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Competition Policy under Laissez-Faireism: Market Power and its Treatment in Hong Kong

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Abstract. The paper describes the current competition policy framework in Hong Kong: how it came into existence, what business practices are prohibited, and how the enforcement system works. Recent cases in the telecommunications industry are used to illustrate the sectoral approach, a unique feature of Hong Kong's competition policy. We argue that a sectoral approach faces two fundamental drawbacks. First, due to having different "rules of the game" for different sectors, the allocation of resources may be distorted in the long run. Second, since the relevant regulatory agencies perform dual roles both as competition policy enforcer and as traditional regulator of natural monopolies, the impartiality of their competition decisions may not be credibly conveyed to the public. We also address other specific problems associated with the sectoral approach, such as the exclusion of structural issues, narrow coverage of sectors, and the lack of public enforcement. We conclude that an overall competition law can better promote competition and economic efficiency in Hong Kong.

Key words: Competition policy, laissez faire, sectoral approach.

JEL Classifications: K21, L4, L5.

I. Introduction

There has been a general impression that Hong Kong is one of the most free market economies in the world. For more than half a century, the Hong Kong government has adopted a positive non-intervention policy, a philosophy that has dominated almost every aspect of its policy making. Laissez faire has been treated with great respect, and market forces have been regarded as the best way of allocating resources. The government seldom, if ever, attempts to fine-tune the level of macroeconomic activities, and has continuously fought to keep intervention into

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the market system at a minimum. However, the general impression is not entirely true. The government has monopolistic control over all land, the vital resource of Hong Kong. Through land sales and zoning policies, the government can exercise significant influence over business activities.

It is also generally believed that the Hong Kong economy is highly competitive. While Hong Kong is truly competitive in international markets in terms of exports and the ability to attract foreign investment, this competitiveness does not mean, nor does it ensure, that competition exists among firms in domestic markets. In service sectors where import substitution is not applicable, monopolistic markets can still exist in open economies. In the earlier days under British rule, there were no government-owned businesses (except the railways, water works, and postal services), but monopolies did exist with the blessing of the government in favor of British companies such as Cable and Wireless (in telecommunications) and Cathay Pacific (in airlines). These companies were labeled as "benign" monopolists. The Hong Kong & Shanghai Bank was given the status of a quasi central bank with some privileges such as the authority to issue money. Preferences were also granted to British insurance companies, securities intermediaries and legal firms.[1] An explicit interest rate cartel on deposit accounts among licensed banks existed for over two decades before July 2001, when it was ended by the government. There was, in fact, never a level-playing field in many of the non-tradable sectors in Hong Kong.

For a long time, the Hong Kong government never considered the lack of competition in some sectors to be a problem. It was believed that monopolists had important purposes to serve. The public has various misconceptions about the role of antitrust (see Section VI for more details), in particular, tending to confuse free competition (laissez faire) with fair or perfect competition, and international competitiveness with competition among domestic firms. Both the government and the public believe that antitrust is necessarily a government interventionist policy resulting in distortion of the functions of a free market system. Thus, it is not surprising that it has been difficult to develop a competition law under Hong Kong's laissez-faireism policy.

Section II of the paper discusses the Hong Kong Consumer Council's recommendation in 1996 on a comprehensive competition law, based on its studies of market power in important industries. It then presents the government's response: instead of a general competition law, it set up a sector-based competition policy. In Sections III and IV, we consider how this competition policy functions. Recent cases from the telecommunications industry are used to illustrate the working of the sectoral approach. In Section V, we argue that such an approach suffers two fundamental drawbacks. First, due to having different rules of the game for different sectors, the allocation of resources may be distorted in the long run. Second, since they perform dual roles, both as competition policy enforcer and as the traditional regulator of a natural monopoly, the relevant regulatory agencies face an inform-

[1] Rice importation to Hong Kong has also been restricted to a few authorized enterprises.

ation problem: the impartiality of their competition decisions may not be credibly conveyed to the public. This argument is supported by recent acquisition cases in the telecommunications industry, which ended with controversial approvals by the government that were said to have compromised the regulatory environment. In this section we also address problems specific to the current sectoral approach, which include the exclusion of structural issues, narrow coverage of sectors, and the lack of public enforcement.

It was a quantum leap forward that an explicit competition policy, no matter how narrow its coverage, came into existence in perhaps the only economy in the world where the government adopts an active non-intervention policy towards business activities. The Hong Kong government's effort in promoting competition in recent years is commendable, but we believe that a broad-based competition law can better promote competition. Section VI of the paper discusses the major difficulties lying ahead in establishing a modern antitrust system. We argue that what Hong Kong really needs, for a competition policy system to be effective, is to educate the public, correct the various misconceptions regarding antitrust, and develop a *culture* for fair competition. Our conclusions are presented in Section VII.

II. The Birth of the Competition Policy

1. The Consumer Council's Recommendation

It was the Consumer Council of Hong Kong, a statutory body established in 1974,[2] that took the lead in bringing to the attention of the government and the public the existence and consequences of monopolistic market structures in Hong Kong. In its early years, the Council mainly provided price information to consumers and censured the trade malpractices of (usually) small retailers. It has played a role in advocating consumer rights and protection through legislation, and has also entertained complaints and conducted regular product testing. In the late 1980s the Council, under the chairmanship of Edward Chen, one of the authors of this paper, developed a keen interest in studying the anti-competitive behavior of firms in many service sectors in Hong Kong.[3] In October 1992 the Council launched a series of studies on market competition and its impact on consumer welfare. The sectors covered included the markets for bank deposits, supermarket sales, gas supply, telecommunications, radio broadcasting, and residential property. "Low levels of competition" were found in most of the sectors. In November 1996, the

[2] A board that consists of a chairperson, a vice-chairperson and up to 20 other members governs the Council. Its members are appointed by the Chief Executive of Hong Kong, and cannot be public officers.

[3] However, owing to limited resources, the progress of the study was very slow. With the arrival of the new Governor of Hong Kong (Mr. Chris Patten) in 1992, the Council was able to convince the government to earmark a grant of some HK$3.7 million for conducting competition studies (US$1 is worth about HK$7.8 under the current linked exchange rate regime).

