local lawyers to engage in discussions with the Office of Utilities Regulation (OUR) and other entities.

Each company rollout of cell sites were different; Digicel decided to go island wide while MiPhone went regional concentrating on the major metropolitan areas of Kingston, St. Andrew and Portmore. Their choice of technology was also different with Digicel opting to use GSM, which is widely used in Europe, while MiPhone opted for CDMA a USA developed standard. The ownership structure of Digicel remained stable since their entry into the market while MiPhone changed ownership several times.

### ***Claro's Entry***

America Movil, the parent company for Claro is the fourth largest network operator in the world and the largest corporation in Latin America. The company provides fixed-line, wireless, cellular telecommunications services and broadband services under the Telcel, Claro, Comcel, Porta, Codetel, and PRT names. The company is owned by Carlos Slim, the world's richest person in 2010, with estimated assets of US\$74 billion according to Forbes magazine annual global ranking of billionaires.

Claro's entry into the Jamaican market was much anticipated with an expected ratcheting up of competition. While American Movil would not comment, industry sources indicate that the company's entrance into Jamaica was in response to Digicel's entry into El

Salvador, and Honduras. At the launch of Claro in Jamaica, America Movil stated that they were using Jamaica as a launch pad to step out into other English speaking countries. According to reports in a local newspaper, Jamaica Gleaner, "Claro Jamaica CEO Alejandro Gutierrez indicated that Jamaica would be the launch pad for the United States and United Kingdom. According to Gutierrez the company planned to be number one in the Jamaican market within 3 years".

Claro wasted no time in undertaking a massive network expansion plan, by improving its technological platform from CDMA to third generation GSM and more than doubling its number of cell sites, with an aggressive plan to take on Digicel and LIME. In 2009, Claro claimed that it had overtaken LIME as the second major cellular company, a claim the latter disputed. In June 2010, Claro announced that it would be investing US\$300M or more than J\$26B over a 12 month period to boost its network capacity. The plan was to use the hefty investment in infrastructure to increase its market share by 20%. The stated goal by Claro was to gain market leadership from Digicel by 2012.

From a consumer's perspective the area in which Claro had the biggest impact was marketing. Between 2008 -2010 the company opened 261 locations across the country including a flagship J\$18M customer access center at its head office in Kingston. According to the Jamaica Observer, a local daily newspaper, Claro incited an industry-wide marketing campaign never seen before locally. From 2009- 2010, the three major players spent hundreds of million of dollars on promotional activities, outdoor advertisements and television commercials. Claro brought a new confrontational, and attack style of advertisement to the Jamaican market, a style that would be more typical of a USA General Election campaign, with each responding quickly to the other's attack advertisement. Prior to Claro's entry into the market, this belligerent style was unheard of in Jamaica. Jamaican advertising is typically British, polite and conservative. Claro used branding and colours similar to and made clear reference to Digicel in its advertising. Claro painted Digicel as old, misleading and overpriced in their call charges to customers. Claro's most catchy advertisement was the Christmas 2010 television advertisement "**Clarorific is so Swaggorific.**"

Text messaging rates were also an area of competition. Claro offered "OMG." For J\$10 a customer would get, for that day, 100 text messages. Digicel countered with their "Gimme Five" promotion. Customers could send the first five texts at J\$3 each and the next 100 text, for that day, would attract no additional cost.

Digicel and LIME also had trivia and game based questions which they pushed to customer's phones, each text response attracted a premium charge of up to J\$25.00. Digicel was the top exponent of premium charge text message through their top rated TV program "Digicel Rising Stars." Launched in 2004, Digicel Rising Stars was Jamaica's first live televised talent search. In 2010, it was the most popular local show on Jamaica TV. The public could vote as many times as they wish for their favorite contestant, each week the contestant with fewest votes was eliminated. Digicel does not disclose how many votes each contestant receives but it is thought that the total sum was massive.

## ***LIME***

In response to Digicel and the new entrant, Claro, C&WJ in 2008, embarked on a new high risk transformation strategy which included corporate rebranding and changing its name from C&WJ to LIME.

The rebranding and transformation which occurred on October 31, 2008 was introduced in the 13 markets across the Caribbean. The new name LIME was supposed to project a new image of freshness and a company on the cutting edge in contrast to its previous stodgy and lumbering persona. Initial reaction to the name change was met with cynicism from customers. "This is just another attempt to dress up the emperor in new clothes even as everyone knows the emperor has long lost the respect of the people he once led".

