FAIR TRADING COMMISSION
Ensuring a competitive marketplace

Investigation into the acquisition of Oceanic Digital (Jamaica) Limited by Digicel Jamaica Limited

Pursuant to
Section 17 of the Fair Competition Act
Staff Report
December 8, 2011

Case no. 6997-11

NON-CONFIDENTIAL VERSION

FAIR TRADING COMMISSION
52 – 60 Grenada Crescent, Kingston 5, Jamaica
Tel: (876) 960 1020 – 4
Fax: (876) 960 0763
Email: ftc@cwjamaica.com
Website: www.jftc.gov.jm

Contents

EXECUTIVE SUMMARY

The purpose of the evaluation is to assess the likely competitive effects of the challenged acquisition of Oceanic Digital Jamaica Limited (Claro) by Digicel Jamaica Limited (Digicel). The investigation was undertaken pursuant to Section 17 of the Fair Competition Act (FCA), which applies to agreements which have as their purpose or effect, the substantial lessening of competition in a market.

The acquisition of a competitor increases the likelihood of substantial harm to consumers arising from two sources: (i) anticompetitive coordination of conduct among the remaining competing suppliers; and (ii) the unilateral exercise of market power of the combined entity. Harm to consumers may take the form of higher prices, lower product quality, slower rates of technological innovation/adoption, lower quality customer service and fewer varieties relative to a market in which the acquisition was not consummated.

The challenged transaction allows for the participant with the largest market share to acquire the participant with the third largest market share. The competition issue is whether, by acquiring Claro, Digicel will eliminate a rival which would be a binding competitive constraint in the foreseeable future. To confirm or refute this hypothesis, we assessed the extent to which Claro's continued participation in the market is likely to limit the opportunities for Digicel to exercise market power in the foreseeable future, relative to the market in which Claro is acquired by Digicel. The exercise of market power would manifest in Digicel raising, maintaining or extending price above competitive levels for a sustained period of time.

At the time the challenged acquisition was announced, the market for voice services included three significant suppliers: Digicel, Claro and Cable & Wireless Jamaica Limited (LIME). Digicel and Claro are generally viewed as the two most significant suppliers with LIME commonly viewed as a distant third.

Over the period April 2007 to March 2011, it is estimated that consumer benefits from competition exceeded $16.9 billion. Competition was further stimulated when Claro and LIME adopted 3G technology, and differentiated their services from that of Digicel's lower quality 2G wireless voice services. This dimension of product differentiation was not present prior to 2008 when all three suppliers employed 2G wireless technology. Further, the value provided to consumers trended upwards through lower average prices and increased value offers, promotions and sponsorships. Digicel's expenditure [redacted] in 2009 and since then, has remained at that level. The one year period ending March 2011 represented the most intense period of competition among Digicel, Claro and LIME as Digicel's average revenue per user declined sharply to a level which was more competitive than ever before; and the gap between Digicel's and LIME's revenue per subscriber narrowed to the point where they are almost equivalent.

The following are the main results of the assessment:

1. Prior to Claro's entry in 2007 Digicel exercised market power as LIME was not a significant competitor.
    - Digicel's prices were [redacted] higher than LIME's prices.
    - Digicel enjoyed a larger market share despite having higher rates.
    - Digicel's expansion in the market was significant as for the six year period leading up to the liberalization (1995-2000), mobile penetration rates in Jamaica increased by 8.0 percentage points to 249,842 subscribers while during the next six years (2001-2006), mobile penetration rate increased by 84.2 percentage points to an industry subscriber base of 2,495,191.
    - Digicel's investment in coverage allowed it to acquire and maintain the largest subscriber base in Jamaica.
    - Since entry into the market, Digicel consistently expanded its subscriber base. In contrast, LIME's subscriber base, on average, remained unchanged during the period 2006 to 2009.

2. Claro is considered a significant competitor to Digicel as it served as a competitive constraint on Digicel's behavior and stimulated technological innovation in the market.
    - Digicel's promotions and value offers to consumers increased significantly after Claro's entry.
    - Claro's reputation as a market leader in several other territories as well as its access to significant resources.
    - Within 15 months of entry Claro introduced improved technology (3G) to the benefit of consumers. At that time 3G was the most advanced wireless technology in Jamaica.
    - In June 2009 LIME also introduced 3G technology.
    - Digicel's transaction price declined [redacted] over the period 2007 to 2010. Its price on average decreased from [redacted] to [redacted] per minute, which is just above [redacted].

- Digicel's transaction price reduced dramatically after Claro's 3G was introduced and again after LIME's 3G was introduced.
- The price competition led to significant benefits to consumers, as talk time increased by 39% while consumer expenditure decreased by 2%. Between 2007 and 2010 consumers were getting more for less.
- The market is significantly more competitive than it was before Claro's entry.

3. LIME is unlikely to constrain Digicel in the event that Claro exits the market.
   - Given the current regulatory regime whereby mobile termination rates are not regulated; and Digicel's pricing practice which incentivizes its subscribers to make mostly on-net calls.
   - There is limited spectrum available for new entrants and for existing players to expand their operations. Further, there is neither 850MHz nor 900MHz bands available.
   - [redacted] of the cell towers used by LIME are owned collectively by Digicel and Claro.
   - Digicel uses [redacted] more cell towers than LIME, therefore Digicel is likely to have better coverage.
   - LIME will no longer enjoy a competitive technological advantage, given that Digicel will acquire Claro's 3G.
   - Reciprocal calling rates between Claro and LIME will be eliminated thereby increasing the price paid by LIME's subscribers to make calls to former Claro subscribers. The effect of this is a reduction in consumer welfare.
   - LIME is less efficient than Digicel in converting its recurring overheads into revenue.

4. Based on the findings, it is likely that the challenged transaction will result in a substantial lessening of competition as Digicel will be removing its only significant competitor from the market. Notwithstanding the anti-competitive effect, Digicel would acquire 3G technology in short order, to the benefit of its subscribers.

5. Should Claro surrender its licence and cease operations in Jamaica, the effect on the market is very likely to be the same as the effect on the market should Digicel acquire Claro under the challenged transaction. It is anticipated that, under both scenarios:
   - Transaction prices are likely to increase; and return to the levels that pertained before Claro entered the market in 2007.

- Consumers will have fewer choices of service providers and of product offerings.
- There will be slower rates of technological advancement. Digicel will have less incentive to innovate. Note that Claro and LIME introduced 3G in 2008 and 2009 respectively, and save for the challenged transaction Digicel had yet to indicate their intention to introduce 3G.
- There will be less incentive to maintain current level of expenditure on sponsorship and advertising.

Recommendation

- Based on the application of Section 17 of the FCA, the challenged transaction should not be approved. Should Claro exit the market independent of the transaction, then its licence, spectrum and customers, would be returned to the market and allow existing players and new entrants the opportunity to compete for them.
- In the event that the challenged transaction is approved steps should be taken to, as best as possible, protect the competitive environment and by extension, consumers. The following are some steps that should be implemented:
    - Mandatory sharing of cell towers.
    - Reciprocal interconnection rates among all players.
    - Claro's customers should be released from any contractual obligations to Claro, thereby allowing them to choose their preferred provider.
    - Mechanisms to ensure that technological advancements are introduced into the market within a reasonable time frame.

I. CHALLENGED TRANSACTION

1. On March 11, 2011 Digicel Jamaica Limited ('Digicel') announced that it had signed an agreement to acquire América Móvil's Claro business in Jamaica, and in return Digicel would sell its business in El Salvador and Honduras to América Móvil.[1] The investigation is initiated by the Fair Trading Commission arising from published reports that the agreement proposes to, among other things, bring under the common ownership of Digicel, two hitherto independent entities competing in Jamaica. Pursuant to its mandate under section 5 of the Fair Competition Act 1993 (FCA), the investigation is being conducted under section 17, to determine whether the agreement has the effect or likely effect of substantially lessening competition in a market in Jamaica.

2. The purpose of this report is to assess the effect or likely effect of the challenged agreement on competition.

II. THE PARTIES

Digicel

3. Digicel Jamaica Limited was incorporated in Jamaica in April 1999.

Oceanic Digital Jamaica Ltd

4. The business name Claro Jamaica Limited was registered in Jamaica in May 2009. Claro's parent company, América Móvil, acquired the licence of Oceanic Digicel Jamaica Ltd. in August 2007. Oceanic Digital Jamaica Ltd. was registered in Jamaica in November 2002.

III. INTRODUCTION

5. An assessment of the competitive effects of acquisitions is an important aspect of Industrial Organisation (IO) economics. The steps in undertaking such an assessment typically include defining the relevant market; describing the structure of this market; evaluating the extent to which the acquiring party would face competitive constraints from other suppliers, potential suppliers or consumers; considering efficiencies specific to the acquisition, determining whether assets are likely to exit the

[1] Nadisha Hunter, "Not Good For Telecoms Market - Digicel- Claro Deal Could Hurt Consumers, Says Opposition," *The Sunday Gleaner*, March 13, 2011.

market absent the acquisition; and designing remedies to mitigate any loss in competition ('anticompetitive effects') , if any, likely to be posed by the acquisition. The analyses used are based on internationally accepted standards, and are consistent with the *US Horizontal Merger Guidelines* which were developed by the competition authorities in the United States.[2]

6. Acquisitions increase the likelihood of substantial harm to consumers arising from two sources: (i) <u>coordinated effects</u>: anticompetitive coordination of conduct among competing suppliers; and (ii) <u>unilateral effects</u>: the unilateral exercise of market power. An acquisition could simultaneously increase the likelihood of coordinated and unilateral effects. Economists typically examine the potential for harm to competition and consumers arising from each of these sources using a variety of market information combined with an application of economic principles.

7. Harm to consumers may take the form of higher prices (restricted output), lower product quality, slower rates of technological innovation/adoption, lower quality customer service and fewer varieties relative to a market in which the acquisition was not consummated.

IV. LEGAL ASSESSMENT

Applicable Provision of the FCA

8. The applicable provision of the Fair Competition Act, 1993 (FCA) under which the agreement is being examined is section 17. Section 17 provides as follows:

> *17. (1) This section applies to agreements which contain provisions that have as their purpose the substantial lessening of competition, or have or are likely to have the effect of substantially lessening competition in a market.*
>
> *(2) Without prejudice to the generality of subsection (1) agreements referred to in that subsection include agreements which contain provisions that—*
> *(a) directly or indirectly fix purchase or selling prices or any other trading conditions;*
> *(b) limit or control production, markets, technical development or investment;*
> *(c) share markets or sources of supply;*
> *(d) affect tenders to be submitted in response to a request for bids;*
> *(e) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;*
> *(f) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage,*

[2] U.S. Department of Justice and Federal Trade Commission, "Horizontal Merger Guidelines," August 19, 2010, http://www.ftc.gov/os/2010/08/100819hmg.pdf

have no connection with the subject of such contracts, being provisions which have or are likely to have the effect referred to in subsection (1)

(3) Subject to subsection (4), no person shall give effect to any provision of an agreement which has the purpose or effect referred to in subsection (1); and no such provision is enforceable.

(4) Subsection (3) does not apply to any agreement or category of agreements the entry into which has been authorized under Part V or which the Commission is satisfied—
(a) contributes to—
(i) the improvement of production or distribution of goods and services; or
(ii) the promotion of technical or economic progress, while allowing consumers a fair share of the resulting benefit;
(b) imposes on the enterprises concerned only such restrictions as are indispensable to the attainment of the objectives mentioned in paragraph (a); or
(c) does not afford such enterprises the possibility of eliminating competition in respect of a substantial part of the goods or services concerned.

9. It must be established that the subject agreement has as its purpose, effect or likely effect the substantial lessening of competition in a market. For a claim to succeed under this provision the following must be demonstrated:

a) An agreement whose purpose, effect or likely effect is to lessen competition in a market;
b) The provision in the agreement falls within section 17 (2)(a)-(f) and has the purpose, effect or likely effect outlined in section 17(1).

10. Section 17 of the FCA is similar in terms with Article 81 of the Treaty establishing the European Union which provides as follows:

Article 81

1. The following shall be prohibited as incompatible with the common market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which:

(a) directly or indirectly fix purchase or selling prices or any other trading conditions;

(b) limit or control production, markets, technical development, or investment;

(c) share markets or sources of supply;

(d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

2. Any agreements or decisions prohibited pursuant to this article shall be automatically void.

3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of:

- any agreement or category of agreements between undertakings,

- any decision or category of decisions by associations of undertakings,

- any concerted practice or category of concerted practices,

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

(a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;
(b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

11. The interpretation of Article 81 of the EC Treaty by the European Court of Justice indicates that if the agreement has as its purpose the restriction of competition an economic analysis on its anti-competitive effect is not necessary.[3] An agreement that does not have as its purpose the substantial lessening of competition must thereafter be examined to determine if its effect is likely to lessen competition substantially in a market.[4]

12. Effect on competition is determined by an economic analysis of the relevant product and geographic market whereby relevant issues for consideration are whether access to the relevant market is impeded and if so whether the subject agreement has contributed to that foreclosure effect.[5] Where the answer is in the affirmative to the above questions, the agreement is treated as being in conflict with Article 81 of the EC Treaty.

13. An important consideration in determining the effect of the agreement is the competition that would occur in the relevant market in the absence of the agreement.[6]

Substantial Lessening of Competition

---

[3] VdS v. Commission, Case 45/85 [1987] ECR 405, 4 CMLR 264, para. 39. In as much as section 17 of the FCA is in similar terms as Article 81 of the Treaty Establishing the European Community (EC Treaty), the FTC considers the jurisprudence developed by the European Court of Justice (ECJ) in its interpretation of this provision, if relevant, as guidance in its interpretation and application of section 17 of the FCA.

[4] Javico v. Yves St.Laurent, Case C-306/96[1998] ECR 1-1983, [1998] 5 CMLR 172.

[5] Delimitis v. Henninger Braüer AG, Case C-234/89[1991] ECR I-935, [1992] 5 CMLR, 210, para. 24-27.

[6] Société Technique Minière Maschinenbau Ulm [1966] ECR 235, [1966]CMLR 357.