Council published a report entitled *Competition Policy: The Key to Hong Kong's Future Success*. Here, it strongly recommended the adoption of a comprehensive competition law, which at a minimum should contain the following:[4]

- Article 1: To prohibit explicit agreements between firms that are intended or have the effect of preventing, restricting or distorting competition. These include horizontal agreements such as those involved in price-fixing cartels, bid-rigging, etc., and vertical agreements such as retail price maintenance, exclusive dealership, tie-in sales, long-term supply contracts, etc.
- Article 2: To prohibit any abuse by one or more undertakings of a dominant position that prevents, restricts or distorts competition. This would address monopoly pricing, and vertical restraints such as tie-in sales enforced through market dominance.

The Council also recommended that an independent Competition Authority be established with the power to investigate possible breaches of the law, and that an Appeal Body be set up to hear appeals against the Authority's decisions. While comparable with existing antitrust frameworks in many other countries, the Council's proposal was regarded by some as "over-encompassing and excessively intrusive". It also proved difficult for such an approach to be accepted in Hong Kong (at least by government officials), a place known for its free market system and for the positive non-intervention philosophy of the government.

2. THE GOVERNMENT'S RESPONSE

One year after the publication of the Council's report, the new SAR (Special Administrative Region) government responded by establishing a Competition Policy Advisory Group (COMPAG) in December 1997, chaired by the Financial Secretary. Then in May 1998 it issued a formal policy statement, which stated that instead of introducing an overall competition law, it would set up a sector-specific competition policy framework.[5] It contended that an overall law banning anti-competitive practices "would not be able to take into account the specific requirement of the individual sectors", and that having such a law would be "overkill".[6] It also argued that setting up an overall competition authority would be too expensive and would duplicate existing regulatory bodies, and that for Hong Kong, a small and

[4] The proposed competition law also included an article controlling the abuse of collective dominance, and an article for the control of mergers and acquisitions. The Council, however, noted the desirability of deferring the introduction of the these two articles, arguing that "the issues raised in cases involving complex monopoly are best addressed when experience has been cumulated. Decisions relating to mergers and acquisitions also raise difficult technical issues, which must be resolved within a strict time table if the ordinary conduct of business is not to be impeded" (Consumer Council, 1996, p. 76).

[5] The policy statement is available at: http://www.info.gov.hk/tib/roles/index%5fmain.htm

[6] *South China Morning Post*, November 4, 1997. See also Trade and Industry Bureau (1997, p. 6).

externally-oriented economy that was already highly competitive, there was no need to enact an all-embracing competition law.

In its policy statement, the government declared that the objective of its competition policy was "to enhance economic efficiency and free flow of trade, thereby also benefiting consumer welfare". It recognized that restrictive practices were detrimental to the overall interests of Hong Kong, and included two types of business practices, horizontal restraints and abuse of market position, in the policy statement.[7,8] The determination of whether a practice was restrictive or not "must be made in the light of the actual situation. The intended purpose and the effects of the practice in question, and the relevant market or economic conditions, etc., must be all taken into account". Thus, a rule of reason, rather than a per se rule, would be followed in order to determine the legality of conduct, even for practices involving price-fixing and bid rigging, which are normally treated as per se illegal in most countries.[9]

The government also set up its sectoral approach in its policy statement, the essence of which was to identify anti-competitive behavior and to initiate pro-competitive measures through administrative or legislative measures. To put it differently, instead of establishing an overall legal competitive framework for the entire economy, the government proposed to set different rules for different sectors to govern competition, with the administration of these sector-based rules to be carried out by sector-specific agencies.

III. The Operation of the Sectoral Approach

Under the sectoral approach, competition rules for various industries are built into legislation, regulatory guidelines, and codes of conduct. For example, the *Telecommunications Ordinance of Hong Kong* and the *Broadcasting Authority Ordinance* specify the competition principles to be followed in promoting competition in the telecommunications industry and the broadcasting industry. In addition, detailed competition provisions were incorporated in the contracts between the government and each individual license holder.

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[7] For horizontal restraints, the following practices that have the effect of impairing economic efficiency or free trade or are intended to distort the normal operation of the market were listed in the statement "for illustrative purpose only": (1) Price-fixing; (2) bid-rigging, market allocation, sales and production quotas; (3) joint boycotts; and (4) unfair or discriminatory standards among members of a trade or professional body (intended to deny newcomers a chance to enter or contest the market).

[8] The government also set out the following examples of conduct that might involve an abuse of market position: (1) Predatory pricing; (2) setting retail price minimums for products or services for which there are no ready substitutes; and (3) conditioning the supply of specified products or services to the purchase of other specified products or services or to the acceptance of certain restrictions other than to achieve assurance of quality, safety, adequate service or other justified purposes.

[9] According to the Secretary for Trade and Industry, many "apparently collusive agreements" can help firms achieve economies of scale and provide better service, and it "would not be proper to rule these out indiscriminately" (*South China Morning Post*, November 4, 1997).

1. Competition Provisions in the Telecommunications Industry

The *Telecommunications Ordinance*, amended in 2000, contains conditions relating to the market conduct of the licensees in all telecommunications markets. These conditions cover anti-competitive behavior and abuse of a dominant position. Anti-competitive behavior includes, but is not limited to, collusive agreements to fix prices, boycotting the supply of goods or services to competitors, entering into exclusive arrangements which prevent competitors from having access to supplies or outlets, and agreements between licensees to share the available market between them along agreed geographic or customer lines. Abuse of a dominant position includes, but is not limited to, predatory pricing, price discrimination, the imposition of contractual terms which are harsh or unrelated to the subject of the contract, tying agreements, discrimination in the supply of services to competitors, the giving of a preference to and the receipt of an unfair advantage from associates, and discounting by a dominant licensee.[10]

The prohibitions on giving or receiving an unfair advantage from associates and discounting reflect the *sector specifics* in the telecommunications industry. Since the liberalization of the telecommunications market in Hong Kong in the mid 1990s, new firms have entered the fixed line telephone markets, mobile phone markets, and Internet services markets. Due to the high fixed cost of setting up networks, some of the newcomers initially had to rent existing networks from the incumbent firms. The provision regarding transactions with one's associates is designed to guarantee fair competition between the newcomers, on the one hand, and downstream affiliates of incumbent operators, on the other. Likewise, in order to help new firms gain market share quickly, the Telecommunications Authority (TA) continues to exercise price control over the incumbent firm (Hong Kong Telecom) as it did prior to the liberalization of the markets, by not allowing it to cut prices below the regulated level in response to the entry of new firms. The prohibition of offering price discounts by a dominant licensee was designed specifically for this purpose.

