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STRATEGY AND STRUCTURE OF MARKET COMPETITION: THE TAIWANESE CABLE TV INDUSTRY IN THE 1990s

LU-LIN CHENG

Cable TV plays a dominant role in the media environment of Taiwanese society. Before the passage of the Cable TV Law in 1993, the industry was a vibrant informal sector; it was highly differentiated, and acted as a democratic alternative to the formal media. The 1993 Cable TV Law, which designed a competitive market with five licenses issued in each area, was touted as a victory for democracy by the opposition parties. In less than a decade, however, drastic merger movements led to a monopolistic structure. The abuse of monopolistic power has become pervasive. This article studies this unexpected historical twist by examining the industry's market dynamics during the country's democratization in the 1990s. To show the path-dependent mechanisms in the nonlinear development trajectory of the market, a sociological approach is applied that emphasizes firms' competitive strategies in controlling the multiple dimensions of uncertainties and rules that induce this competition.

I. INTRODUCTION

THIS paper studies the market dynamics of the cable TV industry in Taiwan during the country's democratization in the 1990s. TV has become a major channel through which people maintain contact with the wider world. It delivers information that covers almost every sphere of our social lives. TV program scheduling structures the way we organize our social time. A 1995 nationwide survey shows that 88 per cent of people in Taiwan watched TV on a daily basis and that their average viewing hours reached 2.8 hours each day (http://140.109.196.210/sc1). In 1999, cable TV reached close to 90 per cent of total households in Taiwan. Between 1990 and 1997, an average of 513,000 households joined the cable TV viewing audience annually and the total number of subscribers increased by over 400 per cent during the same period. Another survey that compared the time viewers spent watching cable TV programs to wireless broadcasting also shows a similar trend (Cheng Li-chung 2000, p. 97). Cable TV has gained a dominant role in the media environment of Taiwanese society.

Before the enactment of the Cable TV Law in 1993, the industry was a vibrant informal sector that was highly differentiated, and acted as an alternative to the formal media, which was controlled by the authoritarian government. Like other informal economies, the cable TV market was competitive and free from governmental regulation in its early years. There were no initial signs of development toward a natural monopoly until legalization brought disequilibrium to the situation. The 1993 Cable TV Law designed a competitive market, with five licenses issued in each area. It was touted as a victory of democracy by the opposition parties, since the single franchise system originally proposed by the nationalist government had been rejected. It was a large-scale voluntary acceptance of "formalization" by the opposition, who had fiercely fought against governmental control over years, and represented a dramatic episode in Taiwan's democratization process.

In less than a decade, however, drastic mergers led to a monopolistic structure. The abuse of monopolistic power is now pervasive. Ironically, a major part of the infrastructure of Taiwan's "new information economy" has emerged as a potential threat to the island's new democracy. To explain this unexpected historical twist, that surprised and disappointed advocates of democratic rights, I argue for the necessity of adopting a sociological approach that emphasizes firms' competitive strategies in controlling the multiple dimensions of uncertainties and the rules that induce this competition. With a new understanding of the competitive strategies of firms, I then revisit the history of the industry to show the path-dependent mechanisms of the nonlinear development trajectory of the market. This research affirms the sociological insight of embedded competition, as compared to the naturalized conception of market often adopted by economists (Granovetter 1985).

This article is divided into five sections. The first defines the research questions "Why do we need to investigate the empirical manifestations of firm strategies and historical changes of market structure in the Taiwanese cable TV industry?" and "How does this subject relate to the challenges Taiwan faces now?" The second defines the subject of research and introduces the method and data of the research. The third illustrates the theoretical framework adopted in the research, including its assumptions, concepts, and propositions. The fourth deals with the competitive strategies of firms and the constituents of the market field; the aim is to demonstrate the diversities of competitive strategies and how they might be classified according to the sources of the uncertainties that they are meant to cope with. The fifth revisits the industry's history in an attempt to reveal the path-dependent nature of the market's development. A conclusion summarizes the arguments.

II. RESEARCH QUESTIONS

A. *Limited Momentum toward a Natural Monopoly*

In the early 1990s, Taiwan's cable TV industry had no fewer than 619 small independent operators. It was a major, though informal, sector of the country.[1] Now,

[1] This number was based on the voluntary registration of cable TV systems right after passage of the

less than ten years later, only 73 or so systems exist, and, among them, 2 vertically integrated multiple system operators (hereafter, VIMSOs) control over two-thirds of the national market. Thus, a very important part of the infrastructure of the "information society" is now controlled by a handful of companies. Moreover, there are increasing signs that the VIMSOs are abusing their monopolistic power to increase their influence and even penetrate into noneconomic areas.