14. The Staff of the Fair Trading Commission ('Staff') notes that section 17 of the FCA is not identical to Article 81 of the EC Treaty. One important difference is the absence in Article 81 of the EC Treaty of the applicable standard under section 17 of the FCA for assessment of agreements, namely that the agreement has or is likely to have the effect of substantially lessening competition in a market.

15. Section 79 (1) (c) of the Canadian Competition Act has a similar provision.[7] The Canadian Competition Tribunal has interpreted the term 'substantial lessening of competition' to be proved in the following manner:

> *"...the substantial lessening which is to be assessed need not necessarily be proved by weighing competitiveness of the market in the past with its competitiveness at present. Substantial lessening can also be assessed by reference to the competitiveness of the market in the presence of the anti-competitive acts and its likely competitiveness in their absence".*[8]

16. This test requires establishing that 'but for' the agreement or impugned provisions in an agreement competition would not have been affected in a defined market or, in the alternative, the agreement is likely to affect competition that could have occurred in a defined market. In *Canada (Commissioner of Competition)* v. *Canada Pipe Company Ltd*., [9] the Federal Court of Appeal in Canada held that the correct test for establishing substantial lessening or prevention of competition is whether, but for the impugned conduct, the relevant market would have been "substantially more competitive",[10] and not whether substantial competition continued to exist in the relevant markets following the occurrence of the challenged conduct.

17. In addition, the Federal Court of Appeal held that whether or not competition is substantial in a relevant market does not determine whether a certain practice has resulted in, or is likely to result in, a substantial lessening or prevention of competition.[11] The Federal Court of Appeal held further that the correct approach is to compare the level of competition in the presence of the exclusive arrangement

---

[7] Section 79 of the Competition Act of Canada provides as follows: **79.** (1) Where, on application by the Commissioner, the Tribunal finds that:
(*a*) one or more persons substantially or completely control, throughout Canada or any area thereof, a class or species of business,
(*b*) that person or those persons have engaged in or are engaging in a practice of anti-competitive acts, and
(*c*) the practice has had, is having or is likely to have the effect of preventing or lessening competition substantially in a market, the Tribunal may make an order prohibiting all or any of those persons from engaging in that practice.
[8] See decision of *The Director of Investigation and Research v. Laidlaw Waste Systems Limited*, CT-91/2, at p.101. 1992.
[9] *Canada (Commissioner of Competition)* v. *Canada Pipe Company Ltd*., 2006 FCA 233 (23 June 2006).
[10] Ibid, at para. 38.
[11] Ibid, paras.36 and 37.

with what it would have been in the absence of the arrangement, and not to exclusively focus on entry by new firms and switching by incumbent firms.[12]

18. The Staff is of the view that a causal relationship must exist between the agreement or offending provisions of the agreement and substantial lessening of competition in a market. Further, the test to be used to establish whether there is a substantial lessening of competition in a market includes comparing past and present competitiveness and comparing present competitiveness with the existence of the impugned agreement and the likely competitiveness of the market in the absence of the agreement.

19. In the instant case, the subject agreement is considered under section 17 of the FCA generally and specifically with respect to sections 17(2)(b) and or section 17(2)(c) thereof the FCA as the relevant provisions of the FCA under which the agreement is examinable.

Limit, Control or Share Markets

20. Section 17 of the FCA is in similar terms to Article 81(1) of the Treaty establishing the European Economic Community (EC Treaty) and the FTC is of the view that the interpretation and application of that provision in the European Community (EC) is of some relevance. The term 'market' in Article 81(1) of the EC Treaty applies to a market within the EC whereby the agreement can affect trade between Member States, and also to markets within a particular Member State.

21. By contrast, section 2(3) of the FCA stipulates that the word 'market' in the FCA refers to a market in Jamaica. To the extent that the agreement is examinable under section 17(2)(b) or section 17(2)(c) of the FCA, the subject agreement must limit or control markets in Jamaica or share markets in Jamaica.

22. There is no provision in the agreement that expressly limits or control markets or provides for the sharing of markets in Jamaica arising from the challenged acquisition of Claro by Digicel. Neither Claro nor Digicel is barred from entering or re-entering the market by virtue of a non-compete clause or other condition or term of the agreement for the challenged acquisition of Claro.

23. Examination of the terms of an agreement may render the entire agreement unenforceable if there are conditions of the agreement that have as their purpose or effect the substantial lessening of competition in a market.

[12] Ibid.

24. The Staff is of the view that the parties' characterisation of the terms of an agreement is not controlling on the nature of the term of an agreement, and that all terms of the agreement are to be examined to determine their nature and scope for the purposes of their likely effect on a market if that agreement were to take effect.

25. Examination of the relevant conditions of the subject agreement under heading '*Conditions to Closing*' shows that they relate to representations and warranties of either Digicel or the Group of Companies acquiring Digicel's interests in El Salvador and Honduras which do not expressly refer to limiting, controlling or sharing of markets within Jamaica.

26. Other terms of the agreement regarding the challenged acquisition of Claro Jamaica Limited do not indicate any express obligation on the parties to limit, control or share markets in Jamaica.

27. The Staff observes, however, that the terms of the subject agreement read in their entirety and in particular the following provisions have the effect of permitting the exit of Claro from the relevant market. These provisions of the agreement are:

A. Article 2 specifically but not limited to sections 2:01 to 2:02;
B. Article 3, specifically but not limited to section 3:17;
C. Article 5, specifically but not limited to sections 5:05 to 5:07;
D. Article 6, specifically but not limited to sections 6:01 to 6:07, and
E. Article 7, specifically but not limited to section 7:05 entitled.

28. Under the agreement, América Móvil, is the parent company of Telmex Perú, and indirectly owns 100% of the outstanding shares of the capital stock in Telmex Perú. Telmex Perú owns 100% of the outstanding shares of the capital stock in AMX Santa Lucia which in turn owns 100% of the outstanding shares of the capital stock in Claro. Under the agreement Telmex Perú is the vendor of the AMX Santa Lucia shares to Digicel in exchange for a consideration of an amount equal to US$[redacted]

29. These provisions when taken together allow Digicel to acquire [redacted]% of the shares of Claro, effectively Claro's business in Jamaica, including Claro's assets. Specifically, the sale of the [redacted]% shares of AMX Santa Lucia therefore [redacted].

30. In addition, article 7 of the agreement allows Claro to transfer its telecommunications licence and spectrum to Digicel.

31. To the extent that the subject agreement is examinable under section 17(2)(b) and or section 17(2)(c) of the FCA, the Staff is of the view that in the absence of terms in the agreement which expressly refer to limiting, controlling or sharing markets in Jamaica, the agreement may not be in conflict with these sections, but may nonetheless be in conflict with section 17 of the FCA if the effect or likely effect of the agreement is to lessen competition substantially in a market. This may occur whereby an agreement provides for the exit of a competitor from the relevant market and the effects or likely effects on the relevant market arising from the actual or likely exit of such a competitor is to substantially lessen competition in that market. This is examined below.

V. INDUSTRY BACKGROUND

32. The evaluation of (i) industry conditions and (ii) the environment at the time of the acquisition can be enhanced by information regarding the history of the industry. This section highlights information which the Staff has found useful for assessing the effects of the challenged acquisition.

33. Telecommunication services allow for individuals to communicate with each other over far distances. Generally speaking, these services are grouped in three categories: voice, data and video. Voice services refer to traditional telephone services transmitted over wireless or wired networks. Data services refer to the transmission of 'text,' the more popular examples of which includes short messaging services (SMS) and Internet. Video refers to the high speed transmission of audio and video data. Subscriber television ('cable tv') service is an example of such services.

34. At the time the acquisition was announced, the market for voice services included three significant suppliers: Digicel, Claro and Cable and Wireless Jamaica Ltd. ('LIME'). Digicel and Claro were generally viewed as the two most significant suppliers with LIME commonly viewed as a distant third. The other suppliers which offered voice services in Jamaica were less significant.[13] The most popular voice service is prepaid mobile voice service.

35. Up until 2000, LIME was the only enterprise that had a licence to supply data and voice telephony services in Jamaica. LIME supplied voice and data services over a fixed network as well as over a mobile network. The beginning of the 21st century marked the end of LIME's monopoly status in

[13] The smaller suppliers include Columbus Communications Jamaica Limited and NewGen Technologies.

Jamaica as it was the starting point for liberalizing the sector, a process which was phased in over a two year period.

36. Mossel (Jamaica) Limited (now Digicel Jamaica Limited) was one of the early entrants in the post liberalization period when it commenced supplying voice and SMS in April 2001 over a mobile global systems for mobile communication (GSM).[14]

37. Digicel's impact on the competitive landscape was observed immediately upon entry with subscriptions reportedly reaching 100,000 in the first 100 days.[15] Its subscriber base continued to grow at a steady rate throughout the decade. Early in the decade, Digicel surpassed LIME as the market leader of mobile voice services; and by December 2006, after five and a half years in operation, Digicel acquired more than twice as many subscribers as LIME had.

38. Another early entrant was Oceanic Digital Jamaica Limited which entered the market in November 2001 offering voice and SMS over a mobile CDMA network under the brand *MiPhone*.

39. The most recent 'new entry' in the telecommunications sector occurred in 2005 by way of Columbus Communications Limited (t/a Flow). Flow supplies voice, data (Internet services) and video (cable tv) services over a wired (fibre optic) network.[16]

40. Up to 2007, there were five suppliers of voice services: Digicel, LIME, Oceanic Digital, Flow and NewGen. Digicel was the market leader and LIME would have been considered the only other significant participant.

41. The competitive dynamics changed in August 2007, however, when América Móvil announced its acquisition of Oceanic Digital Jamaica. The acquisition was of competitive significance in Jamaica, and possibly elsewhere in the world where both Digicel and América Móvil competed. This as América Móvil was the leading mobile phone service operator in Latin America and was widely reputed to have access to significant resources. In 2011, Claro's owner was listed among the richest person in the world.[17] América Móvil launched its *Claro* brand in Jamaica just over one year after acquiring the licence.

42. Claro implemented numerous strategies which placed it in a better position than MiPhone to compete with Digicel and LIME. Firstly, Claro assumed a more competitive position by replacing its

---

[14] In 2008, Mossel (Jamaica) Limited was renamed Digicel Jamaica Limited.

[15] Seamus Lynch, first CEO of Digicel, quoted in Al Edwards, "Digicel celebrates ten years in Jamaica- Part 1," *The Jamaica Observer,* April 15, 2011*.* The Staff has been unable to verify this assertion.

[16] Flow was the first "triple play" provider of telecommunication offering all three categories of services over the same platform (fiber optic cable).

[17] In 2010, Carlos Slim, Claro's owner, toppled Bill Gates as the richest man in the world on the 2011 Billionaires List issue by Forbes (http://www.forbes.com/2011/03/08/world-billionaires-2011-intro.html: last accessed May 31, 2011).

CDMA network platform with GSM technology. By adopting GSM technology, Claro reduced the costs associated with consumers switching from rival providers since the GSM network was by then being used by LIME and Digicel.[18]

43. Secondly, Claro assumed a more competitive position by entering into bi-lateral arrangements with LIME. One arrangement deals with co-location of cell towers and another with reciprocal calling rates between the two networks. While each mobile phone service provider entered into co-location agreements with the two other providers, only Claro and LIME entered into reciprocal calling rates agreements. In addition to entering into co-location agreements, Claro expanded its geographic coverage by way of acquiring additional cell sites up to the point where Claro's coverage surpassed that of LIME and was comparable to that of Digicel.

44. Thirdly, Claro assumed a more competitive position by introducing technological innovations at a faster pace than its rivals. Specifically, Claro introduced third generation (3G) mobile services in October 2008.[19] The upgrade allowed Claro to offer a wider range of services, including video calling, which cannot be offered on the second generation (2G) platform operated by LIME and Digicel. LIME adopted 3G mobile service capabilities eight months later while Digicel introduced its fixed-line service capabilities, *wi-max* (4G), approximately nine months after Claro's upgrade.

45. Fourthly, Claro's advertisements in the mass media made less than subtle "swipes" at Digicel, presumably to induce Digicel's customers to switch.[20] In addition to the advertisements in the media, Claro built public awareness of its brand by virtue of its sponsorship of popular activities such as domestic football competitions and local talent search programs.

Consumer Characteristics

46. A profile of consumers assists assessment of the likely competitive effects of the challenged transaction. For instance, markets in which consumers perceive differences among competing services, i.e. where services are differentiated, tend to be less competitive than markets in which consumers perceive no differences, all other things held constant. Similarly, markets tend to be more competitive as information becomes accessible to more consumers.

---

[18] When switching from GSM to CDMA, consumers would need a new handset. When switching from one GSM network to another, however, a new handset is not required.

[19] Myers, John "Claro Jamaica Open for Business," *The Daily Gleaner*, Saturday, October 11, 2008.

[20] For example, Claro's advertisements referred to "di-old-cell" which is commonly understood to be referring to "di-gi-cel."

47. Based on the results of a 2006 Consumer Survey, subscribers of telephone services are typically (i) young; (ii) informed; (iii) more likely to communicate via mobile rather than fixed-line telephone services; (iv) driven primarily by coverage and calling charges when selecting providers; and (v) prefer not to enter into long-term contractual arrangements.[21]

48. Specifically, the survey reveals that (i) on average, subscribers are younger than 35 years;[22] (ii) only 8 percent of mobile phone users expressed having any difficulty in obtaining information on rates for mobile services; (iii) Approximately 79 percent of individuals who access telephone services subscribe to mobile services with 21 percent subscribing to fixed line services; (iv) the 'cost of calling' was the main factor that 34 percent of subscribers thought about when selecting providers. Another 22 percent indicated that 'coverage area' was the most important factor; and (v) most subscribers choose to enter into 'uncommitted' relationships with service providers in that 98 percent of subscribers acquire prepaid access (i.e. no contract). Prepaid service is described as "uncommitted" since the cost of substituting toward competing services is considerably lower than the cost faced by subscribers of postpaid access. [23]

VI. MARKET DEFINITION

A. Analysis Framework

49. To evaluate the potential effects of the acquisition, we start by identifying the relevant markets in which the parties to the challenged transaction compete. Once the relevant market(s) has(have) been identified, analysis will proceed to determine whether and the extent to which the combined entity would face competitive constraints from present or future suppliers. The identification of the relevant market is also useful in assessing efficiencies as well as aid in the designing of appropriate remedies to mitigate, if not avert, anticompetitive effects of the acquisition.