At the center of LIME's transformation plan was the introduction of a 3G wireless network. LIME spent US\$30M to upgrade its network to 3G. Ericsson was contracted to complete the upgrade. The 3G network will provide mobile users with cutting edge features such as video conferencing calls, multimedia e-mails, faster transfer of files and TV streaming among other features. With its new network completed, in November 2010 LIME launched the Caribbean's first mobile television service in Jamaica, offering premium digital channels. The list of channels included CNN, ESPN, Sportsmax, NBC, Hype TV and the Cartoon Network Channel for kids. More channels, including a Pay Per View offering were to be added within weeks. The company strategy was to use new innovations to gain market share in the competitive and lucrative mobile market. LIME announced in September 2010 that it would double its marketing spend - which was about J\$519 million.

Despite all the changes the company continued to bleed billions, with losses of J\$3 billion on operations recorded at year-end March 2010.

### **3G versus 4G Controversy**

The battle for market share, the hearts, minds and pockets of the consumer went beyond marketing and included skirmishes based on technology. In September 2010, Digicel began marketing WiMax technology as a fourth generation (4G) standard promising to bring broadband wireless Internet access to all areas of Jamaica and to make it affordable. Both Claro and LIME had already started promoting a 3G standard (LTE) based on GSM. LIME, with tacit support from Claro filed a formal complaint to the Fair Trading Commission (FTC) accusing Digicel of misrepresenting its WiMax broadband technology as 4G. LIME argued, making reference to the International Telecommunication Union (ITU) the body charged with establishing and defining telecommunications standards, that there were no 4G standard established as yet and would not be finalized until early 2012.

LIME argued that based on the ITU pronouncements actions should be taken against Digicel for the breach. The suggested redress included mandatory publication of a clarification, retraction or apology in as prominent a manner as the 4G advertisement that was published; cessation of all advertisement proclaiming to be 4G until such time as the



ITU confirms the relevant standards and to grant redress to consumers who were misled by the relevant advertisement.

Digicel countered, accusing LIME of sour grapes and suggested that the claim smacks at desperation. They referred to companies such as Sprint in the USA, P1 in Malaysia; Clearwire in Spain and Yota in Russia which were all using WiMax technology and marketing it as 4G.

### **Tower Sharing**

A critical success factor in Claro's strategy was the roll-out of cell towers to expand network coverage across the country. In February 2009, Parish Councils in St. Mary, St. Catherine, St. Thomas, St. James and Kingston had complained to the central government that Claro was erecting cell towers without the necessary Council approval. The councils had warned that they would take the company to court if they persisted in breaking the law.

In July 2009, LIME and Claro signed a deal to share cell tower sites. While the specifics were not disclosed, it was said to be a long term deal. The companies said that long term contract requires each company provides matching number of cell towers across the island, which would increase the overall coverage footprint of both mobile providers. Claro reportedly had 470 cell towers island wide and had plans to build as much as 610. Digicel had 1,200 sites, while the number of sites for LIME was unknown. No explanation was given why Digicel was not a party to the deal; however both Digicel and Claro were at loggerheads over a previous tower sharing arrangement with the companies being unable to agree on interconnection rates. Another industry view was that Digicel had little to gain from a tower sharing agreement as it already had island wide coverage and boasted about it.

### **Mobile Termination Rates**

A phone call between subscribers to two different networks usually means that both networks require a payment for carrying the call. The most common arrangement for this globally is calling party pays. This means that the originator of the call pays the full cost. The network from which the call originates is charged by the network on which the call terminates. This charge is the termination charge. LIME and Claro each charges J\$12.00 for cross network calls, while Digicel's charges range between J\$15.80 and J\$17.70 for cross network calls. According to LIME, high cross-network charges were a burden on telecoms customers because they literally penalize customers for calling another network. Because of this situation it is common in Jamaica for persons to have two or three phones, one for each network.

In the summer of 2010, Digicel lost a long running legal fight over the regulatory control of interconnection/termination rates between mobile network operators. The company had tried to argue that the Office of Utilities Regulation (OUR) lacked the authority to regulate the termination rates, but lost an earlier case with the Jamaican Court of Appeal.

An appeal to the UK's Privy Council, which acts as Jamaica's highest court, upheld the earlier ruling. The ruling agreed that the law required that each operator is obliged to offer interconnection with the other telecoms networks, but that the lack of price regulation meant that an operator could de-facto block interconnection by imposing excessive pricing. Regulators in the UK, Germany, New Zealand, and Israel intend to or have started to cut termination rates in their respective telecommunications industry to increase competition.

Digicel continues to argue that call termination rates should not be regulated. The company contends that competition is the best form of regulation as it provides the most immediate and tangible benefits to customers. Both LIME and Claro welcomed the Privy Council's decision.