By 1993, Taiwan's cable TV industry had become a typical example of the island's informal economy. It represented a typical Taiwanese industrial system: vibrant and flexible, highly differentiated, run by small to medium-sized family enterprises, and connected to overseas resources. In 1991, about three hundred thousand households were receiving satellite TV through cable networks provided primarily by illegal stations, placing Taiwan second only to Japan in Asia in the popularity of cable TV (*Far Eastern Economic Review*, November 28, 1991, p. 34). An informal economy, by definition, is one that is supposed to be closest to "perfect" competition. Like other informal economies throughout the world, the cable TV market in those early years was competitive and free from governmental regulation (Cheng and Gereffi 1994). However, despite the unregulated competition, the increasing returns on scale, and the market size achieved, there were no initial signs of development toward a natural monopoly.

Taiwan's cable TV industry is a distinct informal economy for another reason as well. The three national broadcast TV stations are Taiwan Television Enterprise (controlled by the former provincial government), China Television Company (controlled by the Kuomintang, the ruling party, hereafter KMT), and Chinese Television System (controlled by the Ministry of National Defense). The cable TV industry provided an alternative medium to the broadcasting companies and to the press media, which was then under the authoritarian control of the KMT. The term "fourth" was used to convey the meaning of "alternative." It was an "underground" economy with a rebellious spirit, which made it more similar to the "second economy" under state socialism than to its Western counterparts (Stark 1989). The popular names for these underground systems—"Fourth TV station" or "Democratic TV station"—also show its democratic nature. The 1993 Cable TV Law, which designed a competitive market with five licenses issued in each area, was touted a victory of democracy by the opposition parties. It represents a unique case of large-scale, "voluntary formalization," which must be seen as part of Taiwan's democratization process.

B. *The Impacts of Monopoly and the Sources of Its Power*

In terms of scale, conflicts have escalated ever since the passage of the Cable TV

Cable TV Law. The law offered a grace period for underground cable systems—called "cable TV broadcasting systems" as a means to differentiate them from the "cable TV systems," which had licenses—to continue operations before the first licenser started business. The figure is therefore an underestimate.

TABLE I

MARKET CONCENTRATION IN TAIWAN'S CABLE TV INDUSTRY

Company	No. of Channels	%	No. of Systems	%
Eastern	14	13	27	37
GigaMedia	10	9	19	26
Filmate (GigaMedia and Eastern each invested 25%)	18	17	0	0
"Three-in-one"	42	39	46	63
ERA	5	4	0	0
"Four-in-one" (ERA included)	47	43	46	63
Total	110	100	73	100

Sources: Data on business groups are from *Weixin yu youxian dianshi zazhi*, November 1998. Total number of systems are from governmental sources (February 2000, http://www.gio.gov.tw/info/radiotv/ctv/ctv3f.htm).

Law in 1993, until they reached a peak at the nationwide signal cutoff in 1998. During the 1998 conflict, more than one million households islandwide are estimated to have been without cable service due to a clash between the two major VIMSOs. This quickly turned into a political tussle involving the central and local governments and all major political parties. The next year, as a result of this experience, the VIMSOs built an alliance with the two other major multiple channel providers (the so-called four-in-one alliance), and the monopoly took shape (see Table I). Before proceeding, I would like to take a quick look at the impact of the monopoly imposed by the VIMSOs to highlight the importance of the research subject.

The first impact was, of course, on other economic actors in the market. Independent channel merchants were forced to go through the agency of their competitors—the channel corporations of the VIMSOs. The VIMSOs raised their downstream system competitors royalty payments tenfold (*Weixin yu youxian dianshi zazhi*, July 1998). In 1999, it became obvious that price-fixing was taking place, as viewing fees simultaneously doubled across areas, especially metropolitan areas such as Taipei, where the two VIMSOs had full control. Taipei City residents were angered by the sharp rise in fees and expressed their resentment to the city council (Cheng Li-chung 2000). The mayor was initially cautious but, under pressure from city councilors, soon came to support the protesting viewers.

The VIMSOs quickly extended their market power in the cable industry to the public arena. A live broadcast of a public forum on the controversy over fees was cut off by cable systems, despite the presence of government officials and city councilors. Later, a news channel that attempted to air the forum was punished by the VIMSOs by having its band position moved to an area where signals were weak and unclear (*Dacheng bao*, January 2, 2000).[2] Channels that were controlled by the

[2] The wide spectrum of control strategies used by firms in Taiwan's cable TV market will be discussed in more detail later.

VIMSOs also boycotted the city councilors who stood against the fee raise.[3] The new economic force had begun to manipulate or block messages it did not want the public to hear.

In 1998, after the turmoil following the national signal cutoff, the head of the Government Information Office (GIO), David Lee, who had initiated a bold plan to curtail the expanding power of the VIMSOs, astonished the public by stepping down (*Weixin yu youxian dianshi zazhi*, February 1998). In 1999, in the midst of political conflicts between local governments and the central government on the issue of fees, it was announced that the new head of the GIO would be the general manager of Eastern, one of the two VIMSO companies. In 2000, when the Taipei City Government intervened in a hostile takeover of an independent news channel by one of the VIMSOs, one senior manager of a VIMSO (now a legislator) openly derided the government officials: "Who do you think you are? We are the ones who decide who the president will be, not you guys" (*Lianhe bao*, January 6, 2000). The violent takeover of the news channel's equipment was openly broadcast, and shocked the nation. The head of the GIO stepped down because of his close financial connections to the conflict.