50. The internationally accepted definition of a relevant market, for the purpose of assessing competition, is a product, or group of products, and a geographic area in which it is supplied such that a hypothetical profit-maximising supplier, not subject to price regulation, that was the only present and

[21] Market Research Services Limited, *Evaluation of Telecommunication Services in Jamaica* (Kingston: Market Research Services Limited, 2006).

[22] Approximately 51 percent of consumers are younger than 35 years of age.

[23] For prepaid subscribers, the cost of substituting would be limited to purchasing a new SIM card and unlocking the mobile handset or purchasing a new handset. For postpaid subscribers, except for those with monthly postpaid services, switching would incur additional charges for early termination which would be quite prohibitive for contracts lasting two or three years.

future supplier in that area, would likely impose a small, but significant and nontransitory increase in price assuming the terms of sale of all other products are held constant. (*US Horizontal Merger Guidelines*, p.8.)

51. Digicel offers voice and data services. Claro offers voice, data and video services. By virtue of the overlap of services between Digicel and Claro, we have to consider at least two services: (i) voice; and (ii) data services.

B. Product Market: Voice and Short Message Service (SMS)

52. The Staff's conclusion in this section is that, for reasons cited below, SMS and voice service is the relevant product market in this matter.

53. Voice and SMS allows for real time communication over long distances between calling parties. Without voice services, real time long distance communications would be difficult.[24]

54. Voice services are typically delivered through two channels: wired ('fixed-line') and wireless ('mobile') networks. The Staff's previous work in this area demonstrates that fixed-line and mobile voice services compete in the same market in Jamaica.[25]

55. A crucial consideration as to whether a hypothetical monopolist supplier of voice and SMS could profitably raise prices above the competitive level is the sensitivity of demand to changes in prices. If, in response to the price increase, enough consumers would substitute away from these services, then the price increase would be unprofitable. Consumers are less likely to switch if the next best product is considerably less attractive.

56. Substitutes for voice and SMS are other forms of telecommunications such as electronic mail ('email'), facsimile ('fax') and the posted mail. It is likely that the closest substitute for voice and text messaging is email. There is however, a considerable gap between voice and SMS on one hand, and email services on the other hand.

57. Evidence in support of voice and SMS as the relevant market are discussed below and organized in the following headings: (i) subscriber substitution patterns; and (ii) suppliers' business strategies.

i. Subscriber Substitution Patterns

---

[24] By long distance communications, in this particular instance, we refer to communications between persons not within earshot of each other.

[25] Fair Trading Commission, "Staff Report: Case no. 6489-09 Investigation into the conduct of Mossel (Ja.) Ltd. with respect to pricing of its fixed to mobile (FTM) voice termination service," June 22, 2010, http://www.jftc.com/Libraries/Case_Reports/Case_No_6489_Mossel_Jamaica_Limited.sflb.ashx

58. The observed demand substitution between voice and SMS is consistent with our claim that voice and SMS compete in the same market.

59. Substitution between voice and SMS is evident from subscriber's response to Digicel's *Gimme 5* promotions which ran for the two month period ending in January 2010.[26] The promotion offered subscribers the opportunity to send one hundred text messages free of charge on a given day, conditioned only on subscribers sending five on-net text messages during that day. Also, subscribers who spent five minutes on an on-net call, received the next twenty five minutes on that call free of charge.

60. During the December quarter of 2009, which reflects the first month of the promotion, Digicel's average revenue per subscriber from data services [redacted] percent while its average revenue per subscriber from voice services [redacted] percent.[27] During the March quarter of 2010, which reflects the second month of the promotion, the average revenue from data services [redacted] percent while average revenue from voice services remained the same as in the preceding quarter.

61. The observed reduction in revenue (and call volume) per subscriber from voice services and the concomitant increase in the revenue per subscriber from text messaging during the *Gimme 5* promotions are consistent with the hypothesis that voice and SMS are substitutable in demand.

62. Other evidence of the substitutability between voice and SMS is found by reviewing trends in the relative contribution of voice and data services to the revenue of the significant voice service providers. Specifically, during the December quarter of 2006, voice services contributed [redacted] percent of Digicel's revenues while data services contributed [redacted] percent. By the March quarter of 2011, revenue from voice services [redacted] while revenue from data services [redacted] percent. This resulted in voice services' contribution to total revenue [redacted] percent and data services' contribution [redacted] percent.

ii. Supplier's Business Strategies

63. It is the Staff's view that the observed strategies identified in this section, support our claim that LIME, Digicel and Claro comprise the group of significant participants in the relevant market.

[26] The promotion ran in three phases. The first phase commenced November 27, 2009 and the third phase ran until January 31, 2010.

[27] Average talk time [redacted] percent.

1. Competition at the time of the Announced Acquisition

64. Evidence that a group of suppliers closely monitors each other's conduct, rather than suppliers outside the group, is consistent with the hypothesis that this group of suppliers competes and comprises the relevant product market.

65. The product development, marketing and pricing decisions of Digicel, Claro and LIME responded to each other's activities and therefore is consistent with our definition of the relevant market.

66. Regarding product development, in October 2008 Claro was the first to roll out 3G wireless infrastructure. Nine months later, LIME rolled-out its 3G wireless infrastructure. In both instances, Digicel responded to its rivals' introduction of 3G wireless voice services by offering sharp discounts on its 2G wireless services. This point is discussed in greater detail in Section VII of this report.

2. Increasing Competition at the time of the Acquisition

67. The Staff concludes that the one year period ending March 2011 represents the most intense period of competition in the market.[28] A likely reason for this is that by adopting 3G technology, Claro and LIME differentiated their services from that of Digicel's lower quality 2G wireless voice services. This dimension of product differentiation was not present prior to 2008 when all three suppliers employed 2G wireless technology. As a subscriber pointed out the day after LIME rolled-out its 3G service, "…Claro is no longer the boss when it comes to high speed wireless (phone service) because …LIME is now in the mix and their (*sic*) is word out that LIME 3G is running faster than (Claro's). People the competition is going to be great."[29]

3. Inducing Subscribers of Rival Networks to Switch

68. Digicel, LIME and Claro engaged in direct marketing campaigns targeted at each other's subscribers. Specifically, each network offered bonus credit to subscribers who switched from rival

[28] The arguments supporting this conclusion are detailed in Section VII of this report.
[29] Maddd Maxxx, Claro vs LIME 3G Network, Jun 24, 2009, post # 14. Available at http://forum.itechinnovations.com/index.php?tid=139 (last accessed: Jun 6, 2011). This comment is one of 24 postings in a web forum. Every participant in the forum anxiously anticipated the introduction of LIME's 3G service expected later in the month of June 2009.

suppliers.[30] The campaigns were launched in 2009, during the most competitive periods in the economic history of the market.[31]

C. Geographic Market: Jamaica

69. The geographic market in assessing the competitive effects of the challenged transaction is Jamaica.

Conclusion

70. Our overall conclusion in this Section is that the market relevant for analyzing the competitive effects of the challenged conduct comprise the market for voice and SMS in Jamaica.

VII. MARKET STRUCTURE

A. Analysis Framework

71. Competition authorities routinely assess whether and the extent to which participants in the relevant market is likely to exercise market power individually through their actions taken independently of other participants and/or collectively through the coordinated interaction among the group, or sub-group, of participants. It is typical for such assessments to rely on the Herfindahl-Hirschman Index (HHI) which measures supplier concentration, as is outlined in the *US Horizontal Merger Guidelines*. The Staff's interest in seller concentration is underpinned by the observation that unilateral actions and coordinated interaction which give rise to adverse competitive effects are more likely in markets which are highly concentrated, especially when there are significant impediments to entry, among other factors.

72. Any acquisition which results in a highly concentrated market (index above 2,500 points) and a large increase in the index (change in concentration exceeding 200 points) is presumed to enhance market power, subject to persuasive evidence to the contrary.

73. The Staff concludes that the challenged transaction resulted in a highly concentrated market and increased the concentration index by at least 384 points.

---

[30] The promotions required subscribers to surrender an active SIM card from a rival supplier in order to receive the bonus credit. The offers were never advertised in the mass media, but rather through direct person to person calls by the respective networks. The Staff became aware of this form of marketing via complaints lodged at the Fair Trading Commission. See for example cases #. 6498-09, 6818-10, 6881-10, 6849-10 and 6938-10.
[31] The competitiveness of the market is discussed later in the Report in greater details.

B. Structure of the Relevant Market

74. The market share and concentration, based on subscribers, voice traffic and cell site ownership, are presented in Table 1.

Table 1 Market Share and Concentration

	Market Share (in %) based on…		
	…subscriber[1]	*…voice traffic*[2]	*…cell sites*[3]
Digicel LIME Claro	[redacted]	[redacted]	[redacted]
TOTAL[4]	**99.5**	**99.4**	**100.0**
HHI	4,747	4,666	3,647
change in HHI	1,294	346	3,262

Notes: (1) Subscriber base as at June 30, 2009. Source: Office of Utilities Regulation.
(2) Voice traffic measured by the volume of domestic calls originating on the respective networks during the quarter Apr-Jun 2009. Source: Office of Utilities Regulation.
(3) Cell site measures the number of cell sites owned by the respective networks. Sources: Cell site data for Digicel and LIME were reported by the respective providers as at March 2011. Cell site data for Claro are current as at Dec 2008 and based solely on reports carried in local a newspaper (Myers, John "Claro Jamaica Open for Business," *The Daily Gleaner*, Saturday, October 11, 2008).
(4) The other voice suppliers are excluded from the analysis because their insignificant market share would affect neither the qualitative nor quantitative results.

75. A detailed analysis of the market structure is presented in Appendix A of this report.

76. Notwithstanding the sensitivity of market share distribution to the measure of size, we have a robust conclusion that the market is highly concentrated and the merger would increase concentration levels by at least 300 points.

77. Specifically, the Table shows that the calculated HHI under the alternative measure each exceeds the 2,500 threshold indicating that the market is highly concentrated.[32] Further the acquisition would increase the concentration index by at least 346 points.

78. Our overall conclusion in this Section is that the challenged transaction raises significant competitive concerns and warrants further scrutiny as it would lead to a highly concentrated market in which the concentration index increases by more than 200 points.

[32] The HHI is calculated by squaring the market share of each participant and then summing them. A market in which HHI exceeds 2,500 points is considered highly concentrated; between 1,500 and 2,500 points suggests a moderately concentrated market and less than 1,500 points reflects an unconcentrated market.

VIII. EFFECTIVE ENTRY

A. Analysis Framework

79. Competition authorities routinely assess whether and the extent to which the top supplier in a given market is likely to face competitive constraints from potential suppliers. It is typical for such assessment to rely on conditions of entry, expansion and exit. Suppliers in markets with negligible impediments to entry, expansion and exit, are unlikely to exercise market power, even if the market is highly concentrated.

80. To be effective in mitigating if not averting anticompetitive conduct, entry must be likely, timely and sufficient. To be likely, there must be an expectation that entry is profitable at pre-acquisition prices; to be timely, entry must take place within two years; and to be sufficient, incumbent suppliers should not have exclusive control over critical inputs and the entrant should have the capacity to accommodate consumers who may seek to avoid the high prices associated with anticompetitive conduct on the part of incumbent suppliers (*US Horizontal Merger Guidelines*).

81. Our conclusion is that entry is unlikely to mitigate any adverse competitive effects arising from the conduct of incumbent suppliers.

B. New Entry into the Relevant Market

1. History of Entry

82. To enter the relevant market, prospective entrants must obtain a licence to supply telecommunication services and permits to erect cell towers. A licence to provide telecommunication services is issued by the Minister with portfolio responsibility for Telecommunication services and cell tower permits are issued by the National Environment and Planning Agency (NEPA). Entry also requires access to the critical inputs including (i) physical infrastructure such as cell towers;[33] and (ii) the requisite spectrum. To expand in the market, participants must have the capabilities of covering the entire island.

83. A review of the history of entry in the relevant market is useful in assessing the conditions of future entry.

84. Regarding acquiring the appropriate licence, history has shown that in Jamaica conditions for entry is unlikely to be an impediment to entering the sector. By the end of 2006, a total of 426 licences

[33] Access could be gained by either leasing wireless infrastructure from incumbent suppliers (and operate as mobile virtual network operators) or building-out the infrastructure. To date, entrants have opted to build-out the infrastructure and share.

were issued to operate in various segments of the telecommunications industry. A breakdown shows that 39 licences were issued for domestic carriers, 48 to provide domestic voice services, 53 to provide international voice services and 33 to provide data services. The other categories (# of licences issued) are: Internet Service Provider (80); Cable TV (7); Free Trade Zone Carrier (10); Free Trade Zone Service Provider (8); International Carrier (76); and International Voice/Data Service Provider (71). Less than 10 percent of the licences were commercially utilized.[34]

85. Regarding conditions for expansion in the relevant market, only Digicel and Claro are considered to have made a significant competitive impact in the relevant market. A historical review shows that competitive entry on the part of Digicel and Claro was underpinned by substantial investments in production and technological capacities.

86. The competitive significance of Digicel's entry is evidenced by a sustained increase in industry demand, measured by the number of subscribers, and Digicel's share of the relevant market. Specifically, Digicel executed a strategy which extended the coverage of mobile services to subscribers who were previously untapped by the incumbent supplier, by investing and building-out cell sites across the island.

87. To appreciate the scale of Digicel's investment, and the impact it had on industry demand, we note that at the end of 2000, there were approximately 249,842 subscribers of mobile voice services. By the end of 2001, after Digicel's first nine months of operation, the total number of subscribers to mobile voice services more than doubled to 640,449.[35] Reports are that in the first one hundred days of operations, Digicel acquired 100,000 subscribers.[36]

88. Digicel's expansion in the market was significant for competition in the short term and long term. For the six year period leading up to the liberalization (1995-2000), mobile penetration rates in Jamaica increased by 8.0 percentage points from 1.6 percent in 1995 to 9.6 percent in 2000. Contrastingly, during the next six years (2001-2006), mobile penetration rate increased by 84.2 percentage points to 93.8 percent with an industry subscriber base of 2,495,191. Digicel's investment in

[34] Fair Trading Commission and Office of Utilities Regulation, "A Review of Jamaican Telecommunications Sector," August 2, 2007, http://www.jftc.com/Libraries/Industry_ Studies/ Telecommunications_ Liberalization_Impact_Assessment.sflb.ashx.