## **The Deal**

The deal between Claro and Digicel was surprising, unexpected and had reverberations within the Caribbean and Latin American region. The deal was also surprising to market watchers based on the apparent amicable almost collaborative relationship between Claro and LIME and the similarity in technology (3G) used by both. The Organization of Caribbean Utility Regulators expressed the following view: "We are concerned that the impending move by Digicel to take over Claro's operation in Jamaica would negatively affect competition and consumer choice in Jamaica's telecoms market. The deal means that there is a real prospect of market failure and the re-emergence of monopolies." The predominant view of the public was that Claro only came to Jamaica to attack Digicel, so that the latter would exit the Honduras and El Salvador markets.

According to Wireless Intelligence figures, in El Salvador the combination of the America Movil (Claro) and Digicel business will create a new market leader with 3.64 million subscribers, overtaking current number one Millicom, which has 2.73 million. In third place in the market is Telefonica's Movistar which has 1.45 million subscribers. In Honduras, America Movil will become a strengthened number two with 2.62 million subscribers, second to Millicom's 4.45 million. The deal would have the greatest impact in the Jamaican market where Digicel subscriber base would move from 2.1 million to approximately 2.79 million compared to LIME which has 757,000 subscribers. On a global scale, America Movil reportedly has 225 million subscribers' worldwide, adding 8.2 million subscribers in the last quarter of 2010. Digicel has 11.5 million subscribers worldwide.

The press release on the Claro/Digicel sale indicated that the sale is subject to the approval of regulators in each of the countries. In Jamaica bodies that would have regulatory oversight are the Fair Trading Commission (FTC) and the Office of Utilities Regulation (OUR). This announcement preceded the AT&T US\$39B purchase of T-Mobile in the USA. The US deal requires approval from both the Justice Department and the Federal Communications Commission and it is expected to face serious regulatory

hurdles. Critics in Jamaica have lamented that no similar serious regulatory hurdles are expected from the OUR and the FTC.

### **The Office of Utilities Regulation (OUR)**

The Office of Utilities Regulation (OUR) was established by an Act of Parliament in 1995 to regulate the operations of utility companies. Section 4 of the Telecommunications Act 2000 stipulates that the OUR shall regulate telecommunications in accordance with the Act and for the purpose of the Office will inter-alia (1) promote the interest of customers, while having due regard for the interest of carriers and service providers and (2) promote competition among carriers and service providers.

According to Section 5 of the same Act, issues of substantial competitive significance that falls within the functions of the Fair Trading Commission (FTC) under the Fair Competition Act shall be referred to the FTC. Therefore the OUR had no jurisdiction over the deal from a competition perspective.

### **The Fair Trading Commission**

The Fair Trading Commission (FTC) is the administrative body responsible for implementing the Fair Competition Act (FCA) of 1993. Several newspaper articles and editorials have cautioned that the deal if approved would reduce competition, employment, and innovation. A March 25, 2011 editorial in the Gleaner (Jamaica's leading newspaper) stated that "The FTC is expected to be vigilant in ensuring that there is no abuse of Digicel's dominant position and that there will be genuine competition. A similar but more conclusive view was expressed by the Organization of Caribbean Utility Regulators: "We are concerned that the impending move by Digicel to takeover Claro's operation in Jamaica will negatively affect competition and consumer choice in Jamaica's telecoms market. The deal means that there is a real prospect of market failure and the re-emergence of monopolies".

The FTC's ability to act was constrained by the current competition laws in Jamaica. Section 19 of the FCA states that: "For the purposes of this Act an enterprise holds a dominant position in a market if by itself or together with an interconnected company, it occupies such a position of economic strength as it will enable it to operate in the market without effective constraints from its competitors or potential competitors." Section 20 then lists six (6) activities that would constitute abuse of dominant position. This list does not include mergers, acquisition and monopoly. According to Darron Powell, a lecturer at the University of Technology, Jamaica, "The existing FCA is confusing and must be amended to include merger policy and monopolization provisions which are the cornerstones of almost all legislations supporting competition policy outside of the Caribbean." The FTC's position is exacerbated by the levels of fines established under section 47 of the FTA is not a deterrent to monopoly or cartel activities. The maximum fine which can be imposed on an entity is J\$5M or approximately US\$59,000; and for an individual, J\$1,000,000 or US\$11,800 for each act.