The influence of the VIMSOs also reached into the legislative processes. In July 1998, the 69th article of the Cable TV Law was hurriedly amended in the Legislative Yuan to allow one VIMSO system, that had been legally suspended from operation, to continue business (*Gongshang shibao*, July 23, 1998). In 1999, after the announcement that the fixed telecommunication network market would be liberalized and opened for franchise bidding, the VIMSOs were able to influence the legislative process on the Telecommunication Law to gain an advantage long before the bidding started. First, the financial requirement for entering the bidding was reduced to half, from NT$20 billion to NT$10 billion, and existing cable network investments could be counted toward this amount. This gave VIMSOs an early start compared with their competitors. Second, the minimum construction scale for the launch of business operations was raised from 100,000 households to 200,000 households, which gave the VIMSOs easy entry into the new market compared with their rivals, who had to start from scratch (*Jingji ribao*, May 13, 1999).

In April 2000, the press learned that a VIMSO that had recently gained a franchise in the fixed telecommunication network had—shortly before the network legislation—sold privately issued stock to many legislators at far below the estimated market price (*Gongshang shibao*, April 25, 2000). The fact that many legislators had received the stocks, and that they belonged to various political parties, shows the degree of political leverage that the VIMSOs are able to exercise. In 2001, at the initiative of legislators affiliated with VIMSOs, the Legislative Yuan passed amendments to the Cable TV Law with uncharacteristic speed and efficiency placing new

[3] From interviews with city councilors.

limits on the authority of local governments to govern cable systems (*Zhongguo shibao*, January 6, 2001). The VIMSOs' political leverage had grown so strong that they could influence the regulatory environment to their advantage.

C. *Why This Twist in the Democratic Fight against Monopoly?*

Research has shown that during the authoritarian period, there were monopolies in both the public and private sectors, which were controlled by either the KMT government or backed by clientalistic policy preferences (Hsiao et al. 1989; Chen et al. 1992). The cable TV industry had indeed once been conceived of as a "free market" force challenging the KMT's monopolistic control of broadcast TV. But now, under the camouflage of the same "free market," a new monopoly was expanding, unlike its older counterparts that grew from the patronage of the authoritarian state.

The 1993 Cable TV Law designed a competitive system where five licenses were issued in each area. The emergence of this monopoly could not be explained easily by the single license bidding design (i.e., "legal monopoly"). In fact, the opposition parties agreed to support the formalization of the underground economy exactly for the reason that the market would be legislated to be competitive. The formation of VIMSOs was the result of complicated interactions among firms in the competitive market. This article will provide a sociological explanation of the strategies and structures of market competition in Taiwan's cable TV industry during the 1990s.

III. RESEARCH SUBJECT, DATA, AND METHOD

Since cable TV is a newly emerging industry, we need to gain some basic understanding of its unique technological and market characteristics prior to examining the Taiwanese case in greater detail. The computer, telecommunication, and consumer electronics industries are merging, and becoming the economic backbone of the so-called information society. However, the realization of this technological potential is still largely constrained by limits on bandwidth. Because cable TV offers a wide bandwidth, it has become a major strategic highland in the coming information economy. Unlike other media, the development of the cable TV industry in various countries differs along three lines, each of which contains a dichotomy.

First, cable TV offers programs that suit both mass and differentiated audiences. HBO and TVBS, for example, have gained great popularity in Taiwan, so much so that many people consider them almost a daily necessity. Meanwhile, cable TV's wide bandwidth allows the broadcast of programs tailor-made for segmented audiences, such as housewives, children, sports fans, Buddhists, and ethnic minorities.

Second, cable TV can simultaneously serve global and local interests. It is among the easiest ways for people in the developing world to be in direct touch with the rest of the world. Foreign live broadcasts by big multinational corporations (e.g., the terrorist attack on the World Trade Center shown on CNN) can be delivered across national borders into households far from the global metropolises. In the eyes of the defenders of traditional culture, cable TV is almost like a Trojan horse sent by cultural imperialists. On the other hand, because cables are laid underground, pass through densely populated areas, and are under the management of local governments, the industry can be expected to reflect local interests by helping to cultivate grassroots culture on the community level.

Finally, cable TV is believed to be both amiable to centralized political control and to have the potential for deepening democracy. Authoritarian governments tend to like cable TV systems because they can easily manipulate the program contents through close surveillance over the grounded system operations. However, paradoxically, in democratic countries, the two-way communication potential of cable TV systems is seen as a rare opportunity for strengthening formal democracy by encouraging citizen participation (Godek 1995).