The TA also specifies explicitly the meaning of dominance in various markets. For the fixed telecommunications network service market, the TA postulates that: (i) A licensee with a greater than 75% market share will be presumed to be dominant; (ii) a licensee with a less than 25% market share will be presumed to be non-dominant; and (iii) a licensee with a market share of between 25% and 75% will not be subject to any presumption.[11]

[10] In addition to the provisions set in the *Telecommunication Ordinance*, the Telecommunications Authority also incorporates these provisions in the license contracts between the government and individual licensees.

[11] Telecommunications Authority (1995, p. 8).

2. Competition Provisions in the Broadcasting Industry

The Broadcasting Ordinance, the law that governs business practices in the broadcasting service markets, contains similar competition provisions, namely a prohibition of anti-competitive conduct that has the purpose or effect of preventing, distorting or substantially restricting competition in a television program service market, and a prohibition on the abuse of a dominant position in a television program service market that may affect competition in that market.[12] The Ordinance empowers the Broadcasting Authority (BA) to enforce these provisions. On February 16, 2001 the BA issued two documents, "Guidelines to the Application of the Competition Provisions of the Broadcasting Ordinance (the Competition Guidelines)" and "Competition Investigation Procedures", which set out the general principles that it expects to apply when dealing with competition cases, and the detailed procedures it will follow in its investigations. For instance, the Competition Guidelines sets up a three-stage procedure, similar to that used by European, Australian and U.S. competition authorities, that the BA will use in handling all competition cases: first, define the relevant market; next, assess market power and/or the presence of agreements or practices; and finally, assess whether there is an abuse of a dominant position or substantial effect on competition and, hence, on consumers and viewers.

With respect to market definition, the Competition Guidelines contain detailed discussion of factors such as demand-side substitution, supply-side substitution, switching costs, geographic locations, etc. For assessing market power, quantitative thresholds are set in terms of market share. Specifically, a licensee is unlikely to be individually dominant if its market share is below 40%. A licensee with a market share persistently above 50% is presumed to be a dominant firm. In relation to the prohibition on anti-competitive conduct, agreements among competitors will not generally be regarded as having substantial effects if the combined market share of the parties is less than 25%.[13]

3. Remedies and Penalties

The sector-based approaches spell out remedies for violation of the rules. Depending on the severity and nature of a violation, the TA or BA can issue either a warning or a direction (requiring a licensee to cease and desist from the action prohibited by the rules). A financial penalty can be imposed for "very serious"

[12] Practices such as price-fixing agreements (direct or indirect) between licensees can be regarded as anti-competitive behavior. The following practices may constitute an abuse of a dominant position: entry deterrence, vertical restraints, predatory pricing, subsidy and cross-subsidy among different units of a company, refusal to supply, bundling, and price discrimination.

[13] The 50% threshold level for a presumed dominant position in the broadcasting industry is, of course, stricter than the 75% level set for the telecommunications markets. This different treatment might be due to a political consideration that a dominant firm in broadcasting could endanger the freedom of speech, which has long been regarded as of supreme importance for Hong Kong society.

cases. For extremely serious cases, the license of the operator may be suspended. Initially, the financial penalties that could be imposed were small. Prior to 2000 the maximum fine that the TA could impose for violations of the competition provisions or breaches of a license contract was HK$20,000 for the first; HK$50,000 for the second occasion on which the penalty is so imposed; and HK$100,000 for any subsequent occasion on which the penalty is imposed. These figures were raised to HK$200,000, HK$500,000 and HK$1,000,000 respectively in early 2000 when the *Telecommunications Ordinance* was amended. The amended *Ordinance* also provided that for extremely serious violations, the TA can request the Court of Law to impose a financial penalty not exceeding 10% of the turnover of the licensee in the relevant market in the period of the breach, or $10 million, whichever is higher.[14] The guidelines for the broadcasting industry state that the penalty for violations of the *Broadcasting Ordinance* is an amount not exceeding 10% of the turnover of the licensee in the relevant market in the period of the breach, or HK$2,000,000, whichever is higher.

4. Appeal Mechanisms

As authorized by the *Telecommunications Ordinance*, the Telecommunications (Competition Provisions) Appeal Board was established to hear appeals against the TA's decisions. The Chief Executive of the Hong Kong SAR Government appoints the Chairman and Deputy Chairman of the Appeal Board for a term not exceeding two years. In hearing an appeal, two additional panel members will be appointed by the Chairman. The Appeal Board's decision is final. No competition appeal board has as yet been set up for the broadcasting industry.[15]

IV. Enforcement: Cases from the Telecommunications Industry

The government's sectoral approach to competition policy has a very short history, but a relatively large number of cases have been considered, especially in the telecommunications industry. Table I provides data on the competition cases

[14] In February 1999, Hong Kong Telecom, the dominant operator in the provision of IDD services, was fined HK$50,000 by the TA for having repeatedly violated the contract term that prohibited it from offering unauthorized discounts to its customers. This incident was one of the driving forces behind the amendment of the Telecommunications Ordinance. In a press release, the Head of the TA stated "I have also considered the more severe penalty of suspending the company's license but this would cause too much disruption to all the customers of Hong Kong Telecom" (see TA Press Release, February 12, 1999).

[15] The Broadcasting Ordinance specifies that appeals from the BA's decisions can be made directly to the Chief Executive of Hong Kong. Guided by the small-government principle, it has been common practice in Hong Kong that appeals from a government agency's decision can be made directly to the Chief Executive.

Table I. Competition cases completed by the Telecommunications Authority

Type of case	No. of cases 1997–98	1999	2000	2001 (Sept)	Total
Price-fixing			1	0	1
Predatory pricing		1	1	0	2
Mergers/acquisition	3	0	1	0	4
Unauthorized discount		8	1	0	9
Breach of advertising code		22	13	5	40
Exclusive dealing		2	0	0	2
Undue discrimination/ unfair cross-subsidization		3	0	0	3
Customers-related complaint		3	2	3	8
Operation without license		0	0	3	3
Others		6	0	0	6
Total:	3	45	19	11	78

Source: The Office of the Telecommunications Authority, Hong Kong.

that the TA has considered from 1999 to September 2001.[16] Although over half of the cases related to advertising conduct, some important competition cases have been considered during this short period of time. To illustrate the working of the government's sectoral approach, we now discuss three cases that the TA has dealt with.[17] These cases are reviewed chronologically in order to illustrate the evolution of regulatory decision-making.