[35] Fair Trading Commission and Office of Utilities Regulation, A Review of the Jamaican Telecommunications Sector, August 2, 2007, p.13.

[36] Al Edwards, "Digicel celebrates ten years in Jamaica- Part 1," *The Jamaica Observer,* April 15, 2011. The Staff has not independently verified this claim.

coverage allowed it to acquire and maintain the largest subscriber base in Jamaica.[37] Digicel is the only supplier to have consistently expanded its subscriber base. It increased by, on average, 2.3 percent per quarter during the periods 2006:Q4 through 2009:Q4. In contrast, LIME's subscriber base, on average, remained unchanged.

89. Similarly, Claro's successful expansion in the relevant market was underpinned by substantial investment in production and technological capacities. The competitive significance of Claro's entry is evidenced by a sustained reduction in the average price of services provided by the main incumbent suppliers, Digicel and LIME.[38] In addition to building-out its cell sites, Claro's expansion included massive investments in technological advancement. These investments allowed Claro in October 2008, to be the first participant to roll-out a 3G wireless infrastructure, albeit limited to a few parishes.

2. Timeliness of Entry

90. A timely effective entry would be more likely in short order to mitigate if not reverse adverse competition effects which may arise from the challenged transaction, relative to a market when entry is prolonged. A review of the history of entry may inform our assessment of the prospects for timely entry in the future, subject to there being no technical or other changes which would alter the speed of new entry, relative to the speed of past entry.

91. A prospective entrant would face greater cost to building out the requisite cell tower coverage, relative to the costs faced by past entrants. Specifically, spectrum allocation of the lower frequency bands of 850 MHz and 900 MHz is already exhausted by incumbent suppliers.[39] This as the Spectrum Management Authority (SMA) has indicated that it is not in a position to allocate any additional spectrum using the preferred lower bands of 850 MHz and 900 MHz. This is crucial as these bands are typically used to offer service over long ranges and in built-up areas to penetrate walls. Only the higher bands of 1800 MHz and 1900 MHz are available to new entrants. This is significant since it is significantly more expensive to build out coverage using the higher bands, relative to building out cell site coverage on the lower bands.

92. Prospective entrants are required to secure the necessary permit from NEPA for each cell tower erected in Jamaica. The application to securing the permit is administered by the parish council

---

[37] Fair Trading Commission and Office of Utilities Regulation, A Review of the Jamaican Telecommunications Sector, August 2, 2007, p.13.
[38] The effect of Claro's entry on the price of LIME and Digicel services are discussed in greater detail in Section IX.
[39] SMA, *Spectrum Availability to provide 4G services*. Letter. August 24, 2011.

governing the location in which the cell tower is to be erected. NEPA advises that applications are processed within 90 days.[40] Claro was able to build out its cell tower network comparable to that of Digicel within seventeen months of entry (see note 3 to Table 1). Claro's timely build out of cell towers may not be representative of likely experience of new entrants, however, since at least three of the thirteen parish councils have accused Claro of erecting some cell towers without securing the requisite permits from NEPA.[41]

93. In this section, we conclude that new entry is likely to be less timely than past entry due to increased costs associated with building out on higher bands of spectrum as well as stricter enforcement of rules governing NEPA's telecommunications related application process.

3. Likelihood and Sufficiency of Entry

94. The likelihood and sufficiency of effective entry are reduced by factors including (i) demand conditions for mobile phone services; (ii) restrictive business strategies on the part of incumbent providers; and (iii) lax regulatory oversight.

Demand conditions

95. Demand for mobile phone services are such that subscribers' perceived valuation of the services of a given network increases with the number of subscribers connected to the network, all other things held constant.[42]

96. To the extent that Digicel owns at least a 60 percent share of subscription connections, the demand conditions described above places a new entrant at a considerable competitive disadvantage relative to Digicel, reducing the potential for new entrants to earn (origination) revenue from a significant segment of the market.

Restrictive Business Strategies and Lax Regulatory Oversight

97. The tendency for demand conditions to reduce the likelihood of effective entry is reinforced by the existing tariff (pricing) strategy implemented by Digicel and an accommodating regulatory

[40] NEPA, "Telecommunications Planning Guidelines." http://www.nepa.gov.jm/publications/guidelines/telecom/TelecomPlanningGuidelines.pdf (accessed December 1, 2011)

[41] Reported in Arthur Hall, "Parish Councils Clamping down on Unauthorised Claro Cell Towers," *The Daily Gleaner,* February 4, 2009.

[42] Economists typically refer to this phenomenon as "network effects."

environment. In particular, Digicel diverts revenue from two main sources for network operators- call origination and termination services, by implementing a tariff structure which effectively discourages its subscribers from connecting to other networks as well as discourages subscribers on other networks to connect to Digicel's network.

98. Specifically, other networks generate revenue from call termination services when Digicel subscribers call their networks. Digicel limits this source of revenue for other networks in a regulatory environment which permits it to set its cross-net tariffs up to 77 percent higher than comparable on-net tariffs.[43] Contrastingly, LIME charges its subscribers the same tariff for on-net and cross-net calls.

99. To the extent that calls made to other networks are relatively expensive, we conclude that Digicel's cross-net charges effectively discourage subscribers from calling subscribers on other networks, reducing the potential for new entrants to earn (termination) revenue from a significant segment of the market.

100. Further, other networks generate (call origination) revenue from Digicel's subscribers when their subscribers call Digicel's network. Digicel limits this source of revenue for other network by setting termination charges up to $12.00 per minute to complete calls to Digicel's mobile network, more expensive than the $10.00 per minute it charges its subscribers for a comparable call. Issues relating to this impediment are discussed in detail in a Staff Report issued in June 2010.[44]

101. We conclude that the likelihood and sufficiency of effective entry is diminished due to inadequate regulatory oversight which allows Digicel to implement a pricing strategy which diverts origination (respectively, termination) revenue that new entrants would earn from calls made to (respectively, placed from) a significant segment of the market. Specifically, Digicel pricing strategy makes it relatively expensive for its subscribers to call other networks and for other networks to call Digicel's network.

102. Our overall conclusion in this Section is that entry is unlikely to be effective in mitigating the adverse competitive effects which are likely to arise from the challenged transaction.

---

[43] During peak period, Digicel charges its mobile subscribers $17.70 per minute to call mobile subscribers on other networks but only $10.00 per minute to call mobile subscribers on Digicel's network.

[44] Fair Trading Commission and Office of Utilities Regulation, "A Review of Jamaican Telecommunications Sector," August 2, 2007, http://www.jftc.com/Libraries/Industry_ Studies/ Telecommunications_ Liberalization_Impact_Assessment.sflb.ashx.

IX. ASSESSMENT OF COMPETITIVE EFFECTS

A. Analysis Framework

103. To assess whether and the extent to which the effect or likely effect of the challenged transaction is to lessen competition in a market, we undertake a counterfactual analysis. This analysis requires a comparison of the likely competitive environment in a market if the transaction is approved (the 'factual' market) against the likely competitive environment in that market if the transaction is not approved (the 'counterfactual' market).

104. There are two types of potential anticompetitive effects from the challenged transaction: unilateral anticompetitive effects and coordinated interaction anticompetitive effects. Unilateral anticompetitive effects are harm to competition and consumers which a supplier can profitably undertake without coordinating with other suppliers. Coordinated interaction anticompetitive effects, on the other hand, are harm to competition and consumers which are brought about as a result of coordination among suppliers.

105. Anticompetitive effects may take the forms of (i) higher prices; (ii) fewer choices; (iii) low product or customer service quality; and (iv) slower rates of technological innovation or adoption in the factual market, relative to what would have prevailed in the counterfactual market.

106. Our overall conclusions in this section are (i) consumers are likely to be harmed by the challenged transaction by virtue of a $4 billion reduction in consumer surplus annually, on average, and a reduction of another $37 million annually, on average, regarding reduced promotions and value offerings; (ii) incumbent suppliers and prospective entrants are likely to be harmed since the challenged transaction is likely to increase unilateral market power by eliminating a significant competitive constraint for Digicel.

B. The Factual Market

107. The factual market is one in which Digicel assumes full control over the assets and operations of Claro, including allocated spectrum, by way of a transfer of a licence previously issued to Claro.

108. In the foreseeable future, the factual market is likely to differ from the status quo, i.e. the market in existence prior to approval of the challenged transaction, in the following respect:

109. Digicel acquires preferred spectrum. Spectrum is a crucial input in delivering wireless services. As at August 2011, Jamaica managed 252 MHz of allocable spectrum spanning the frequency bands of 850 MHz, 900 MHz, 1800 MHz and 1900 MHz.[45] The lower bands of 850 MHz and 900 MHz are preferred to higher bands because, among other things, cell cites operating on the lower bands cover a wider area than cell sites operating on higher bands. A single cell site operating on the lower bands covers an area of approximately 800 square miles whereas it would take three cell sites operating at 1800 MHz to cover the same area. According to SMA, "…a properly built 1900 MHz system, will work as well as a properly built 850 MHz system, but it will cost significantly more to deploy and operate…"[46] Prior to the transaction, Digicel and Claro were each assigned 21 percent of this spectrum with LIME assigned 13 percent. The unallocated 45 percent of the spectrum spanned the higher bands. As a consequence of the challenged transaction, Digicel acquired 22MHz from the preferred 850 MHz band that was assigned to Claro. By virtue of acquiring the preferred lower bands, Digicel would be able now to expand its operations at a cost, relative to the status quo, which would be significantly lower than the cost which would be incurred by current or future entrants contemplating a comparable expansion using the higher bands.

C. The Counterfactual Market

110. The counterfactual market is the Staff's view of how the market would evolve in the foreseeable future if the challenged transaction was not approved. The competitive environment in this market is the benchmark against which the challenged transaction is assessed.

111. In the foreseeable future, the counterfactual market is likely to differ from the status quo in the following respects:

112. Claro exits the market. One of the important adverse competitive effects of the challenged transaction is that Claro would exit the market in Jamaica and Digicel would exit the markets in El Salvador and Honduras. Digicel's incentive to complete the challenged transaction is outlined later in a section of this report which demonstrates that Claro's presence in Jamaica has been constraining Digicel from exercising market power. While we have not conducted similar analyses for the other two countries subject to the agreement, we can reasonably deduce that América Móvil stands to gain from

[45] Spectrum Management Authority. Spectrum Availability to Provide 4G Services. Letter. August 24, 2011, p.2
[46] SMA. Spectrum Availability to Provide 4G Services. Letter. August 24, 2011, p.2

Digicel's exit from El Salvador and Honduras.[47] The non-approval of the challenged transaction diminishes neither the incentives nor the opportunity to realise this effect through means other than the challenged transaction. Digicel's opportunity to achieve the effect of the challenged transaction arises from the fact that a licence swap spanning the three countries is not the only means through which the effect of the challenged transaction could be achieved. For example, the effect of the challenged transaction could be achieved by Claro surrendering its licence to operate in Jamaica, as opposed to requesting permission to transfer it to Digicel; and Digicel would likewise do the same in El Salvador and Honduras. Admittedly, this alternative means may be less palatable than the challenged transaction in the sense that access to critical assets/input such as 3G advanced technological mobile platform and scarce spectrum, to the extent that it is required, may introduce additional obstacles which do not arise under the challenged transaction.

113. Digicel offers mobile services on only a 2G platform. If Claro exited the market by surrendering its licence, its allocated 52 MHz spectrum would be returned to the pool of the resource allocable by the Spectrum Management Authority. The spectrum would then be available through auction to LIME, Digicel and new entrants. In fact Digicel, LIME and Claro expressed an interest in November 2010 to acquire additional spectrum to expand their operations.[48] It is unlikely that Digicel would be assigned sufficient spectrum to roll out a 3G mobile platform in the foreseeable future to the extent unallocated spectrum is limited and to facilitate such a technological expansion, Digicel would require the entire spectrum that was previously assigned to Claro.

114. Digicel faces competitive constraints from existing and potential rivals. If Digicel operates on only a 2G mobile platform, LIME will have a distinct competitive advantage regarding its capability of delivering 3G mobile services consumers consider to be superior to services capable of being offered on a 2G mobile platform. With Claro's exit releasing 52 MHZ of spectrum, it is likely that Digicel would face additional competitive pressures, relative to the status quo, by the credible threat of new entry or an expansion by LIME.

[47] If América Móvil did not stand to gain from Digicel's exit from El Salvador and Honduras, then it is unlikely that it would have agreed to enter into the challenged transaction in the first place.
[48] Spectrum Management Authority. Spectrum Availability to Provide 4G Services. Letter. August 24, 2011, p.2.

D. Substantial promotional benefits for consumers coincided with Claro's entry

115. The most visible form of customer benefit from competition between Claro and Digicel is the frequent promotions and value offers. Promotions afforded consumers the opportunity to win prizes in the form of call credit, cash, mobile handsets, among others, while value offers provided consumers with the opportunity to access bonus call credit, discounted calling rates and mobile phones. The data reviewed suggest that introduction of value offers on the part of Digicel coincided with the entry of Claro in August 2007, and has steadily intensified since then (Table 2).

Table 2 Consumer Benefits derived from Digicel's Promotions and Value Offers (in $ million)

Promotions and Value Offer	2007	2008	2009	2010	2011*
Drive your Dream	14.5				
Gold Rush		19.2			
Strike it Rich			23.9		
Crazy Money			6.4		
Mega Mini			78.0		
Make the Team				1.7	
Jus Buss				5.8	
Jus Buss II					14.2
Sub-Total	**14.5**	**19.2**	**108.3**	**7.5**	**14.2**
Value Offers**	---	5,288.6	5,144.9	6,146.2	49.3
Total	**14.5**	**5,307.8**	**5,253.2**	**6,153.7**	**63.5**

*As at Mar 31, 2011

**Benefits from value offers are calculated as the improvement (increase) to consumer surplus arising from the reduction in average price during the year. In economics, consumer surplus measures the benefits consumers derive from participating in markets. Specifically, the (price, call time per user) pair at the beginning and end of the respective years are assumed to be two points along a stable linear demand curve and used to estimate the increased consumer surplus per subscriber per quarter. This value is then multiplied by the number of quarters in the respective period and then by the number of subscribers at the end of the year.