It is therefore not just the bandwidth, but more importantly the way the bandwidth is utilized, that makes cable TV a crucial industry to national socioeconomic development. It represents a technological opportunity for plural, democratic, grassroots, and balanced development in the media and cultural environments. This is, however, just a potential; the specific direction of its actual development is not predetermined. Taiwan reached a crossroads in the three dichotomies in the late 1980s. The industry has experienced a dramatic transformation from one of the country's major informal economies in the 1980s, through great turbulence in the 1990s after the legal formalization, and finally to its current monopolistic structure at the turn of the new millennium.

Two sectors form the core of the cable TV market: the downstream system operators and the upstream channel program suppliers.[4] By combining the two sectors with a degree of integration, we can draw a typology of the major firms in the cable TV market (see Table II). The industry's development is mainly driven by complex interactions among firms, inside and across the two major sectors in the field of market competition. It is important to remember at the outset that when people talk about the cable TV industry, they usually mean the downstream system operators. For example, the 1993 Cable TV Law regulated only the system operators, not their upstream program suppliers. Two reasons may explain this. First, the same programs can also be delivered to final viewers through traditional wireless broadcasting, video stores, or satellite receivers. The upstream software supply does not define the main characteristics of the industry. Second, the cable TV industry has now ceased to be devoted only to TV entertainment, and has become a broadband access

[4] Two sources of revenue for cable systems are subscriber's viewing fees and advertisements from local sources. The expansion of systems into internet service provision and fixed networks will bring new sources of income. However, the new areas of investment so far have not turned into profits. Channel providers rely mainly on royalty payments from systems and advertisements.

TABLE II

MAJOR FIRMS IN THE CABLE TV MARKET

Integration	Sector	
	System	Channel
Low	Independent system operator	Single channel provider
High	Multiple system operator (MSO)	Multiple channel provider (MCP)
	Vertically integrated MSO (VIMSO)	

service provider that offers fast speed, wide bandwidth, and two-way communication through an underground, closed network (the literal meaning of “cable”).

A significant development in Taiwan’s cable TV industry in the 1990s was the consolidation of VIMSOs. GigaMedia Co. (Ho-Hsing) initially stepped into the market, by buying up independent systems, and then expanded by backward integration into content provision. In contrast, Eastern Co. (or Tung-Shen) went the other way around.[5] The transformation of Taiwan’s cable TV industry from one composed of numerous independent system operators to one dominated by VIMSOs in the 1990s was a complicated process, involving control and resistance among many firms in the market. To prevent the fallacy of “reading history backward,” this research adopts a bottom-up grounded method, which emphasizes analytic induction instead of the top-down model of deduction (Fligstein 1990; Strauss 1987).

I began with in-depth interviews with employees and insiders of some of the key systems in Taiwan’s cable TV industry. From those interviews, I gained a deeper understanding of the pervasive anxiety involved in trying to control (or escape the control of) the uncertainties and the very complex competitive interactions in the market. From there, I started an extensive collection of data on strategic moves in the industry between 1987 and 1999. These data came from various sources, but mainly from magazines and newspapers. In the end, 3,605 news items were collected and stored in end note format, making Boolean cross-comparisons easy. Many of the reports concerned identical market events. They can enrich our understanding of some crucial conjunctures of market conflicts: how a series of strategies that were linked together ran up against counterstrategies, resulting in a shift of the market structure.

The analysis yielded thirty types of strategic moves aimed at controlling sources

[5] The two VIMSOs have changed their names many times over the last decade. In the article, I consistently use the most recent name to reduce confusion. Also, hereafter, “system” will be used to refer to the “cable system operator” and “channel” to “channel program provider.” Indeed, the channel side of the market is also a complex market involving different subtypes of firms. Here I use the term loosely to prevent distractions in developing arguments.

of market uncertainty. By grouping these competitive strategies, five major constituents of the market field and their related control strategies were analytically inducted. When conflicts that developed along these interfaces of competition were arranged chronologically, a path-dependent history of market competition was revealed. To highlight the theoretical meaning of Taiwan's unique case, I consciously follow the method of an "extended case" in developing my historical investigation, by embedding data in a dialogue with the asocial framework of mainstream economics (Burawoy 1989; Burawoy et al. 1991, pp. 271–87). In addition to news clips, a portion of the data in this section was collected from published legislative debates, industry research reports, and oral histories. This last source of data proved especially helpful (Yu 1997).

IV. EMBEDDED COMPETITION: A SOCIOLOGICAL PERSPECTIVE

How should we understand the conflicts and the market processes that led to the monopolistic structure of Taiwan's cable TV market? The investigations of both sociology and economics on the subject of monopoly revolve around a similar group of concepts: competition, market, conflicts, and monopoly. However, they differ significantly and reveal quite different understandings of the situation. This section introduces the sociological perspective adopted in this article, by contrasting it with the way mainstream economics deals with the subject. The intention is not to debate the field of economics but to highlight the uniqueness of sociology.