1. Acquisition in the Mobile Phone Service Market

The telecommunications industry has undergone drastic structural changes in recent years. In 1995, new entrants were permitted by the government to compete with the incumbent (Hong Kong Telecom) which had enjoyed a monopoly position for decades in the fixed telecommunications network services markets. Shortly after the government formally announced its competition policy, the TA faced first major test of the sectoral approach when it had to deal with several merger cases.

On December 3, 1997 the TA approved the application by Hong Kong Telecom CSL Limited to acquire Pacific Link Communications Limited, the fourth largest mobile phone player in the market. The transaction made CSL the biggest mobile

[16] The Broadcasting Authority has not received any competition complaint since it issued its competition guidelines in February 2001.

[17] It should be noted that while the overall competition policy for Hong Kong was set in May 1998, competition provisions had been introduced into the license contracts of operators in the telecommunications sector in 1995. These provisions were enforced by the TA in its expanded role as regulator and competition enforcer.

phone operator in Hong Kong, jumping from the second largest player prior to the deal. The TA approved the acquisition without imposing conditions, just one week after receiving the application. In considering it, the TA's primary concerns were whether competition in the market would be adversely affected, whether consumer interest had been adequately safeguarded, whether the regulatory environment would be compromised, and whether economic efficiency would be reduced.[18]

To assess the possible effect on competition and consumers, the TA looked at factors such as choices available to consumers, the number of competing systems, market concentration and market dominance, and concluded that the proposed acquisition would not adversely affect competition in the market. The market "could not be considered to be too concentrated" even though the market share of CSL would be around 40% after the merger. The TA believed that "no operator in the mobile phone market would be dominant after the acquisition". It also found that "there is nothing in the CSL acquisition of Pacific Link to suggest that economic efficiency would be reduced. In fact, the contrary may occur. By allowing CSL to acquire more spectrum to meet its needs to provide a better service to its customers, economic efficiency could be enhanced. The merging of Pacific Link's network facilities with CSL's would also result in efficiency gain".

The third concern of the TA, whether the regulatory environment would be compromised, is of particular interest, as one year prior to the acquisition both CSL, Pacific Link and several other firms in the industry bid for PCS (Personal Communication Services) licenses organized by the TA. Hutchison (the largest mobile phone operator prior to the acquisition) and Pacific Link were successful in obtaining a license whereas CSL was not. Now CSL was proposing to acquire Pacific Link and, as the regulator of the telecommunications industry that issues telecommunication licenses, the TA decided to let the acquisition go ahead. This naturally led to criticisms. In particular, the decision was said to have compromised the regulatory environment because a loser in the PCS bidding exercise could simply buy a license back.[19]

2. Acquisition in the Internet Market

There were over 130 licensed Internet service operators in Hong Kong at the time when Hong Kong Telecom IMS and Star Internet, two major firms in the market, submitted their application for approval of the acquisition of Star Internet by IMS in November 1998. Compared with its handling of the case reviewed above, the TA's approach in this case exhibited distinct features. Prior to making a decision on the proposed acquisition, the TA through a press release laid out the main factors it would consider (effect on competition, consumer interests, continuity and quality of services to existing customers, etc.). It was also made clear that "the

[18] See TA Press Release, December 3, 1997, and Economic Services Bureau (1998).

[19] Some analysts criticized the deal as a back-door entry by Hong Kong Telecom into the personal communication service industry. See *Hong Kong Standard*, December 4, 1997.

TA may impose conditions as appropriate". It formally invited views from interested parties on the proposed transaction. In response, several parties submitted their opinions. The Hong Kong Internet Service Providers Association (HKISPA) strongly opposed the proposed acquisition, as did a pro-consumer body, the Hong Kong Telecommunication Users Group. The Consumer Council also expressed its concerns over the case and suggested that the TA use the merger and acquisition tests involving concentration ratios that are used in foreign jurisdictions.[20]

Market share and the possibility of abuse of a dominant position were the major concerns of both the TA and other parties. According to the TA, the Star acquisition would give IMS a 51% share of the market, a share that was substantially higher than that of the next largest player in the market.[21] After reviewing characteristics of the market such as a large number of competitors, low entry barriers, and low consumer switching costs, the TA came to the conclusion that "it would be extremely difficult for an operator to abuse its position, by, for example, raising prices above the competitive level", and on December 23, 1998 it gave its consent to the acquisition. However, it imposed two conditions prohibiting abuse of a dominant position and unfair cross-subsidies to the operation of IMS.[22]

3. Tacit Collusion among Mobile Phone Service Providers

On January 2, 2000 all six licensed mobile phone service providers in Hong Kong simultaneously announced their decisions to raise the monthly subscription fees for their major service plans. All the providers raised the fee for their basic monthly packages by HK$20, with the exception of Cable & Wireless Hong Kong Telecom CSL Limited, the dominant firm in the sector, which raised its fee by HK$10. The fee adjustment amounted to a 20–25% increase, and affected 3.6 million mobile phone users. The TA was informed of the fee increase ex post via immediate, widespread negative responses of mobile phone users in the local media.

The companies justified the increases by citing losses due to the price wars that had been occurring since 1999. While denying any cooperative effort regarding the timing and amount of the fee increases, the service providers admitted to the TA that the CEOs or senior staff met two or three times in November and December 1999 to discuss issues of common concern. They admitted discussing the issue of raising the license fee in at least one of the meetings. No notes were kept of these meetings. The TA immediately launched an investigation into whether the price increases had violated any of the competition conditions set in the licensee con-

[20] See Consumer Council (1998).

[21] The next two largest firms were HKNet and City Telecom, which had a combined market share of no more than 10% (*Hong Kong Standard*, December 24, 1998).