## Discussions

From a policy perspective there is an interesting contrast between India and Jamaica. It was reported that India is expected to overhaul its current merger and acquisition rules in the telecoms sector. Under India's current rules when two service providers merge their combined revenue or subscriber base cannot exceed 40% of the total in the region. Critics have called this rule over-restrictive and a barrier to much-needed consolidation in the sector. India has 15 service providers catering for approximately 800M subscribers. Contrast this with Jamaica which wants to make its merger and acquisition rules more restrictive in a subscriber base of approximately 2.8M. The circumstances and size of each country is no doubt different and further analysis of each market could provide further insights.

Another issue for discussion is the issue of switching cost and dominance in the market. Switching costs and network effects bind customers to vendors if products are incompatible, locking customers or even markets into making early choices. Lock-in hinders customers from changing suppliers in response to (predictable or unpredictable) changes in efficiency, and gives vendors lucrative ex-post market power – over the same buyer in the case of switching costs (or brand loyalty), or over others with network effects. Firms compete ex-ante for this ex-post power, using penetration pricing, introductory offers, and price wars (Farrell & Klemperer 2006). Digicel has apparently used its market dominance to lock in customers and created switching cost. Despite Claro's and LIME's cheaper rates, the Digicel network with 2.1 million subscribers is more valuable to new and existing customers as one is likely to be calling more persons on the Digicel network than the other two networks. Digicel charges a premium rate to call other networks, in essence punishing or restricting persons from calling another network. The response of customers has been to subscribe to two or networks, making on-net calls with each phone instead of switching networks.

Factors affecting lock-in includes:

- Perception of dominance: Digicel has a large subscriber base, approximately 75% share.
- First mover advantage: Digicel took advantage of LIME's relatively small market share vis-à-vis the potential market size. LIME only had 400,000 subscribers (it's network capacity) when Digicel entered the market.
- Fierce defense by standard setter to keep its position: Digicel challenged the OUR regarding its intention to regulate termination/off net charges and took the issue to the highest court in Jamaica.

This leads us to the question of how many players can the local market profitably accommodate? Prior to Claro's market entry we had two effective players, Digicel and LIME, MiPhone was essentially irrelevant. With the government endorsing the Digicel Claro deal we have reverted to a duopoly. Juxtapose the developments in the Jamaican telecommunications market with the USA market. On August 31<sup>st</sup> the US Justice Department sued to block AT&T's proposed US\$39 billion acquisition of T-Mobile. According to the complaint: "AT&T elimination of T-Mobile as an independent, low

priced rival would remove a significant competitive force from the market, thus unless this acquisition is enjoined, customers of mobile wireless telecommunications services likely will face higher prices, less product variety and innovation, and poorer quality services due to reduced incentives to invest than would exist absent a merger.”

The acquisition would mean that AT&T who has the second highest market share would acquire T-Mobile the third highest, and become the largest carrier in the USA, relegating Verizon to second. Between AT&T and Verizon would control approximately 79% of the over 300M subscribers, reshaping the industry to a virtual duopoly. An examination of several markets appears to indicate a duopoly trend: Japan two largest telecommunication providers NTT DoCoMo and au Japan controls 77% of the market. In the EU wireless market on average the two leading providers control approximately 70% of the market. In the region Barbados and Trinidad both have duopolies with an approximate equal split between Digicel and C&W in the former and Digicel and TSTT in the latter. The situation in Jamaica with the acquisition, Digicel will now have approximately 80% market share. We could poke some fun and argue that Digicel is a duopoly because it has to maintain separate networks based on the decision by the government but in fact they are a monopoly. In the Jamaican cellular market we therefore have a boomerang effect progressing from a pre-1999 monopoly, to vibrant competition from 2000 onwards and monopoly again in 2011.

Can policy measure be put in place to prevent the boomerang effect and what should they be? While these issues are to be further discussed most persons argue that mobile termination rates should be the first target.