Mainstream economics commonly adopts an efficiency model, which views the market as a resource allocation mechanism driven by price-mediated competition among anonymous economic actors. Two things separate the sociological paradigm from that of economics: one ontological and the other methodological. Sociologists use the term "embeddedness" to emphasize the influence of social constructions and the preexisting sociopolitical context on economic activities (Granovetter 1985; Granovetter and Swedberg 1992; Smelser and Swedberg 1994). In contrast, mainstream economists often assume a "naturalized" conception of the market, as self-sufficient, self-regulating, and beyond politics and history (Unger 1987; Swedberg 1990, 1991). Methodologically, sociologists often approach economies inductively from the bottom up, pay special attention to diversity and historicity, and rely on various sources of data. Economists instead prefer parsimonious assumptions, mathematical models, deductive reasoning, and restricted ranges of quantitative data (Hirsch, Michaels, and Friedman 1990).

With regard to the monopoly in the cable TV market, two positions (not necessarily mutually exclusive) can be found in economics. I will call them "constraining natural monopoly" and "releasing natural competition." Both share the naturalized understanding of the market and the belief that increasing scale return is crucial to the cable TV industry. Advocates of the first group are prone to accept the idea that market competition in the industry will lead to a natural monopoly. The problem is how to prevent rent-seeking behavior by monopolistic firms (Demsetz 1968; Posner 1986; Williamson 1985). The second stance toward cable monopolies became popular in the 1990s. Advocates question the empirical soundness of a "natural monopoly" and emphasize the de facto creation of a legal monopoly and the various sources of government failure that have been observed. Their prescription is to go for deeper laissez-faire deregulation, in the hope that new technological breakthroughs will bring in new competitors and revitalize contestable competition (Liu 1993; Johnson 1994; Crandall and Furchtgott-Roth 1996).[6] With regard to the cable TV industry, a "naturalized" market is assumed either in the name of a "natural monopoly" (although the abuse of market power and uncontested profits must be constrained by careful regulation) or "natural competition" (though its potential will not be released unless the "artificial regulations" are removed).

Sociologists do not deny that: (1) our modern economy is gravitated toward market processes; (2) competition lies at the heart of most market phenomena; (3) market competition among firms is a decentralized, multilateral process; and (4) firms tend to maximize profits and can be conceived of in this way (Block 1990; Burt 1992). However, they emphasize the social embeddedness of economic activities (Granovetter 1985; Swedberg 1991) and demonstrate through research that economic transactions are socially constructed (Zelizer 1983, 1988), parts of ongoing network processes (Granovetter 1985), and historically contingent on the institutional environment (Hamilton and Biggart 1988).

This article follows Fligstein's "market as politics" approach (1990) and places causal priority on the strategies of firms to reduce environmental uncertainty and ensure returns on investment in a field of market competition. A firm steps into a "field of market competition" when it foresees an opportunity for returns and combines physical, financial, and human capitals into an investment. At the core of market competition lie firms' other-oriented strategic actions aimed at controlling uncertainties in the volatile environment in order to assure returns.[7] This explains the recent paradox of rival firms increasingly forming strategic alliances, as intensi-

[6] Some even insist that the "abuse" of market power by monopolistic firms represents a heroic "breakaway" of the market from governmental interventions. Even in the face of the damage to consumers (not to mention to those nonmonetary goods that a good society may cherish, such as justice or tradition), they insist that those "temporary" disturbances will be self-correcting if the market is set free (Cheng 1997).

[7] The naturalized conception of the market conceives of competition as an asocial mechanism of ecological selection (subject to the final sovereignty of consumers) or information feedback (for adjustments in investment or pricing). Competition as a social process of power struggles and competitive behavior as relational and other-oriented is unimaginable especially in a competitive market. From a different perspective, Palermo (2000) compares the analytical logic of the two contrasting braches of new institutional economics (i.e., the measurement approach of Demsetz and the governance approach of Williamson) and points to their common failure in dealing with the problem of economic power.

fied global competition and technological innovation brings unprecedented uncertainty into returns on investment (Piore and Sabel 1984; Harrison 1994).

These strategic actions to control uncertainty often aim at aggressively avoiding competition by excluding competitors or restraining specific competitors' freedom of action. Ironically, one firm's control of uncertainty is often the cause of another firm's loss of certainty. Control however, inevitably invites its own resistance. Market competition, hence, can be understood as a power phenomenon. Indeed, a control strategy is more likely to be successful when all the possible sources of resistance are carefully calculated beforehand. In some cases, estimated resistance (from a third party, perhaps) is crucial to the success of control strategies. For example, a channel branch of a VIMSO that cuts off signals to a certain system can, of course, foresee an angry reaction from the latter; but what the strategy actually aims to do is to trigger a massive flight of subscribers. The large-scale switching of viewers then creates an opportunity for the VIMSO to acquire the targeted system as it runs short of cash.