[22] HKISPA questioned the TA's assessment of market shares and said a survey it had conducted showed that the acquisition would give IMS a market share of as high as 70%. It also argued that the two special conditions imposed fell short of preventing the combined firm from abusing its dominant position, as no remedy existed that could effectively punish HKIMS if it engaged in anti-competitive actions (HKISPA, Press Release, December 23, 1998).

tracts of the companies. On January 15, 2000 it formed the opinion that at the very least some kind of arrangement must have existed, which led to the simultaneous price adjustments, and invited the six providers to make representations on why it should not issue a direction. They all agreed to rescind the price increases in their entirety. In view of this prompt action, the TA decided not to issue a direction, but instead wrote to each of the providers warning them that in future they should comply with their licensee obligations. No penalty was imposed on the companies (Telecommunications Authority, 2000).[23]

V. An Assessment of Hong Kong's Competition Policy Framework

The current competition policy framework is transparent. For a given sector and the types of conduct covered, the rules are comprehensive, covering almost all of the practices that are prohibited in the antitrust laws of developed countries. During the three years since the establishment of its competition policy, the government (the TA in particular) has handled many competition cases in an open, transparent and timely manner. Although the procedures adopted and the technical analyses used in these dealings are not as nearly sophisticated as those used in other antitrust jurisdictions, and certain decisions reached were highly controversial, the government seems to be satisfied with its current approach to competition policy.

Before adopting this policy, the government was aware of the views on the pros and cons of a sectoral approach. For instance, according to the Consumer Council, a sectoral approach is "piece meal" and fails to provide comprehensive guidelines in a consistent manner; competition provisions in different sectors may be subject to different interpretations and carry different penalties; and a sectoral approach may be prone to the capture of regulators by interest groups.[24] The government, on the other hand, stressed that a sectoral approach is less expensive to set up; it can take into account industry specifics and thus provides greater certainty to the business community; it helps avoid over-kills; and it did not see the need to introduce a broad competition law to Hong Kong at that stage.

We agree with the Consumer Council and support the establishment of a broad competition law approach. As well as the arguments made by the Council, we identify two additional, yet fundamental, drawbacks of the sectoral approach.

1. Distortion of the Allocation of Resources in the Long Run

From a general viewpoint, a sectoral approach may hinder the efficient allocation of resources across different sectors of the economy. In choosing which sectors to invest in, private agents follow not only price signals but also consider the insti-

[23] The TA's quick action was widely applauded, but three months after the incident, in April 2000, some of the companies involved again raised their prices by $20. As the adjustments were made sequentially, rather than simultaneously, the TA did not launch an investigation.

[24] Consumer Council (1996, p. 32), and Consumer Council (1999).

tutional costs of operating in different environments. Under a sectoral approach, different sectors will inevitably have different sector-specific rules of the game. These rules are enforced by different regulatory agencies that may interpret the rules differently, follow different criteria, and have different enforcement experiences. One may then expect that, other things being equal, "fair players" and/or weak players would prefer to enter sectors where competition rules are perceived as complete and fair, so that they are less likely to be bullied by dominant firms, whereas "nasty players" would choose sectors where competition rules are either absent or lenient. Different institutional environments therefore imply different rates of return on investment, which will unavoidably affect private investors' decisions as to which sectors to enter. In the long run, the potential distortion of a sectoral approach on resource allocation across sectors should not be ignored.[25]

2. The Duel Roles of the Enforcer and Information Asymmetry

Under the current sector-based competition policy, various government regulatory agencies perform dual roles. On the one hand, as regulators of natural monopolies, they must fulfill their traditional regulatory duties, such as issuing and administrating business licenses, and reviewing and monitoring the prices and qualities of regulated firms. On the other hand, they are the judges when competition complaints and allegations are brought *against* the firms they regulate.[26] For simplicity, we name these two roles as regulator and enforcer, respectively. In other antitrust jurisdictions, these two roles are in general performed by separate agencies.

An effective enforcement of competition rules requires fair and independent decisions on competition complaints. But to act fairly and independently is a separate matter from being able to convince the concerned parties and the public that one has done so. The ruling in a competition case affects not only the parties concerned in the case, but it also influences the future behavior of other firms. It is therefore extremely important for the enforcer to make sure not only that justice is done, but also that justice is seen to be done. However, when the very same agency is responsible for two inter-related duties, it is difficult for outsiders to believe that decisions concerning one such duty are made independently of considerations of the other duty. Having to perform dual roles, often conflicting with one another, the

[25] The arguments provided here are analogous to those often made regarding the relationship between foreign direct investment and competition policy. When considering investment options in different markets, foreign companies place a high premium on the country that has the most developed legal system in terms of allowing access and protection to the investment, reducing administrative burdens and addressing the distortions of the competitive process.

[26] For example, the TA's responsibilities "include economic regulation, technical regulation, enforcing fair competition rules, setting technical standards, coordinating the development of the telecommunications infrastructure, investigating consumer and industry complaints, managing the radio spectrum, providing advice to the Government on telecommunications matters and representing Hong Kong in international telecommunications organizations" (see the TA's web site: www.ofta.gov.hk).

enforcer under a sectoral approach faces an information problem in communicating its impartiality to the public.

An information problem arises because the public, as well as the parties in a competition case, do not observe perfectly the regulator's decision-making in performing either of its roles.[27] Although a competition case can be open to the public throughout, it is impossible for the public to know exactly how a regulator interacts with the firms it regulates on a daily basis, especially with long-time incumbents with which regulators often have close working or even personal relationships. It is then natural for the public to presume biased decisions by the enforcer/regulator. The burden of proof thus lies with the regulator.[28] Unless it is *solely* an enforcer, it is difficult for the agency to prove it behaves independently in making competition rulings.

The information problem can be illustrated in the telecommunications cases presented in Section IV. In the CSL-Pacific Link acquisition case, the TA was criticized for having compromised the regulatory environment by allowing the loser in a license bidding process to buy back a license.[29] The TA had difficulties defending its position because it was unable to convince critics that it had acted fairly in both granting mobile phone licenses and in approving the acquisition. Similarly, it was not able to establish that its approval of the transaction was independent of its on-going negotiation with HK Telecom (CSL's parent) on the termination of HK Telecom's exclusive licensing contract in the international calls market. Since the government had to compensate HK Telecom for early termination of its monopoly status, questions were raised as to whether the TA's approval of CSL's acquisition of Pacific Link was related to the terms of the negotiation. Specifically, it was asked whether the approval of HKT's acquisition was a part of the "compensation package" for the early termination of the monopoly contract.[30] In cases like this, the dual roles of the TA provide the very cause of the criticisms and the obstacle for the TA to prove its innocence. Had an independent authority approved the acquisition and the TA been responsible for making license decisions only, there probably would not have been such criticisms. We are not claiming, nor do we believe, that the TA was "captured" by any interest groups. Our point is that, burdened with the dual roles, it suffers from its inability to *convince* the public that its decisions

[27] The standard information problem pertaining to regulation refers to the difficulty of obtaining (cost) information from the regulated firm (see Laffont and Tirole (1993) and Kahn (1993)). We here emphasize the difficulty for the enforcer to explain to the public its independent decision-making when it also serves as a regulator.