116. Specifically, in 2007 Digicel had only one promotion, *Drive your Dream*, which started in July 2007 and lasted for approximately 15 weeks. There were no value offers in 2007. During 2008, Digicel again had one promotion, *Gold Rush*, but introduced at least eight value offers such as *Talk for free*, *Free Sundays*, *free nights* and *$3 after 3 minutes*. Consumer benefits from Digicel peaked in 2009 with three promotions and fifteen value offers such as *Sweet Deal* and *Gimme 5*; and kept apace in 2010

with two promotional offers and ten value offers. The annual benefits of the promotions commencing in the respective years are presented in Table 2.

117. The Table shows that the promotions provided Digicel's subscribers with prizes valued at an estimated $14.5 million in 2007 which was followed up with a promotion with prizes valued at $19.2 million in 2008. Consumer benefits from promotions peaked in 2009 with three promotions with prizes valued at approximately $108.3 million.

118. In addition to the value of prizes from promotions, Digicel offered considerable benefits through discounted call rates and or call credit (airtime) from value offers. For instance, during 2007:Q4, Digicel's subscribers paid, on average, $[redacted] per minute on calls and spent approximately [redacted] minutes making calls.[49] In contrast, during 2008:Q4, the average price paid declined to $[redacted] per minute while the talk time increased to [redacted] minutes. Based on changes in price and minutes spent on calls, we estimate that for each subscriber, the competition stimulated by Claro's entry increased consumer surplus by approximately $683.65 per quarter during 2008. This means that aggregate consumer surplus to Digicel's subscribers during 2008 was approximately $5.3 billion.[50]

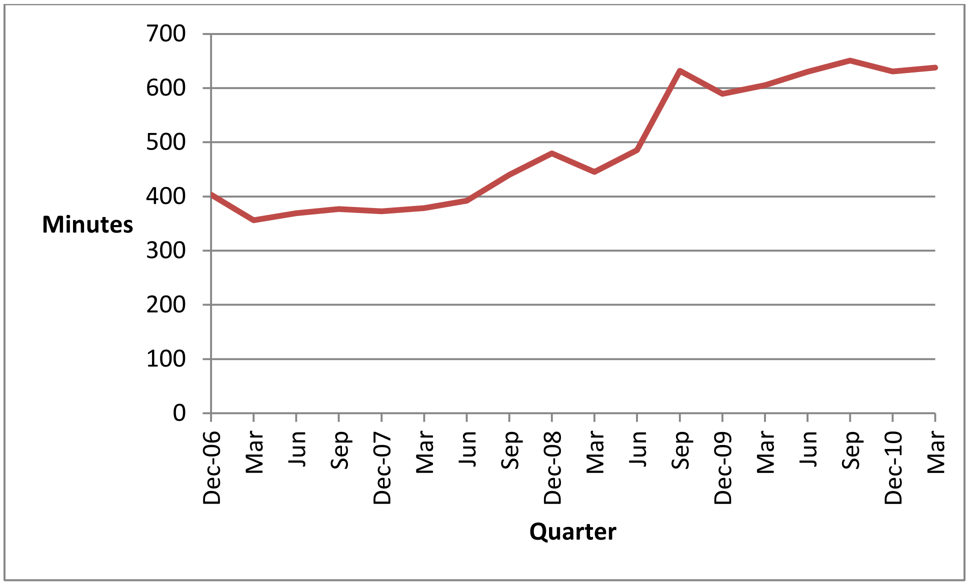
119. The estimated consumer benefits from value offers for 2007 through 2011 are presented in Table 2. It shows that, among other things, benefits were highest during 2010 where subscribers benefitted to the order of $6.1 billion.

120. Digicel's increased promotion and value offers resulted in its subscribers accessing more talk time for less money. Specifically, Figure 1 shows that, on average, prior to Claro's entry in August 2007, Digicel subscribers spent approximately [redacted] minutes ([redacted] hours) on phone calls each quarter. Since September 2007, the average time increased to [redacted] minutes ([redacted] hours).

[49] Average refers to the weighted average price charged by Digicel. Prices are weighted by voice traffic and bonus minutes are implicitly priced at $0.00.

[50] To calculate this annualized aggregate consumer surplus, we multiply the average consumer surplus ($683.65) by Digicel's subscriber base as at Dec 31, 2008 (1,933,949) and the number of quarters (4) in 2008.

Figure 1 Call Traffic per Subscriber (Digicel)

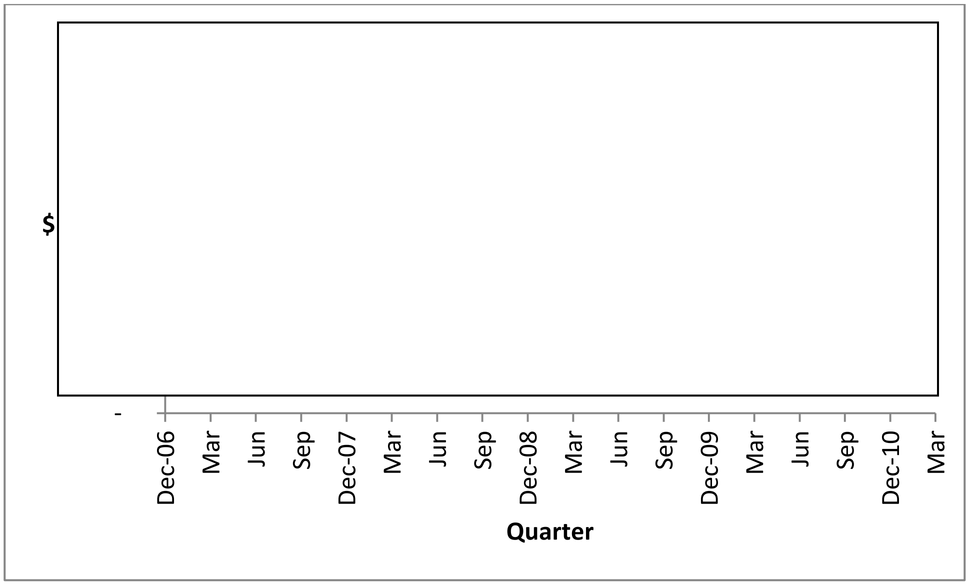


Source: Digicel

121. Further, Figure 2 shows that prior to Claro's entry, consumers spent, on average, $[redacted] per quarter on phone calls. Since September 2007, however, the average expenditure on phone calls declined to $[redacted] per quarter. Therefore even though consumption increased by 39 percent, expenditure declined by 2 percent.

122. Our conclusion is that Claro's participation in the market 2007-2010 resulted in an increased consumer surplus of $4 billion annually, on average, and benefits amounting to another $37 million annually, on average, regarding promotion and value offerings.

Figure 2 Average Revenue per User (ARPU) for Domestic Voice Traffic (Digicel)



Source: Digicel

E. Claro's Participation limited Unilateral Anticompetitive Effects

123. Theory of Competitive Harm: The challenged transaction allows for the market participant with the largest market share, with respect to cell site ownership, to acquire the participant with the second largest market share.[51] The hypothesis of competitive harm is that by acquiring Claro, Digicel will unduly weaken competitive constraints on its conduct by simultaneously (a) eliminating a current rival; and (b) extending its control over a scarce and crucial input, i.e. spectrum, effectively shielding itself from competitive pressure from current and potential entrants. To confirm or refute this hypothesis, we assess whether and the extent to which the challenged transaction has the effect or likely effect of lessening competition substantially in the relevant market, relative to the counterfactual market in the foreseeable future in which the transaction was not approved. The exercise of market power would manifest in the factual market by Digicel raising, maintaining or extending price above the levels that would prevail in the counterfactual market for a sustained period of time.

124. Competitive Effect of Claro's Entry: We assess the competitive pressure Claro has exerted to date by comparing Digicel's pricing strategy prior to and since Claro's entry in August 2007.

[51] As at March 2011, Digicel controlled [redacted] percent while Claro controlled [redacted] percent. See footnote to Table 1 for additional details.

125. Digicel, as is the case for the other service providers, charges a range of prices for its voice service. Prices vary by characteristics such as (i) *time of day*, with calls made during the day typically attracting higher rates than calls made during the night; (ii) *day of the week*, with calls made during weekdays typically attracting higher rates than calls made during the weekend; (iii) *billing method*, with calls made by prepaid subscribers typically more expensive than calls made by postpaid subscribers; and (iv) *terminating network*, with cross-network calls typically more expensive than on-network calls. As at March 2011, Digicel's listed calling rates range from a minimum of $4.00 per minute for prepaid on-net calls to a maximum of $17.75 per minute for international calls.[52] The listed rates were unaltered throughout the period of review.

126. For the purpose of our analysis, we construct an average price as the volume-weighted price of the various voice services consumed by each network's subscribers.[53] We have also estimated the average variable cost (avc) of supplying voice services. These data for Digicel and LIME, along with significant market events during the period, are presented in Figure 3. The Staff requested corresponding data from Claro, but Claro failed to comply with the request.[54]

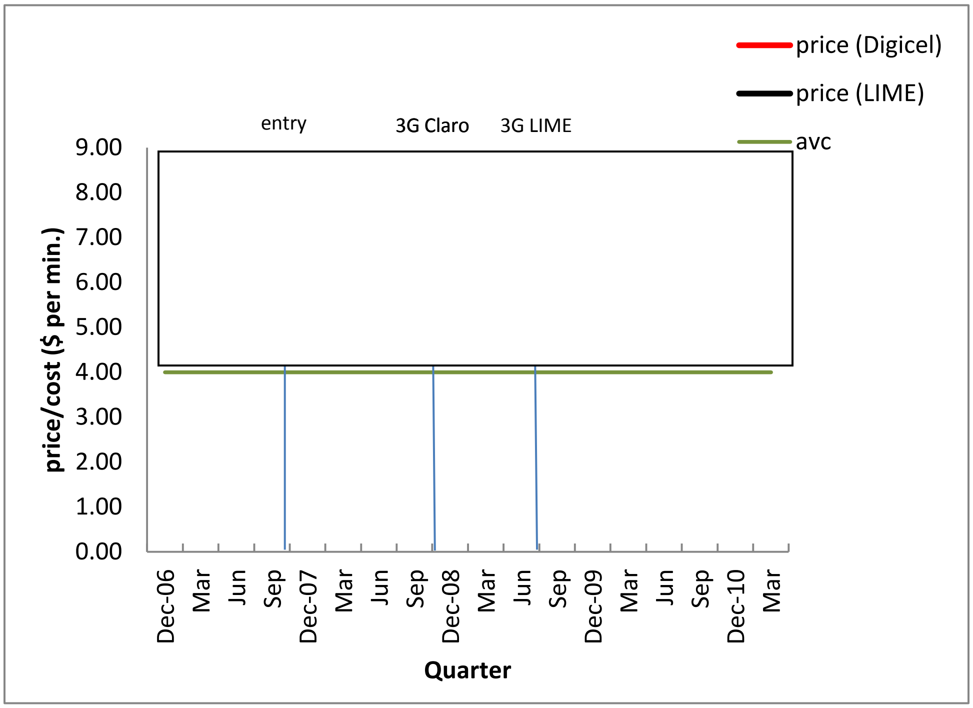
---

[52] Excepting to Cuba where the rate was $90 per minute.

[53] To construct the average price, we divide total revenue from voice services by the volume of domestic calls originating on the respective network. Bonus minutes are implicitly assigned a price of $0.00.

[54] Fair Trading Commission. Challenged Acquisition Agreement between Oceanic Digital (Jamaica) Ltd. and Mossel (Jamaica) Ltd. letter. April 6, 2011.

Figure 3 Trends in Price and Average Variable Costs (AVC) for Voice Services



Sources: Digicel and LIME.

127. The Figure highlights the quarters during which at least three events of competitive significance occurred. In August 2007, América Móvil entered the market by acquiring the licence of Oceanic Digital (Jamaica) Limited. This event is labeled "entry." In October 2008, América Móvil leaped ahead in the technology race by rolling out its third generation (3G) wireless infrastructure and officially rebranded its operation as Claro. This event is labeled "3G Claro." In June 2009, LIME rolled-out its 3G wireless infrastructure. This event is labeled "3G LIME."[55]

128. Economic theory tells us that a profit-maximizing supplier will supply its services only if it expects to recover at least its average variable costs of production.[56] Since the lowest price that

---

[55] Dionne Rose, "LIME 3G hits the market- Roll-out starts in the capital, islandwide coverage to be phased in," *The Daily Gleaner,* June 24, 2009.

[56] Economic theory also tells us that in certain circumstances, a profit-maximizing supplier will subsidize sales of some of its products, and recoup the loss through sales of high-margin products. In markets for multi-sided platforms, such as the telephone industry, it has been shown that a profit-maximizing supplier will subsidize the price to some of customers, to attract high-margin customers. We have no reason to hold the view that Digicel is subsidizing the price of its services.

Digicel and LIME charge is $4.00 per minute, we use this as a conservative estimate of the average variable costs.

Competitive Environment: Pre-Entry

129. The Figure shows that for Digicel's voice services, the average price trended [redacted] during the period preceding Claro's entry. During the pre-entry period, Digicel supplied its services at a price which was, on average, [redacted] percent higher than LIME's price. By way of example, in the quarter ending December 2006 ('2006:Q4'), Digicel's average price was $[redacted] per minute while that of LIME was $[redacted] per minute.

130. The price gap cannot be explained by differences in the costs of providing the services. To this end, a detailed review of the financial statements of both suppliers indicates that Digicel's operating costs [redacted]. A detailed comparison of the operations of LIME and Digicel is presented in *Appendix A*. This implies, therefore, that the difference in price is likely attributable to differences in demand for the services provided by LIME and Digicel. Specifically, subscribers to Digicel's services were less sensitive to price increases than subscribers to LIME's services.

131. The fact that in the pre-entry period Digicel maintained prices above (i) its average variable costs, thereby having the strategic room to lower prices; and (ii) LIME's prices , is consistent with the hypothesis that LIME provided only limited competitive constraints on Digicel's prices during the period prior to Claro's entry.