These competitive interactions of control and resistance lead to an accumulation of stresses in the market field and lead to intermittent conflicts on various scales. It is exactly through these conflicts that market relationships gradually move in a certain structural direction. Fligstein argues that firms that face a highly uncertain environment tend to follow the business model that appears to be successful; this is recently the process that sociological institutionalists call "mimetic isomorphism in organizational field" (DiMaggio and Powell 1991). In every stable market, we can observe a certain type of firms in power and the popularity of a compatible concept of control. The market transition period is often characterized by chaotic struggles among equally competitive types of firms, and pervasive confusion about the conception of control (Fligstein 1996). It is not difficult to understand why sociological studies on economic embeddedness—which focus on how rules, norms, and conventions shape and constrain competition—tend to emphasize the path-dependent nature of industrial history.

To summarize, economic sociology, in contrast to mainstream economics, starts from the assumptions that: (1) firms are not only profit maximizers but also power manipulators; (2) firms are not isolated units, but are able to control competitive processes beyond monopolistic pricing; (3) firms in competition are not anonymous and often target one another specifically; (4) profits come from uncertainty control driven by investment protection, not only from efficiency improvements internal to firms; and (5) the application of technologies is subject to social contest, rather than given and intrinsically defined. The strategic actions of firms to control environmental uncertainties in order to assure returns on investment, the conflicts that are driven by power struggles among firms, and the shift of market structure that result, are the three interweaving dynamics of a market field.

V. CONTROL STRATEGIES OF FIRMS IN THE MARKET

Through a careful inductive analysis of the competitive strategies that were reported between 1987 and 1999, I found thirty forms of strategic moves conducted by the five major types of firms (see Table II). These strategies aimed at controlling various sources of market uncertainty. Further analysis shows that these competitive strategies can be classified into five major groups, each representing a dimension of control (see Tables III and IV): structure (the number of effective competitors), route (the ways commodities are transmitted to the final consumers), networking (i.e., informal and formal cooperation among firms that can negotiate a common interest), chain (manipulation of sector linkages on a vertical basis), and consumption (shaping consumer habits and preferences). They are also the constituents of the field of market.[8]

Many market conflicts—at least the cable TV market—develop along these interfaces of competition. The five categories are meant to be mutually exclusive and hopefully exhaustive; but the strategies are not necessarily so, because the effects of strategies depend largely on the objective specificities of conflict conjunctures and our subjective scope of examination (e.g., short/long term or direct/indirect). The purpose of the following discussion is to illustrate the constituents of a market field and competitive strategies of control, both as they are understood from the perspective of "market as politics."

The first dimension of market control, "structure," refers to control strategies that aim to limit the number of *effective* competitors in the field of market—the most common way for economists to conceive the contestability of a market. Mergers and collusion are typical examples. Not all the strategies listed under this category have the same level of immediacy. Predatory pricing, for example, can be a means to squeeze a target company's cash flow so that a merger can proceed with less resistance, resulting in a good bargain. Territorial division can be observed on a different geographical scale. In earlier days, intralicensing area division was not a rarity, especially in agricultural areas where local factions had developed stable networks of mutual restraint (Yu 1997). Geographical division between licensing areas is a game that only multiple system operators (MSOs) are capable of playing.

[8] The concept of "field" has been used for a long time. It defines a vague boundary of direct and indirect influences that together drive the movements or formation of a focal subject to a certain direction (e.g., "a field of forces"). It can be traced back to the Gestalt tradition of cognitive psychology (or even to the impacts of Newtonian physics). It is a key concept in organizational sociology, where interorganizational dynamisms are examined to study environmental influences. So far most of the literature concentrates on pinpointing the *mechanisms* or *factors* of influences in an organizational field; but the *constituents* of the field are still surprisingly understudied. Here I only offer a brief overview. For a detailed discussion of all the strategies, please refer to Cheng Lu-Lin (2000).

TABLE III

CONTROL STRATEGIES AND FIRM TYPES (I)

Dimension	Strategy	Firm Type				Note
		ISO	IC	MCP	MSO	
Structure	Territorial division	2			2	
	Segmentation	2	2			Institutional
	Merger	2			2	Concentration
	Collusion	2			2	De facto monopoly
	Predatory pricing	2			2	Expelling competitors
Route	Control satellite converter			1		
	Preoccupy underground routes	2			2	
	Expand channel			2	2	Horizontal expansion
	"Import substitution"				1	
	Circumvent by DBS		1	1		Circumventing system
	Community broadcasting		1			Circumventing system
	Area-exclusive licensing of channel program	2			3	Blocking competitors from access
Networking	Business organization	2	2	2	2	
	Group boycotts	2		2	3	
	Concerted refusal to buy			2	2	
	United selling	2			2	

Notes: 1. The numbers represent the degree of impact. The higher the number, the greater the impact.
2. ISO: independent system operator, IC: independent channel, MCP: multiple channel provider, MSO: multiple system operator.