[28] The tendency to presume biased decisions is certainly strong when the competition decisions concern an incumbent firm versus newcomers, or domestic firms versus foreign firms.

[29] In a subsequent case involving acquisition of P Plus by Smartone Telecommunications Limited, approved by the TA in March 1998, exactly the same criticism was once again raised.

[30] See *Hong Kong Standard*, December 4, 1997. In January 1998, shortly after its approval of the acquisition case, the TA announced that it would compensate Hong Kong Telecom about US$858.97 million (net of tax) for surrendering this exclusive right.

on competition issues are independently made from those related to its traditional regulatory duties.

In our view, these criticisms of the TA's actions are not specific to these individual cases. Rather, they reflect the general drawback of a sectoral approach that stems from the presence of asymmetric information, and will likely arise in other sectors as well. Having to perform traditional regulatory duties hinders a government agency's ability to establish itself as an independent competition policy enforcer. Consequently, the agency's reputation and effectiveness in performing either role may be undermined.

3. Structural Issues Should Not Be Ignored

Having argued for the general drawbacks of a sectoral approach, we now turn to some problems specific to the current practices of the government. As described earlier, the current competition policy of Hong Kong focuses on business conduct (anti-competitive practices and abuse of market power) only.[31] As it now stands, the competition policy framework cannot adequately and effectively deal with structural issues, such as mergers and acquisitions (M&As). In the telecommunications industry, for example, the control of M&As occurs mainly through conditions in the licensing agreements between the government and license holders. No one industry in Hong Kong now has competition legislation that governs M&As. Even in the banking industry, which has seen a lot of M&A activity in recent years, explicit regulatory provisions to govern structural changes do not exist.[32] Prompted by the cases it has handled recently, the TA now sees the need to introduce new legislation for the regulation of M&As in the telecommunications industry. In April 2001 it issued a consultation paper that both evaluates the existing regulatory regime for M&As and proposes new regulations, including draft guidelines the TA will follow in considering proposals for M&As.[33] Whether or not the proposed regulations will become law in the future, the proposal itself underscores the need for the government to incorporate conditions governing structural issues into its existing competition policy framework.

[31] The reasons for the government to have left structural issues out are unknown. It does not seem to be the case that it simply followed the Consumer Council's suggestion to defer the introduction of structural provisions. The conduct-only approach is probably due to the government's reluctance to introduce a competition law and its concern of over-kill. An alternative explanation is that, given its positive non-intervention approach, the government probably regarded mergers and acquisitions as normal business transactions that should be left for the market to decide on. However, given the conventional wisdom that market structure is a main factor influencing firm conduct (the structure-conduct-performance paradigm (Bain, 1959), control of anticompetitive conduct is unlikely to be effective unless structural issues are addressed. Kwoka and White (1994) contains detailed economic analysis of the effects of industry structures on firm conduct in influential antitrust cases in the United States.

[32] Early in 2001, The Development Bank of Singapore was able to purchase the fourth largest bank in Hong Kong, DongHeng Bank, without having to obtain any type of government approval.

[33] TA Press Release of April 17, 2001.

Without specific provisions governing M&As, the government is not in a position to effectively prevent structural changes that can be potentially detrimental to competition and the consumer interest. As an example, consider the supermarket industry in Hong Kong, which has been dominated by two giant chain stores, Park'n Shop and Wellcome, that have together held around 80% of the market since the early 1990s.[34] Despite its near duopoly status, competition in the industry has been quite intense.[35] However, if the two firms decided to merge with one another, there would be no legal basis whatsoever for the government to do anything to prevent it. Obviously, social welfare would be greatly lowered should such a merger occur. Given that it is extremely costly, both technically and socially, to undo a large merger, the damages caused by such a merger would be long lasting even if the government subsequently extended its current competition policy to cover structural issues and took ex post action against the merger. We believe that the government should realize the potential danger of such structural changes and take steps to include M&As within the coverage of its competition policy.

4. Broadening the Coverage of Sectors

Another feature of the current competition policy is that it covers only a small number of sectors. The telecommunications and the broadcasting industries are perhaps the only two industries in Hong Kong that have specific competition provisions to govern their daily operations. Other sectors, by and large, do not yet have a sector-based competition policy framework in place. Even the banking industry, perhaps the most important sector in the economy, has yet to face explicit competition rules, despite numerous complaints in recent years.[36] Another sector wherein oligopolistic practices have caused widespread competition concerns comprises the markets for gasoline, diesel and liquefied petroleum gas. The Consumer Council conducted a detailed study of these markets as early as 1995, and conducted another study of the practices of major gas and fuel companies in 1999. It recommended in early 2000 that the government set up an Energy Commission that would have the task of regulating anti-competitive behavior of these firms, similar to that of the TA.[37] The government has not yet responded to these recommendations. Besides the banking and the oil products markets, anti-competitive practices have also been

[34] *South China Morning Post*, August 9, 2000.

[35] The French-based company, Carrefour, entered the market in 1996, and managed to open only four hypermarkets in Hong Kong by 2000. After suffering big losses, it withdrew in September 2000, blaming the restrictive behavior of incumbent firms, as well the government's land policy, for its departure.

[36] One such incident is the controversial fee increase in 2000 by the Easy Payment System Corp., a consortium of about 35 banks in Hong Kong that provides electronic debit services to local merchants.

[37] In the absence of a general competition authority, the Consumer Council recommended the establishment of such an agency within the government's sectoral approach. See Consumer Council (2000).

alleged to have occurred in markets such as newspapers, supermarket retailing, and housing conveyance services. Because a counterpart of the TA does not exist in these industries, the alleged practices have remained untouched.

In our view the current competition policy should be extended to cover a larger number of sectors, which display substantial evidence of anti-competitive practices, and to cover structural issues such as mergers and acquisitions, as well as conduct. Mergers and acquisitions will become even more prevalent in Hong Kong as China enters the WTO, and in an era of rapid technological change.

5. Lack of Active Public Enforcement

Since the inception of its competition policy, the government through its regulators has been acting passively as a referee in resolving complaints and disputes. It rarely, if ever, initiates a competition case itself and then brings it to "court". The current enforcement of competition policy depends primarily on private enforcement. For instance, almost all the cases handled by the TA in the past three years (see Table I) were reported in the form of complaints by either rivals, customers, or the Consumer Council.