132. As at December 2006, Digicel exclusively used [redacted] cell sites whilst LIME exclusively used [redacted] sites.[57] As indicated earlier in the report, subscribers consider price and coverage area as the most important factors when selecting mobile service providers. Digicel's coverage, therefore, was likely to have been superior to that of LIME's and seems a plausible explanation as to why consumers were willing to pay [redacted] for Digicel's services. Digicel's investment in greater capacity, [redacted], likely facilitated its exercise of market power during the period prior to Claro's entry.

[57] To the extent that LIME and Digicel had co-location agreements, both providers used cell sites other than those they owned.

Competitive Environment: Post-Entry

133. During the post-entry period, we observe a closing of the price gap [redacted] coincided with Claro's entry in 2007:Q3. For reasons identified later in this report, however, the Staff concludes that Claro's entry caused Digicel to lower its prices rather than these two events being merely coincidental. Digicel's average price during the post-entry period declined sharply when Claro rolled-out its 3G wireless infrastructure in October 2008 and declined [redacted] when LIME rolled-out its 3G wireless infrastructure in June 2009. The Staff notes that the observed steep reduction in Digicel's price during 2009:Q3 may be attributable to events other than the roll out of LIME's 3G technology. For example, Digicel may have steeply discounted the price of its mobile services in response to what we conjecture to be a sharp decline in Claro's price during the post-entry period. Without Claro's data, however, we are unable to confirm this conjecture. It is useful to note that Digicel's average price during the post-entry period declined and eventually stabilized at a price that is only slightly higher than $4.00 per minute, which we conservatively estimate to be the average variable cost production.

134. Digicel's observed responses following (i) Claro's entry, (ii) Claro's roll-out of 3G mobile technology and (iii) LIME's roll-out of 3G mobile technology are consistent with the predictions of economic theories of dynamic competitive interaction among incumbent suppliers and recent entrants.[58]

135. A common thread among the various theories is that competition takes place over two distinct periods of strategic interaction: (i) in the long run where the incumbent and potential entrants commit to an observable level of investments, in say production, technology or supply capacity; and (ii) in the short run during which, for a given level of investments, suppliers engage in either price or quantity (that is call volume) competition.[59]

A. *Long run competitive interaction (investment-based competition):*

136. There are two dimensions in the long run investment strategies employed by suppliers. The first is cell site network and the other is technological innovation. Digicel, LIME and Claro undertook

---

[58] For a comprehensive discussion on the various economic theories of dynamic competitive entry see J. Tirole, "*The Theory of Industrial Organization" (*Cambridge: The MIT Press, 1988), Chapter 8.

[59] The distinction between long run and short run competition has to deal with the relative ease with which price and capacity can be altered. Price competition is classified as short run because suppliers are able to adjust prices relatively sooner than capacity.

massive investments shortly after Claro's entry. Digicel took the lead with regard to cell site network whereas LIME and Claro were ahead of Digicel, regarding the technological capabilities.

137. Claro's committed investments took the form of cell sites and upgraded wireless infrastructure. In October 2008, just over one year of entry, Claro rolled out its 3G mobile network, the first of its kind in Jamaica.[60] At that time, Claro announced that its more than US$ 300 million investment in the new technology would allow it to offer innovative mobile phone services which cannot be offered on a 2G network; such services includes video-calling. Also, Claro announced its intention to install an additional 135 cell sites by December 2008, which would have increased its network of cell sites from 475 to 610.[61] In addition to its cell sites, Claro extended the number of accessible cell sites by entering into co-location agreements with the other mobile service providers. Claro's investment in cell sites made its coverage comparable to that of Digicel (see Table 1).

138. LIME's committed investments took the form of cell sites and upgraded wireless infrastructure. In June 2009, LIME rolled out its 3G wireless infrastructure in Kingston only, with a plan to phase in the technology in other parishes within 12-18 months. LIME reported then that rolling out the technology in Kingston alone represented a US$ 40 million investment.[62] LIME reportedly spent $3 billion in 2008 for its 3G wireless infrastructure and in October 2009 announced its commitment to spending $670 million to install 70 cell sites in 12 parishes outside of Kingston by March 2011.[63] In addition to its cell sites, LIME extended the number of accessible cell sites by entering into co-location agreements with the other mobile service providers.

139. Digicel's committed investments took the form of expanding its cell site network and establishing a fixed line infrastructure (wi-max). Of the [redacted] cell sites owned by Digicel as at March 2011, approximately [redacted] were installed after December 2006. In addition to its cell sites, Digicel extended its coverage by entering into co-location agreements with Claro ([redacted] towers) and LIME ([redacted] towers), thereby gaining access to [redacted] sites over and beyond the ones they owned. Furthermore, in August 2010 Digicel launched its 4G platform for fixed-line services (including broadband Internet) for residential consumers. The technology was made available to business consumers in 2007.[64]

---

[60] LIME and Digicel were then still operating their mobile services using 2G technology.
[61] John Meyers, "Claro Jamaica open for business," *The Daily Gleaner*, October 11, 2008.
[62] Rose, Dionne "LIME 3G hits the market- roll-out starts in the capital city, islandwide coverage to be phased in," *The Daily Gleaner*, Wednesday June 24, 2009.
[63] "LIME Pours $670 million into cell sites" *The Sunday Gleaner*, October 4, 2009.
[64] Sheil, Ross "Digicel launches wi-max internet in Jamaica," *The Jamaica Observer*, Friday August 20, 2010.

140. Despite upgrading its fixed-line infrastructure, Digicel failed to make commensurate investment to upgrade its 2G mobile infrastructure. Consequently, Digicel was placed at a competitive disadvantage when Claro first, then LIME, upgraded to 3G technology. This disadvantage stemmed from the fact that a 3G wireless infrastructure can deliver a host of mobile phone services that cannot be delivered on a 2G infrastructure. Digicel therefore lacked the capacity to supply services which would appeal to “tech savvy subscribers,” which is likely to generate a significant segment of market demand since 51 percent of telecommunications subscribers are less than 35 years of age.[65]

141. The [redacted] decline in Digicel’s prices which followed Claro’s and LIME’s roll-out of 3G infrastructure (see Figure 3) is consistent with our argument that Digicel was placed at a competitive disadvantage by its failure to invest in a similar upgrade to its mobile infrastructure.

B. Short run competitive interaction (price-based competition)

142. We now discuss the competitive dynamics in the market based on adjustment of prices. Our assessment of the competitive dynamics is based on price adjustments by LIME and Digicel only as Claro failed to submit corresponding data. While the Staff’s assessment would have benefitted from Claro’s data, the unavailability of Claro’s data did not preclude the Staff from discerning the nature of competition during the period of analysis.

143. Specifically, Figure 3 shows that prior to Claro’s entry, Digicel’s voice service was being offered at a significant premium over LIME’s voice services. In fact during the December quarter of 2006, Digicel earned approximately $[redacted] per minute more than LIME for originating domestic calls. During the September quarter of 2007, this premium increased to $[redacted] per minute, as LIME lowered its average price by [redacted], presumably as a response to Claro’s entry during that quarter. This premium persisted until the September quarter of 2009, when Digicel’s average price, on average, was $[redacted] per minute which was 41 cents lower than that of LIME. This closing of the price gap followed the roll-out of LIME’s 3G services during the preceding quarter. Since then, Digicel’s average price declined steadily to $[redacted] per minute. We have seen from a 2006 Consumer Survey that the two most significant considerations for subscribers are price and coverage. The introduction of 3G mobile services in the market in 2008, however, resulted in technological capabilities becoming another consideration for consumers. Since Claro and LIME had superior wireless technology, subscribers became more sensitive to Digicel’s (premium) prices. Accordingly, Digicel had the proper incentives to lower its prices, by way of

[65] Market Research Services Limited, *Evaluation of Telecommunication Services in Jamaica* (Kingston: Market Research Services Limited, 2006).

promotional value offerings, to encourage subscribers to remain on its network. The [redacted] reduction in Digicel's average price may be interpreted as compensation to its subscribers for consuming the services offered on a technologically inferior mobile network.

144. At the time Claro rolled-out the 3G network, it announced its intention to introduce call rates which were 40 percent lower than the existing rates offered by rival mobile networks.[66] Since the announcement, Digicel's average price gradually declined by 36.4 percent up to 2011:Q1, moving from $[redacted] to $[redacted] per minute (Figure 3).[67] Digicel's strategies subsequent to Claro's announcement support our claim that competition in the short run is based on, i.e. reflected by, prices.

145. Figure 3 provides an insight into the challenges that faced Digicel and which the challenged transaction would likely resolve. Competition in the market was stimulated by at least three events, as evidenced by observed downward trends in Digicel's prices. The three events were (i) Claro's entry in August 2007; (ii) Claro's roll-out of its 3G network in October 2008; and (iii) LIME's roll-out of its 3G mobile network in June 2009. It is also significant that Digicel has yet to roll-out a 3G wireless infrastructure.

146. We have argued that the various promotions and value offers were the primary means through which Digicel has competed in the short run in an increasingly competitive market. Figure 3 shows that since the June quarter of 2010, however, Digicel's prices have stabilized just above the estimated average variable costs.

147. This means that further reductions in prices, through more aggressive value offers, are unlikely to remain a feasible option for Digicel in the long run.[68]

148. It is reasonable to argue that the challenged transaction would have at least two significant effects: (i) it would eliminate an effective competitor in Claro, thereby allowing Digicel the opportunity to increase prices by way of, for example, less reliance on value offers; and (ii) it would allow Digicel to acquire 3G wireless technology in short order, and thereby eliminate what is likely to be

---

[66] John Meyers, "Claro Jamaica open for business," *The Daily Gleaner*, October 11, 2008.

[67] As indicated earlier in the report, the reduction in rates took the form of offerings of bonus minutes rather than changes in the listed call rates.

[68] Pricing close to variable costs for any extensive period of time would be an infeasible option for Digicel because Jamaica is a much more important profit centre to Digicel than it is to Claro. Specifically, Digicel Jamaica generates approximately one third of revenues generated by the Digicel Group globally (Laverne Clarke, "Debt weighs on Digicel- Losses at US $74m, but operating income, revenues strong," *The Daily Gleaner,* October 8, 2008.). Contrastingly, Jamaica is less important to América Móvil since the less than 1 million subscribers in Jamaica represents only a negligible portion of 231 million wireless subscribers globally (Ian Mansfield, "American Movil profits jump up on lower debt financing costs," *Cellular News,* May 3, 2011.).

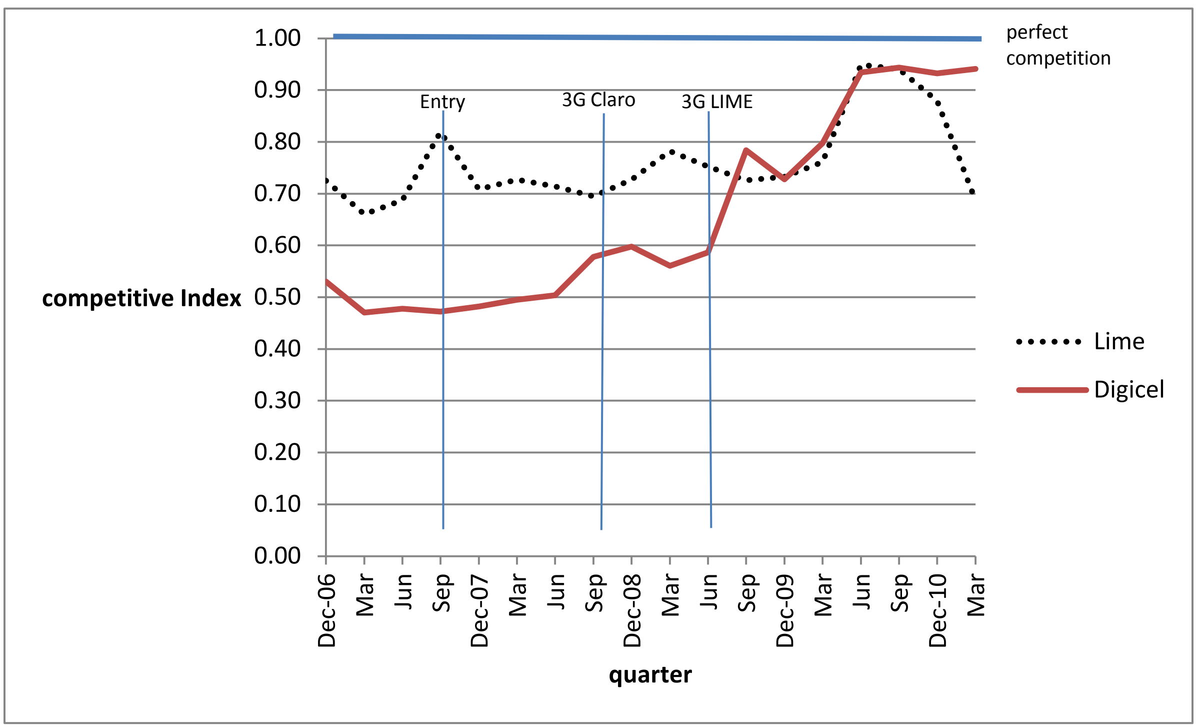
the only discernible competitive advantage that LIME has over Digicel. This would most likely restore the market to a state which is comparable to that which existed prior to Claro's entry.

149. To reinforce the merits of the argument that Claro exerted competitive pressure on Digicel, we review the market using various price and non-price indicators of competitiveness: (i) gross profit margins, i.e. the difference between price and cost; and (ii) output.

Gross Profit Margins

150. The relationship between cost and price is an indicator of competitiveness. As markets become more competitive, prices tend to fall closer to costs. To measure changes in the competitiveness in the market, we construct an index by dividing average variable cost by the price. The index increases as the market becomes more competitive. In fact the index attains the maximum value of 1.00 under the perfectly competitive market structure. The results are depicted for Digicel and LIME in Figure 4.