(For example, GigaMedia exchanged its Hsinchu City license with Eastern's Keelung City license, which enabled the two to reduce their competition in the two areas.) Market segmentation often happens when a new technology breaks the existing boundaries of socially constructed commodities and brings uncertainty to the status quo. (For example, video retailers and movie theaters divide the time periods for marketing after a film is released, creating two separate markets. Cable systems refrain from broadcasting certain satellite programs to reduce hostility from "other" markets.)

The second market dimension is the "route." Competitive strategies of this kind aim to control the physical or institutional passages through which commodities (signal, in this case) are transmitted to the final consumers. For example, in earlier days when signal compression technology had not yet matured, the program companies that controlled the satellite converters had the upper hand in the market, especially where other program providers were concerned.[9] Increasing the number of channels can also be a strategic action of this kind.

[9] This is also why it would be possible for a program provider to cut another program provider's signals.

TABLE IV

CONTROL STRATEGIES AND FIRM TYPES (II)

Dimension	Strategy	Firm Type				Note
		ISO	IC	MCP	MSO	
Chain	Blocking signal	2			3	Cut off channel's ad income and viewer base
	Signal holdups		2	2	2	Pressure on systems
	Differential pricing		2	2		Maintain competition
	Vertical integration				2	
	Information distortion	2	1	1	2	
	Buy but not show	1			2	
Consumption	Tie-in			2	2	Eliminate competition
	Fixing channel position		1	2	1	Build viewing habits
	Free broadcasting		2	2		Build viewing habits
	Combination of channels	1			2	Disturb viewing habits
	Send channels to exile	1			1	Move to band position with weak reception
	Advertisement masking	2			2	
	Line destruction	2				
	Addressing device	2			2	Prevent stealing of signals

Notes: 1. The numbers represent the degree of impact. The higher the number, the greater the impact.
2. ISO: independent system operator, IC: independent channel, MCP: multiple channel provider, MSO: multiple system operator.

"Import substitution" is another strategy anchored on route, that often happens when an MSO pursues backward linkages and then excludes similar channels offered by competitors. For example, in 1998 Eastern abruptly announced the debut of five self-produced channels to replace similar channels, in the name of "protecting national programs." On the other hand, when multiple channel providers (MCPs) realized that they might be blocked by the emergent power of the VIMSOs, they started to search ways to circumvent their systems. For example, in March 1997, ERA announced that it would spare no effort to develop a "second route" for DBS (Direct Broadcasting System). This was a dangerous move, because the systems might have retaliated, aborting the MCPs' new business. Indeed, soon afterward, GigaMedia and Eastern joined hands to cut off ERA's seven channels (*Ziyou shibao*, March 4, 1997). Both the timing of introducing DBS (i.e., why then and not some other time) and its chance of success (i.e., how long it would last) depended largely on the competitive dynamisms of its embedded field of market, not on its intrinsic technological maturity.

"Networking" is another dimension of market control. I define this as "formal and informal cooperation among firms that are able to negotiate a common interest." Many research studies in economic sociology have demonstrated that a market can be conceived of as networks endowed with structural holes (Burt 1992) and that the internalization of transactions is not the best alternative to the naturalized market (Powell 1990). Even potential rivals can consciously build short-term or long-term cooperation (including rules of competition) to control uncertainties in the market (Cheng 2001). In high-tech industries, it is common for firms to organize a consortium to act as an industrial midwife, bringing an emergent market up to a certain scale in a rapid but stable fashion. In the cable TV market, allied efforts toward united buying or selling (not necessarily rising to the scale of concerted refusals to sell or buy) were not uncommon.

In 1994, to confront the increasing threat of the MCPs, fifty-two independent systems organized to foster the united procurement of channel programs from foreign sources, utilizing the national architecture of democracy stations. However, they failed (*Weixin yu youxian dianshi zazhi*, February 1996).[10] This case shows that networking strategies require tremendous coordination and expense when the prospective participants are large in number and geographically widespread. In early 1996, Eastern organized seventy other systems to join its alliance; at the same time, its competitor, GigaMedia, organized its own (*Gongshang shibao*, September 25, 1996). The VIMSOs, with their financial and administrative superiority across sectors, have invited and/or coerced independent systems to follow their plan; they are more likely to succeed. The formation of the “three-in-one” alliance in 1999 was prompted by simultaneous investments by Eastern and GigaMedia (each owns 25 per cent of the stocks) in the largest MCP, Filmate. The stockholding structure was carefully planned to balance the two VIMSOs, and also gave the MCP a certain amount of security and autonomy. The networks helped to hide what Harrison (1994) called “concentration without centralization” in the field of market.[11]

“Chain,” the fourth dimension of market control, rests upon the manipulation of linkage structures among sectors that are connected on a vertical basis. Its effects often depend on the reactions of entities that stand behind the ones to be controlled. Signal cutoff is the most common practice in this dimension. When a system cuts off a channel’s programs, it directly influences the channel’s income from commercials. Advertisement income is a significant part of a channel company’s revenue. For example, ERA’s average monthly advertisement revenue was NT$40 million in 1994 and NT$160 million in 1997. In March 1993, ERA’s programs were cut off by allied systems for eight days. Its competitors took advantage of this, with each increasing its commercial income by over NT$1 million a day (*Minsheng bao*, March 5, 1997). Of course, a signal cutoff is a two-edged sword, and a system can poten-

[10] When independent systems developed their first association, the number of members had fallen to just over twenty stations. In the end, the institutional framework could not measure up to the VIMSOs.