Under the current policy setting, the burden of proof in a given competition case lies to a large extent with the plaintiff or the complainant. For instance, it is stated explicitly in the "Competition Investigation Procedures" published by the BA that a complainant must provide necessary information to convince the government that the complaint is valid. Complainants need to answer fourteen questions so as to provide "the information required to commence the investigation". One of the questions contains 22 parts, all pertaining to technical aspects of antitrust analysis such as how do you define the relevant market?; what is the level of competition in the relevant market?; what is the effect on competition of the behavior complained about?; and what are the possible remedies?[38] Since most firms in Hong Kong do not have detailed knowledge about competition laws and analysis, such information requirements impose a great burden on complainants.

The passive attitude of the government towards competition policy enforcement is consistent with its general positive non-intervention policy toward business activity. However, private enforcement alone is not enough. In many situations, plaintiffs may not be willing to come forward to report anti-competitive conduct. They may fear retaliation if they complain about a dominant firm. Or, the standard free-riding problem may exist if there is a large number of plaintiffs. The role of government enforcement in such cases is essential. More active public enforcement in both collecting relevant information and bringing cases, together with private enforcement, would greatly increase the deterrent effect of competition policy.[39]

[38] Broadcasting Authority (2001).

[39] Most economists favor a combination of private and public enforcement. See Areeda and Turner (1978). For the weaknesses of each type of enforcement, see Martin (1994, Chap. 18).

6. THE ROLE OF COMPAG

COMPAG was set up in December 1997 in order "to provide a high level, dedicated forum to review issues related to competition which have substantial policy or systemic implications, and to examine the extent to which more competition is needed in both the public and private sectors" (COMPAG Report, 1998).[40] After its establishment, its work has been focused on reviewing existing practices alleged to be anticompetitive, considering new initiatives to foster competition, and on tracking competition-related complaints. The published COMPAG reports for 1998 and 1999–2000 list the measures taken by the various government bureaus and departments to foster competition. By early 2000, 28 competition-related complaints were received by or referred to COMPAG by different parties, including government bureaus and the Consumer Council (COMPAG, 2000).[41] COMPAG looked into all these complaints and the follow-up actions by the concerned parties, but, for substantiated cases, it is the relevant government bureaus and departments (such as the TA) that make the decisions, although COMPAG gives advice when necessary.

The establishment of COMPAG was a part of the government's response to the Consumer Council's recommendation to set up an overall competition law and a general competition authority. Its role so far has been primarily to keep track of all competition complaints referred to the government. However, the symbolic role of the COMPAG should not be underestimated. The mere establishment of COMPAG signals the government's determination to combat anti-competitive behavior, albeit on a sectoral basis. However, the credibility of COMPAG may be undermined unless it becomes more actively engaged in promoting competition in Hong Kong. For example, COMPAG could make known to the public the government's views and/or its actions on major competition cases. The government's determination and its ability to promote competition should be continuously conveyed to the general public, which needs to be better educated on competition issues.

VI. Developing a Culture for Competition

It is fair to say that an overall environment that is favorable to establishing a modern antitrust system has yet to be developed in Hong Kong, and it may be a long time before a general competition law comes into existence. The public, and some government officials, have various misconceptions regarding the roles of competition

[40] COMPAG comprises high level government officials, including the Secretary for Trade and Industry, the Secretary for the Treasury, the Secretary for Economics Services, the Government Economist, the Director-General of Trade, and the Director of the Business Service Promotion Unit. Outside observers, such as the Consumer Council, may be invited on a needs basis.

[41] There does seem to be confusion among the public about the role of COMPAG. For instance, seven out of the twelve complaints received by COMPAG from February 1999 to March 2000 were against various government bureaus regarding their unfair practices in dealing with the private sector. These cases were found by COMPAG to be either unsubstantiated or not needing follow-up action.

law. Some hold the view that being competitive in international markets and the absence of any trade barriers imply that the Hong Kong economy as a whole is immune from anti-competitive conduct, thereby ignoring the difference between tradable goods and non-tradable goods markets. Some regard competition laws as a means to protect certain groups of players, rather than to protect competition.[42] Others believe that antitrust would necessarily lead to infringement of free market efficiency and that setting up rules is equivalent to imposing regulation on private business activities. Many do not see the possibility and danger of business firms intentionally hurting competitors and consumers by abusing their market power. Some even regard possession of market power as an indicator of business success, and thus view abusing it as a legitimate act. Historically, firms in Hong Kong have not been shy of cooperating with one another.[43] Even today, rival firms sometimes publicly announce their intention to cooperate with one another, although often in an attempt to reduce hard feelings or hostility toward one another. In short, setting rules for competition is widely regarded by government officials, business executives and the public in general as contradicting with laissez faireism.

Unlike in some western countries, where competition laws are seen as a means to promote democracy, antitrust is regarded by many in Hong Kong as a purely economic matter unrelated to the democratic development of society.[44] Although there exists resentment against big companies being able to influence the government, many do not realize that concentration of economic power may threaten democracy. As in most East Asian countries, Hong Kong does yet not have a modern democratic system in place. We believe that as Hong Kong society becomes more mature democratically, the demand for a competition law will increase.

The Hong Kong government has been facing direct external pressures from international organizations and trading partners in relation to competition issues. For instance, competition policy has been an important aspect considered by the WTO when conducting its trade policy reviews of Hong Kong every four years. The adequacy of Hong Kong's competition policy was raised in the WTO's 1998 report, along with other issues such as copyright piracy.[45] However, the pressure from the WTO on competition issues has had only a minimal effect on the government's

[42] The fact that the Hong Kong Consumer Council has been the primary advocate of competition law may have reinforced the belief that antitrust exists to protect consumers and is anti-business.

[43] For instance, in 1913 two major ship-builders, Hong Kong & Whampoa Dock Co. and Taikoo Dockyard Co., agreed to form a cartel after a long period of cut throat competition between the two (see Fung, 1999, Chap. 3).

[44] For example, one of the goals of setting up the antitrust system in the U.S. over one hundred years ago was to protect the democratic movement of the nation by preventing economic power from being too concentrated around big companies. See Hofstadter (1991, pp. 199–200).