Figure 4 Competitive Pricing Index for Digicel and LIME



151. The Figure shows that, prior to the June quarter of 2007, Digicel's voice services were less competitively priced than LIME's services. Modest improvement to Digicel's competitiveness was observed, however, when Claro entered the market in August 2007, and accelerated when Claro rolled-

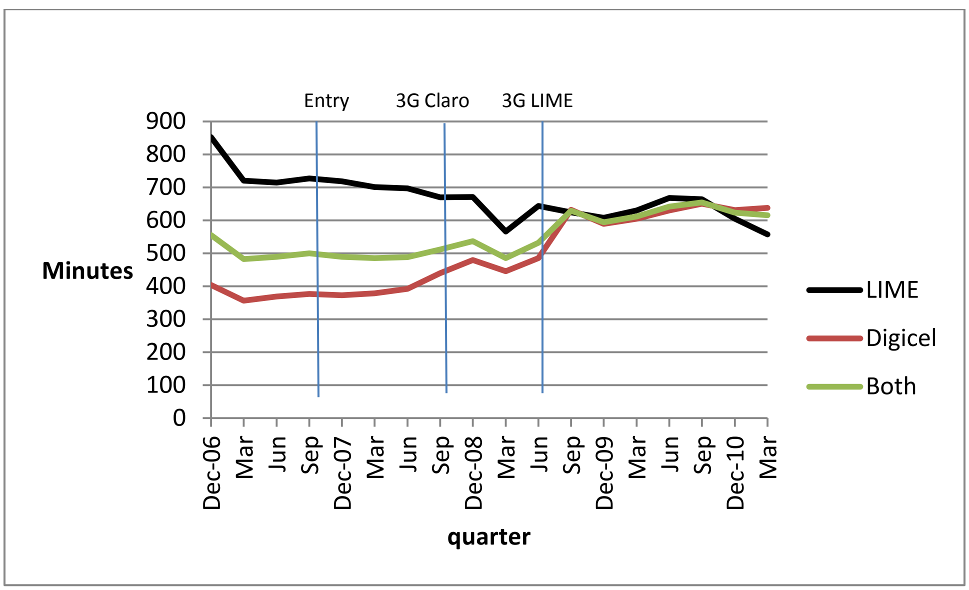
out its 3G wireless technology early October 2008. The sharpest jump in the competitiveness of Digicel's pricing was observed in the September quarter of 2009, following LIME's roll-out of its 3G wireless services.

152. The one year period ending September 2010 was the most competitive period in the market since the December quarter of 2006. This as the average price for LIME and Digicel both trended "neck and neck" increasingly closer to the competitive benchmark. This implies that the advantage that Digicel hitherto had over LIME, which allowed it to profitably sustain a price above LIME's price, was neutralized with the roll-out of LIME's 3G wireless infrastructure. Digicel's inadequate investment, i.e. its failure to roll-out a 3G wireless platform, placed it at a competitive disadvantage in the short run. Since the September quarter of 2010, Digicel has maintained its highly competitive prices, despite a slight fall off in the competitiveness of LIME's prices.

<u>Output</u>

153. An increase in an industry's advertising expenditure and output levels is consistent with markets becoming more competitive. The trend in output, with respect to voice traffic, is presented in Figure 5.

Figure 5 Average Minutes per User



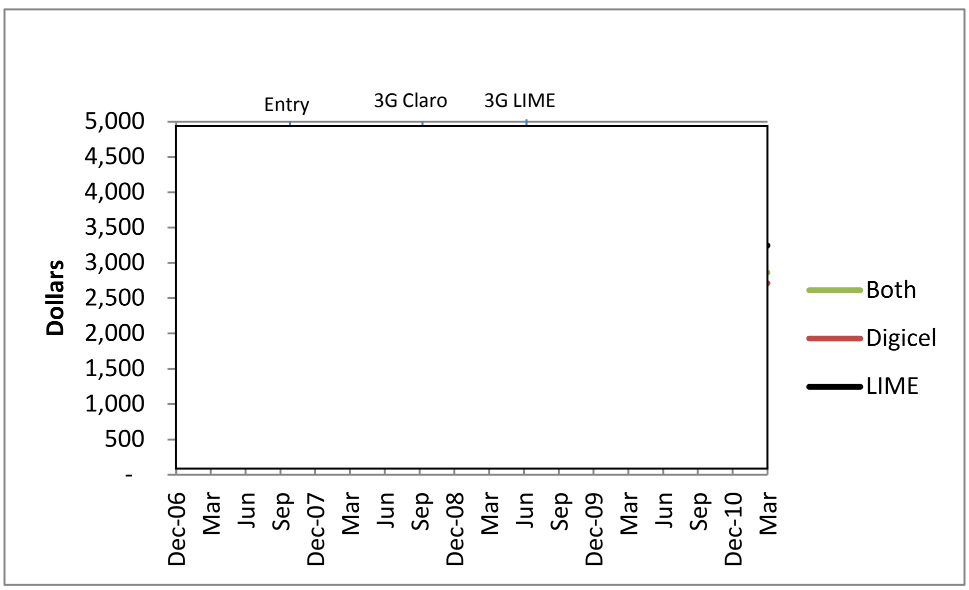
154. Figure 5 shows that, on average, the amount of time consumed in voice services gradually increased over the period; this is consistent with the hypothesis that the market was being

directed by the forces of competition. In support of this point, observe that prior to Claro's entry, subscribers on LIME's network spent considerably more time on voice services than subscribers on Digicel's network; this is not surprising given that LIME's prices, on average, were [redacted] lower ([redacted] percent) than Digicel's prices (see Figure 3).

155. The increase in call volume per subscriber has been due solely to the increased consumption by Digicel's subscribers. The increased traffic on Digicel's network is due to various promotions and value offers from Digicel, and not due to any exogenous increase in the demand for Digicel's services *per se*. Specifically, Digicel's various promotions and value offers, which commenced in the March quarter of 2008, precipitated a [redacted] percent expansion in average time spent on calls on Digicel's network. Contrastingly, call volume on LIME's network, on average, contracted by [redacted] during the corresponding period despite the fact that throughout most of this period, LIME's services were cheaper (see Figure 4).

156. To properly interpret this narrowing of the "talk" gap, we review the average revenue per user (ARPU). The information is summarized in Figure 6.

Figure 6 Average Revenue per User (ARPU) in Dollars



Source: Digicel and LIME.

157. The Figure shows that, on average, the aggregated average revenue per subscriber declined over the period; this, again, is consistent with the hypothesis that the market was being directed by the forces of competition. The reduction in ARPU is driven primarily by LIME [redacted]

[redacted], even though the average minutes per user expanded (see Figure 5), collaborates our earlier inference that the various promotions and value offers is best described as a "compensation," rather than reflective of increased demand, necessitated by the fact that Digicel occupied the least favorable position in the mobile network technology race.

158. That is, Claro's competitive positioning provided Digicel with the proper incentives to undertake the value offers since doing otherwise may have resulted in substantial switching by consumers wishing to take advantage of the services delivered on the superior 3G mobile infrastructure rather than those offered on the 2G infrastructure. Observe, for instance, that there was a narrowing of the gap in time spent making calls shortly after Claro rolled-out its 3G infrastructure in October 2008 and then the gap disappeared immediately after LIME rolled-out its 3G infrastructure in June 2009.

159. The fact that Digicel continually increased its share of domestic call volume, even after Claro's entry, seemingly contradicts our result that Claro exerted competitive pressure on Digicel. That is, it may seem puzzling that Claro, with [redacted] percent of call volume, plausibly could exert competitive pressure on Digicel which held as much as [redacted] percent. This puzzle is resolved by recognizing that the competitive pressure was exerted on the basis of Claro's long run committed investments (i.e. (i) capacity to supply the entire market; and (ii) technological innovation), rather than the actual portion of the market it served (i.e. share of call volume). Further, the competitive pressure was manifested in reduced promotional offers rather than an increase in calling rates.

160. For the purpose of assessing whether Claro represented a competitive constraint, two results emerge from preceding discussion. Firstly, prior to Claro's entry, LIME's participation in the market was insufficient to constrain Digicel from exercising market power. Secondly, Claro's entry provided Digicel with the proper incentives to lower and maintain prices closer to competitive levels.

161. These results jointly support the hypothesis that Claro's participation in the relevant market was effective in mitigating if not averting the exercise of market power on the part of Digicel. We conclude, therefore, that the absence of a credible significant competitive constraint in the factual market, such as the one provided by Claro, is likely to lead to the exercise of market power through unilateral anticompetitive effects.

F. Coordinated Effects

162. We have no information to suggest that the challenged transaction is likely to make the market more conducive to coordinated conduct on the part of Digicel and LIME.

Conclusion

163. Using the benefits to consumers arising from Claro's participation in the market during the period August 2007 through March 2010 as a proxy for the likely loss consumers would experience in the factual market where the competitive constraint is absent, then our overall conclusion in this Section is that the challenged transaction is likely to substantially lessen competition in the factual market, relative to the counterfactual market, by (i) reducing consumer surplus by some $4 billion annually, on average; and (ii) unduly restricting the opportunities (availability of preferred spectrum) for Digicel to face competitive constraint.

X. EFFECIENCIES

164. One obvious benefit to Digicel from the challenged transaction is that Digicel would enhance its mobile service offerings by acquiring a more technologically superior mobile network, relative to its current network. At present, Digicel's mobile services are delivered via 2G wireless technology. Claro's mobile services operate on a 3G infrastructure. This technological upgrade is credited as an acquisition specific efficiency, however, since Digicel could acquire the technology by means less harmful to competition, such as building-out its own 3G wireless infrastructure. Indeed, this was the way in which Digicel acquired its 4G fixed services network (wi-max).

165. To date, Digicel is yet to announce any plans to roll-out 3G wireless infrastructure, independent of the challenged transaction. Based on discussions earlier in the report, the process is likely to take at least one year and an investment amounting to at least US$60 million. It is reasonable to conclude that through this transaction, Digicel would acquire a 3G wireless infrastructure sooner than they could otherwise have done. In this sense, the earlier adoption of 3G technology is reasonably counted as a transaction specific efficiency. That is, the transaction would allow Digicel's subscribers the opportunity to access 3G mobile services sooner than they could otherwise.

166. Our overall conclusion in this Section is that the likely gains from the transaction-specific acquisition are likely to be dwarfed by the anticompetitive effects which are likely to result from the transaction. Specifically, the consumer surplus which is likely to arise from (i) the highly competitive pricing (that is improved allocative efficiency) observed in the two year period preceding the challenged transaction is likely to exceed the likely surplus to be gained from Digicel's earlier adoption of 3G technology, especially since the 3G technology is available from LIME.

XI. EXITING ASSETS

167. An acquisition is unlikely to enhance market power if the imminent failure of the enterprise being acquired would have led to the assets of that enterprise leaving the relevant market. The Staff is aware of claims that Claro would have exited the market even if the transaction was not approved. Such claims are generally not credited unless it is shown that, among other things, the acquired enterprise made credible efforts to secure reasonable alternative offers to keep its assets in the market in a manner which pose a less severe threat to competition than does the challenged transaction (*US Merger Guidelines*).

168. None of the information reviewed by the Staff suggests that Claro was a failing enterprise. Further, none of the information reviewed by the Staff suggests that Claro attempted to dispose of its assets in the relevant market through means other than the challenged transaction.

169. Our overall conclusion in this Section is that claims that Claro would have exited the market, even if substantiated, would not alter our position that the challenged transaction is likely to substantially lessening competition in the relevant market.

XII. REMEDIES

170. Digicel's acquisition of Claro is likely to substantially lessen competition in the voice and text messaging service market in Jamaica. Further, the efficiencies to be gained from the challenged transaction are unlikely to offset the anticompetitive effects. For this reason, we recommend that the challenged transaction be blocked.

171. Given that Claro has the incentive to exit the market even if the challenged acquisition is not approved, we make the following additional recommendations, which are important in safeguarding competition and are crucial to the continued functioning of the market:

- Mechanisms must be put in place to lower the impediment in having islandwide coverage. This could be effected, for example, by making co-location agreements mandatory and regulating the rates, terms and conditions pursuant to such agreements.
- Mechanisms must be put in place to mitigate the advantages that the network with the most subscribers have over networks with fewer subscribers. This could be accomplished by safeguarding competition among networks. By way of example, interconnection rates for every network should be regulated.
- Claro's customers should be released from any contractual obligations to Claro, thereby allowing them to choose their preferred provider.
- Mechanisms should be put in place to ensure that technological advancements are introduced into the market within a reasonable time frame.

APPENDIX A: Market Shares and Concentration Levels

172. The market share and concentration, based on subscribers, voice traffic and cell sites, are presented in Table A1.

Table A1 Market Share and Concentration

	Market Share (in %) based on…		
	…subscriber[1]	*…voice traffic*[2]	*…cell sites*[3]
Digicel LIME Claro	[redacted]	[redacted]	[redacted]
TOTAL[4]	**99.5**	**99.4**	**100.0**
HHI	4,747	4,666	3,647
change in HHI	[redacted]	[redacted]	[redacted]

Notes: (1) Subscriber base as at June 30, 2009. Source: Office of Utilities Regulation.
(2) Voice traffic measured by the volume of domestic calls originating on the respective networks during the quarter Apr-Jun 2009. Source: Office of Utilities Regulation.
(3) Cell site measures the number of cell sites owned by the respective networks. Sources: Cell site data for Digicel and LIME were reported by the respective providers as at March 2011. Cell site data for Claro are current as at Dec 2008 and based solely on reports carried in local a newspaper (Myers, John "Claro Jamaica Open for Business," *The Daily Gleaner*, Saturday, October 11, 2008).
(4) The other voice suppliers are excluded from the analysis because their insignificant market share would affect neither the qualitative nor quantitative results.

173. The relative size of the three suppliers varies according to the basis upon which size is measured. Table A1 shows that Digicel is [redacted] as large as its main rivals if subscriber base is used to measure size. Specifically, the table shows that Digicel has approximately [redacted] percent of subscribers. When cell site ownership and voice traffic are used to measure size, however, Digicel's size is comparable to that of the next largest rival. Specifically, Digicel controlling [redacted] percent of cell sites with Claro controlling [redacted] percent. Similarly, Digicel controls [redacted] percent of voice traffic with LIME controlling [redacted] percent. For reasons highlighted in this report, cell site ownership which is a measure of an enterprise's capacity to supply the market and a factor of consumer demand, is the most appropriate measure of market size for the purpose of assessing the competitive effects of the challenged transaction. The Staff is aware of instruments such as co-location and lease agreements which effectively serve to mitigate capacity constraints which would otherwise be binding on enterprises which own only a few cell sites. To the extent that the duration of such instruments depends on the

discretion of owners, the availability of these instruments does not alter our assertion that cell site ownership is the most appropriate measure of size for the purpose of analyzing competitive effects.