## References

- Campbell, N. (n.d.). *Claro claims that it's now Jamaica's second largest provider*. Retrieved September 2, 2009 from <http://blog.marketplaceja.com/?p=193>
- Clarke, P. (2011). *Telecoms takeover dangerous*. Retrieved March 25, 2011 from <http://mobile.jamaica-gleaner.com/gleaner/20110325/letters/letters1.php>
- Cunningham, A. (2011). *Digicel to acquire Claro*. Retrieved March 12, 2011 from <http://jamaica-gleaner.com/gleaner/20110312/lead/lead3.html>
- Edwards, A. (2010). *Digicel sets the record straight on 4g*. Retrieved December 2, 2010 from [http://www.jamaicaobserver.com/Digicel-sets-the-record-straight-on-4G\\_8121640](http://www.jamaicaobserver.com/Digicel-sets-the-record-straight-on-4G_8121640)
- Farrell, J., & Klemperer, P. (2006). *Coordination and lock-in: Competition with switching costs and network effects*. Retrieved March 27, 2011 from <http://www.nuff.ox.ac.uk/users/klemperer/lockinwebversion.pdf>
- Gupta, S. (2009). *What is the difference between WiMax and LTE?*. Retrieved April 4, 2011 from <http://www.goingwimax.com/what-is-the-difference-between-wimax-and-lte-4155/>
- Jamaica Fair Trading Commission. (1993). *The fair competition act: A guide to consumer protection*. Retrieved March 15, 2011 from <http://www.jftc.com/Legislation/TheFairCompetitionAct.aspx>
- Kiernan, P. (2011). *America movil makes three-country agreement with Digicel*. Retrieved March 14, 2011 from <http://www.totaltele.com/view.aspx?ID=463206>
- Klemperer, P. (2005). *Network effects and switching cost: Two short essays for the new palgrave*. Retrieved March 27, 2011 from <http://www.nuff.ox.ac.uk/users/klemperer/NewPalgrave.pdf>
- Miller, D. (2005). *Fighting hard core cartels*. Retrieved March 15, 2010 from <http://www.oecd.org/dataoecd/41/21/38835255.pdf>
- Ody, E. (2011). *Carlos Slim tops Forbes list of billionaires for second year*. Retrieved March 12, 2011 from <http://www.bloomberg.com/news/2011-03-09/carlos-slim-tops-forbes-list-of-billionaires-for-second-year.html>
- Richardson, J. (2011). *Claro calls time on Jamaican dream*. Retrieved March 13, 2011 from [http://www.jamaicaobserver.com/business/Claro-calls-time-on-Jamaican-dream\\_8512054](http://www.jamaicaobserver.com/business/Claro-calls-time-on-Jamaican-dream_8512054)

- De La Merced, M., Cane, J., & Protesse B., *U.S. Moves to Block AT&T Merger with T-Mobile*. Retrieved September 1, 2011 from <http://dealbook.nytimes.com/2011/08/31/u-s-moves-to-block-att-merger-with-tmobile>
- Sorkin, A., De la Merced, M., & Wortham, J. (2011). *AT&T to buy T-Mobile USA for \$39 billion*. Retrieved March 21, 2011 from <http://dealbook.nytimes.com/2011/03/20/att-to-buy-t-mobile-usa-for-39-billion/>
- Stross, R. (2008). *What carriers aren't eager to tell about texting*. Retrieved December 1, 2010, from <http://www.nytimes.com/2008/12/28/business/28digi.html>
- The Gleaner, (2009). *Claro under probe*. Retrieved February 13, 2009 from <http://jamaica-gleaner.com/gleaner/20090213/lead/lead4.html>
- The Gleaner, (2011). *Denis O'Brien's wealth tops us\$4b*. Retrieved March 13, 2011 from <http://jamaica-gleaner.com/gleaner/20110313/business/business2.html>
- The Gleaner, (2009). *The Digicel-Claro merger*. Retrieved March 25, 2011 from <http://jamaica-gleaner.com/gleaner/20110325/cleisure/cleisure1.html>
- Thomas, D. (2011). *Is Digicel on the mad march to monopoly?*. Retrieved March 13, 2011 from <http://jamaica-gleaner.com/gleaner/20110313/cleisure/cleisure2.html>
- Thomas, D. (2011). *Power and privilege: How the FCA lost its teeth, and the FTC, its spine*. Retrieved April 3, 2011 from <http://jamaica-gleaner.com/gleaner/20110403/focus/focus2.html>
- Titus, M. (2010). *4g quarrel*. Retrieved October 27, 2010 from <http://jamaica-gleaner.com/gleaner/20101027/business/business1.html>
- Titus, M. (2010). *Claro invests j\$26b to grow market share*. Retrieved June 11, 2010 from <http://jamaica-gleaner.com/gleaner/20100611/business/business8.html>
- Titus, M. (2010). *LIME, Claro in 'cross-rate' agreement to cut charges*. Retrieved September 2, 2009 from <http://jamaica-gleaner.com/gleaner/20090902/business/business3.html>
- Titus, M. (2010). *LIME, Claro reach 'tower-sharing' agreement*. Retrieved March 14, 2011 from <http://jamaica-gleaner.com/gleaner/20090722/business/business3.html>
- Titus, M. (2010). *LIME Jamaica seeking partners*. Retrieved October 29, 2010 from <http://jamaica-gleaner.com/gleaner/20101029/business/business1.html>
- Williams, D. (2011). *Phoney concerns: No need for alarm on digicel-claro merger*. Retrieved March 28, 2011 from <http://jamaica-gleaner.com/gleaner/20110327/focus/focus1.html>