[45] The WTO review committee cited the studies of the Consumer Council that had identified anti-competitive practices in various sectors. The Hong Kong representative reiterated the government's stand that the introduction of a general competition law is not necessary, given Hong Kong's small, externally oriented, highly competitive economy. See WTO (1998).

attitude towards competition law, as WTO members are not obligated, so far at least, to establish any sort of competition policy.[46]

Competition complaints in the future will surface from within the Hong Kong economy, when business firms face more fierce competition after China joins the WTO and when Hong Kong will no longer be the only major gateway to the China market. Increased external pressure, whether direct or indirect, will certainly accelerate the government's effort to address the issue of competition. To educate the public about the roles of antitrust, which the Consumer Council has been doing tirelessly, is certainly an effective way to develop a culture for fair competition. A meaningful thing for the government to do is to take advantage of the competition cases it has dealt with, such as those in the telecommunications industry, and use them to educate the public and to clarify the misconceptions discussed earlier.

VII. Conclusions

Given its long-time positive non-intervention philosophy, it is a major achievement for the Hong Kong government to have introduced a competition policy. The current competition policy framework is simple, transparent, and has shown its ability to combat restrictive practices in the sectors it covers. Relative to a general competition law, a sector-based policy is less expensive to put into place, easy to operate, and can better take sector specifics into account. Its drawbacks include potential inconsistency among the rules covering different sectors, coordination failure among various enforcement agencies, and possible capture by industry interest groups. Although recent enforcement experience in the telecommunications industry provides no evidence of industry capture, public concerns have arisen over the fairness of decisions made in various cases. Under the "dual roles" setting inherent in the sectoral approach, competition policy enforcers engage in traditional business with the firms in their corresponding industries, making it difficult for the agencies to establish a reputation of independence. It should be realized that while they may have acted fairly, it might not be easy to convince the public that they have done so.

We believe there are several reasons why a comprehensive competition law with an independent enforcement body can better promote competition and economic

[46] Perhaps the most vocal external critic of the government's competition policy so far has been the European Union in its November 2000 parliamentary report on the political and economic environment in Hong Kong. It expressed its concerns about an environment possibly tilted against foreign companies, citing that "a number of tycoons have an undue and dominant influence in certain sectors of Hong Kong". The report called for a general competition law by saying that "as the existence of fair competition laws and practices ensure a level playing pitch for SAR [Special Administration Region] firms when they compete in the EU marketplace, European Union businesses are entitled to reciprocation when they operate in Hong Kong". The Hong Kong government rejected this claim and defended economic freedom in Hong Kong in general terms, and reiterated its position that there is no need for Hong Kong to introduce a general competition law (*South China Morning Post*, October 27, 2000).

efficiency in Hong Kong, as the Consumer Council has been advocating since the mid 1990s.[47] First, the consistency of competition provisions for all sectors of the economy should not be undervalued, especially in an era of rapid technological change which blurs the boundaries of traditional markets. The government should consider how to better balance consistency of rules against simplicity and sector specifics. Second, having an independent enforcement body that is unrelated to any traditional regulatory duties can overcome the information problem inherent in the sectoral approach. Such a body with greater investigatory powers will also help deter violations of competition rules. Third, lessons should be drawn from international antitrust experience. To avoid over-kill, a system similar to the one in the European Community is perhaps most suitable for Hong Kong. However, it may be a long time before an effective antitrust system is established. It is difficult to set up an effective antitrust system from scratch in any economy. It is far more difficult to do so in an economy that has benefited so much from unfettered market conduct. The misconceptions about the roles of antitrust should be corrected, the general public must be educated, and a culture for fair competition needs to be developed.

References

Areeda, P., and D. Turner (1978) *Antitrust Law*, Vol. II. Boston: Little, Brown.

Bain, Joe S. (1959) *Industrial Organization*. New York: John Wiley and Sons.

Broadcasting Authority (2001) *Guidelines to the Application of the Competition Provisions of the Broadcasting Ordinance*.

Cheng, Leonard K., and C. Q. Wu (1998) *Competition Policy and Regulation*. Hong Kong: Commerce Press.

Cheng, Leonard K., and C. Q. Wu (2000) 'Competition and Competition Policy', *Pacific Economic Review*, **5**(2), 279–289.

COMPAG (1998) *Competition Policy Advisory Group Report 1998*.

COMPAG (2000) *Competition Policy Advisory Group Report 1999–2000*.

Consumer Council (1996) *Competition Policy: The Key to Hong Kong's Future Success*.

Consumer Council (1998) 'Submission to the Legco Panel on Information Technology and Broadcasting Regarding a Proposed Acquisition of the Internet Related Service Business by Hong Kong Telecom IMS Ltd.'.

Consumer Council (1999) 'Submission on Motion on Anti-Monopolization To Be Moved at the Legislative Council'.

Consumer Council (2000) 'A Study of Motor Gasoline, Diesel and LPG Markets in Hong Kong: Findings and Recommendations'.

Economic Services Bureau (1998) 'The Impact on the Development of the Telecommunications Industry in Hong Kong in the Light of the Acquisition of Pacific Link by Hong Kong Telecom'.

Fung, B. Y. (1999) *British Companies in Hong Kong: 1860–1997*. Hong Kong: Joint Publishing Co. Ltd.

Hofstadter, R. (1991) 'What Happened to the Antitrust Movement?' in T. E. Sullivan, ed., *The Political Economy of the Sherman Act: The First One Hundred Years*. New York: Oxford University Press.

[47] Cheng and Wu (1998, 2000) also argue that a competition law is a necessary underpinning for a comprehensive competition policy in Hong Kong.

Kahn, A. (1993) *The Economics of Regulation: Principles and Institutions*. Cambridge, MA: MIT Press.

Kwoka, J. Jr., and L. J. White (1994) *The Antitrust Revolution: The Role of Economics*, 2nd edn. New York: HarperCollins.

Laffont, J. J., and J. Tirole (1993) *A Theory of Incentives in Procurement and Regulation*. Cambridge, MA: MIT Press.

Martin, S. (1994) *Industrial Economics: Economics Analysis and Public Policy*, 2nd edn. New York: Macmillan.

Telecommunications Authority (1995) *The Guidelines to Assist the Interpretation and Application of the Competition Provisions of the FTNS License*.

Telecommunications Authority (2000) 'Report on the Investigation by the Telecommunications Authority into the Simultaneous Price Changes of the Mobile Telephone Operators'.

Trade and Industry Bureau (1997) *Competition Policy for Hong Kong*.

WTO (1998) *Trade Policy Reviews, Hong Kong, China*.