174. Notwithstanding the sensitivity of market share distribution to the measure of size, we have a robust conclusion that the market is highly concentrated and the merger would increase concentration levels by at least 300 points. Specifically, the Table shows that the calculated HHI under the alternative measure each exceeds the 2,500 threshold indicating that the market is highly concentrated.[69] Further the acquisition would increase the concentration index by at least 346 points, above the suggested threshold change that requires further scrutiny for adverse competitive effects.

175. We conclude, therefore, that the challenged transaction raises significant competitive concerns and warrants further scrutiny as it would cause market concentration levels to increase by more than 200 points.

[69] The HHI is calculated by squaring the market share of each participant and then summing them. A market in which HHI exceeds 2,500 points is considered highly concentrated; between 1,500 and 2,500 points suggests a moderately concentrated market and less than 1,500 points reflects an unconcentrated market.

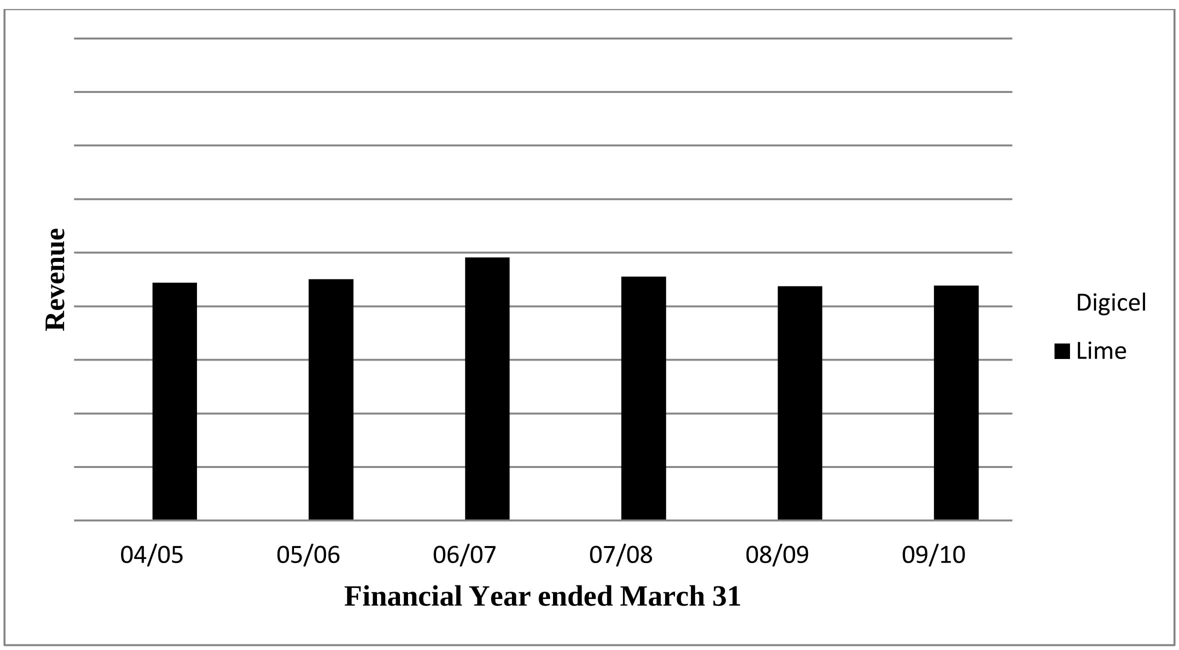
APPENDIX B: Assessment of Financial Performance of LIME and Digicel

174. To assess whether LIME has the capability of posing a significant competition constraint should Claro exit the market we review the performance of both LIME and Digicel over the 6 year period 2005 to 2010. Specifically, we examined the revenue, profitability, how efficiently their financial resources are used and the level of advertising and promotional expenditure.

175. Over the period, Digicel's revenue [redacted], while LIME's revenue declined by 1.3%, thereby resulting in the revenue differential between the two entities widening [redacted]. (See Figure 7).

176. [redacted]. [redacted], LIME's revenue has remained at almost the same level with an average of approximately $23 million. There was a marginal increase between 2006 and 2007, then it reverted to its previous level in 2008.

Figure 7 Comparison of Digicel's Revenue to LIME's Revenue: 2005 - 2010



177. [redacted]. [redacted]

[redacted]. Thereafter both entities recorded reduced growth rates. This reduction coincides with the entry of Claro. See Table B1.

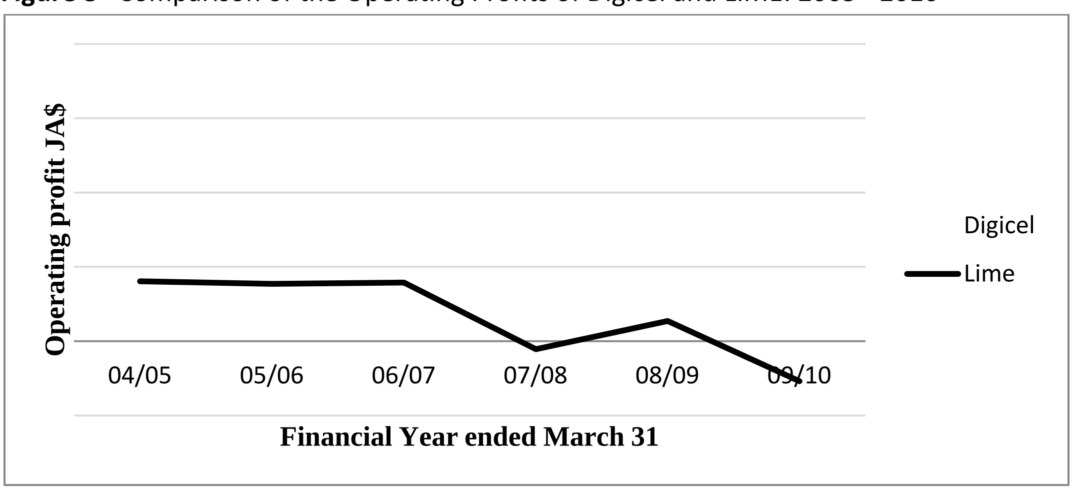
Table B1 Percentage growth rate of revenue

	Financial Year				
	05 – 06	06 – 07	07 – 08	08 – 09	09 – 10
Digicel	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LIME	1.45	9.05	-7.31	-3.97	0.21

178. Figure 8 shows a comparison of the operating profits of Digicel and LIME over the period 2005 to 2010. Digicel's operating profit was, on average, [redacted]. [redacted], LIME's operating profit has declined from J$4 billion in 2005 to a operating loss of J$2.7 billion in 2010. [redacted]. LIME's operating profit remained virtually constant over the period 2005-2007; drastically declined over the period 2007-2008; and marginally increased over the period 2008-2009.

179. In fact, over the 6-year period LIME recorded operating losses for the years ended in 2008 and 2010.[70] It is to be noted that for the year ended March 2010, LIME recorded additional depreciation and obsolescence charges of J$3.8 billion as part of its continuing review of useful lives of assets and its continuing transformation of its network.

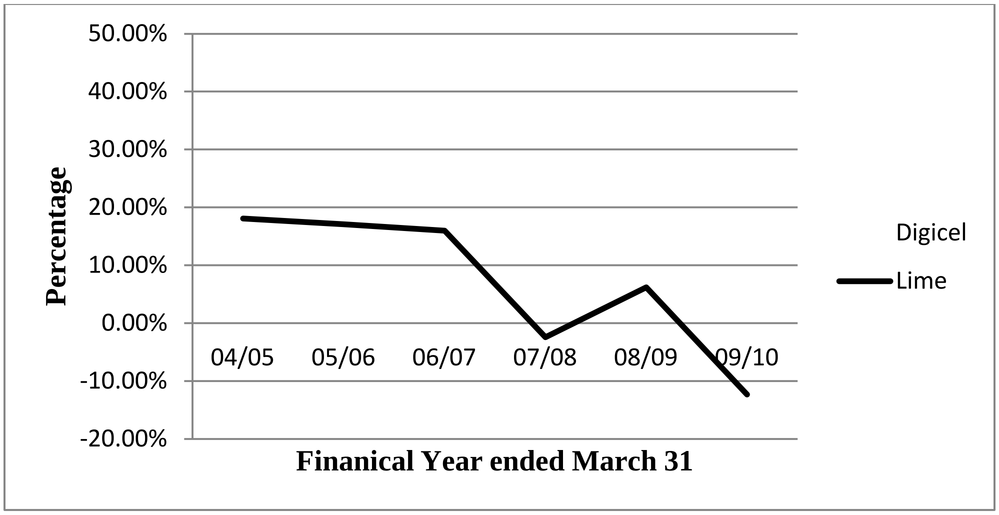
Figure 8 Comparison of the Operating Profits of Digicel and LIME: 2005 - 2010



[70] According to Cable & Wireless Jamaica Annual Report 2008, "Gross Margin of $13.275 million or 58% fell by 17% compared with the same period last year, as a result of the decline in national fixed line revenue of $1.533 million, higher mobile cost of sales as a result of increased handset subsidies due to competitive reasons, and a decrease in international gross margin of $389 million, as a result of increased competition from wireless carriers."

180. Digicel's ratio of operating profit to revenue ranges between [redacted]% and [redacted]% over the 6-year period.[71] For that same period LIME's ratio declined from a high of 18% in 2005 to a low of negative 12.3% in 2010.[72] See Figure 9 below.

Figure 9 Comparison of the Ratios of Operating Profit to Revenue: 2005 - 2010



181. The financial statements show that Digicel [redacted]. On average [redacted] on general and administrative expense. However [redacted].

182. [redacted]. [redacted]; [redacted].

183. [redacted]. [redacted]. [redacted]. [redacted].

[71] Excluding Other Operating Income, operating profit as a percent of revenue ranges from a low of 27.74% in 2005 to a high of 33% in 2008.

[72] Excluding additional depreciation and obsolescence charges of J$3.8 billion in 2010, operating profit is 5.11% of revenue.

Figure 10 General and Administration Expenses as Percent of Revenue: 2005-2010

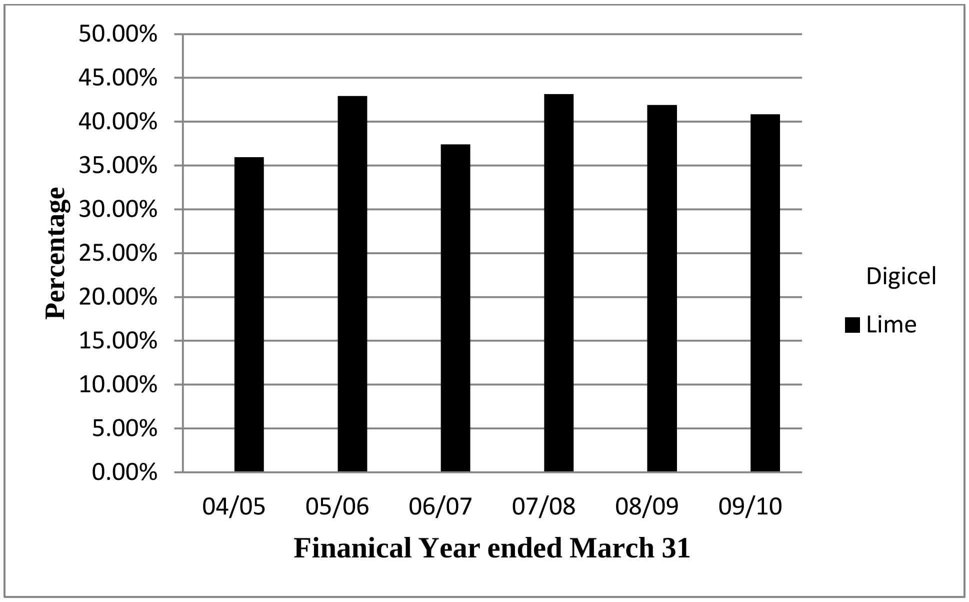
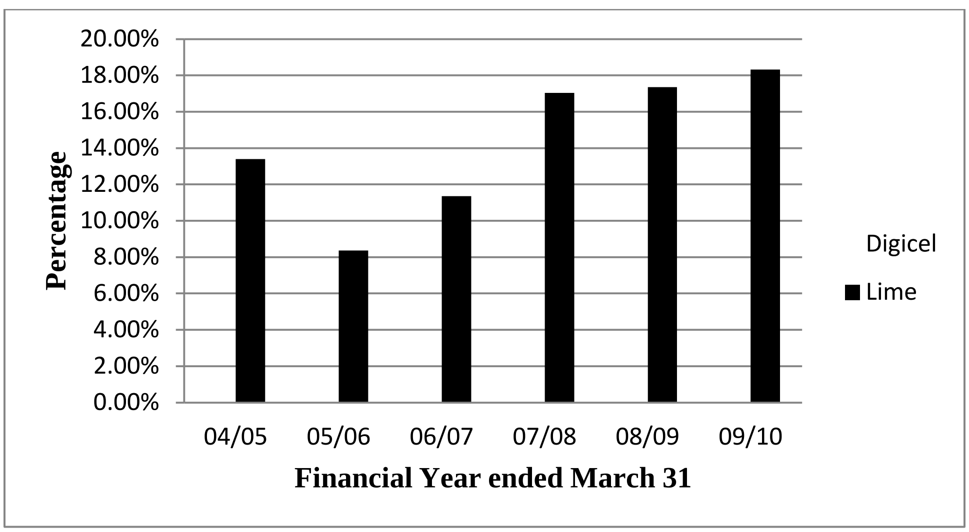


Figure 11 Selling and Distribution Expense as Percent of Revenue: 2005-2010



184. On average LIME spends [redacted] than Digicel on advertising while Digicel spends [redacted] than LIME on sponsorships. From 2008 to 2009 [redacted].

185. [redacted].

(See Figure 12)

Figure 12 Sponsorship & Advertising Expenditure: 2007 - 2011