[11] A more formal networking strategy is to establish business organization to foster common interests. There have been six different business organizations formed in Taiwan’s cable TV industry.

tially also suffer a loss of subscribers to its competitors. In the midst of the 1995 signal cutoff, ERA launched an aggressive campaign through newspapers, encouraging viewers to express their grievances to their system providers. It also offered other systems' phone numbers to ease switching (*Minsheng bao*, January 11, 1995).

The number of competitors in the upstream or downstream sector is therefore a crucial factor in chain control. Burt's famous study on what he called a "structural hole" (i.e., nonredundant ties in the networks of a market field) also showed that it is related to the degree of control and the richness of entrepreneurial opportunities a focal firm can garner (1992).[12] The number of "structural holes," however, is not fixed but dynamic, and subject to strategic manipulation. As we observed in Taiwan's cable TV market, differential pricing was a strategy not just about unfair trades but also represented an attempt at hole management. For example, in 1995, ERA charged smaller systems much lower royalties than the bigger ones in the same area, in order to maintain competition in its downstream (*Zhongguo shibao*, August 14, 1997).

Differential pricing relates to another strategy in the chain dimension: information distortion. Information distortion is pervasive in the market and can be quite complicated. For example, on the one hand, both systems and channels inflate their viewer base figures to increase income from advertisements (*Ziyou shibao*, December 25, 1997); but when systems negotiate with channels on royalty fees, they tend to do the opposite, underestimating their viewer base.

Do channels suffer from these underestimated figures? In one way, but not entirely. The practice, ironically, allows them to reply to advertisers who are skeptical of their viewer numbers that its necessary to push up the standard numbers which have been underestimated by the systems. And can the systems, like the channels, also claim innocence? Yes. They face another source of information distortion from viewers. A large proportion of cable viewers in Taiwan do not pay their fees. The number of viewers who "steal signals" by splicing into cables is estimated to be between 20 per cent and 30 per cent of viewers.[13] Thus, when systems negotiate with channels, their reason for giving an underestimated viewing base is almost the same as when channels face advertisement clients. It has often been argued that information distortion is one cause of the conflicts in Taiwan's cable TV market. Therefore, increasing the transparency and completeness of contracts would reduce the conflicts. However, is not the information distortion also a result of the competitive strategies that the economic actors actively pursue?

The final dimension of the market is "consumption," which refers to competitive strategies aimed at influencing consumers' preferences or habits by manipulating their viewing experience. TVBS and other famous channels used "free broadcast-

12 As well as the richness of the entrepreneurial opportunities a focal firm is embedded in.

13 There has been no systematic investigation into the matter. Firms interviewed in this research, however, commonly give the figures cited here.

ing" as they tried to obtain a strong startup base and to influence viewing habits.[14] This strategy gave channel program providers some bargaining leverage when they started collecting royalty fees. Another strategic control of consumption habits first conducted by ERA was to "fix the channel positions" in the range where the signals were clearest and most accessible. Even now, the dominant VIMSOs have not changed ERA's channel positions (channels 37 to 39). Likewise, after the "three-in-one" alliance was formed in 1999, its first concerted move was to circulate a "list of suggested channel positions."

Conversely, a system can punish a channel by moving its band position to a far corner, where signals are the least clear (the so-called snowy channels). For example, under pressure from the "three-in-one" alliance, the Super Channel, an independent channel, strove to survive by bidding for a famous Japanese drama from Fuji TV to consolidate its viewers. The alliance was angered, however, and announced the channel would be moved to a position above channel 60 (*Dacheng bao*, March 13, 1999). During negotiations over the 1998 national signal cutoff, the two VIMSOs agreed to buy channels from each other after governmental intervention. However, the signal cutoff continued because both VIMSOs claimed that the decision to show the purchased programs or not was theirs alone (*Weixin yu youxian dianshi zazhi*, February 1998). After another round of negotiations, one VIMSO brought up an innovative strategy that was unprecedented in other countries. It started a large-scale "channel combination," by which, the company claimed, "the best parts of different channels are combined together to avoid repetition" (*Dacheng bao*, January 15, 1998).[15] Consumer preference is thus not a privileged judge of business competition, impartial and outside the market, but rather a social variable subject to strategic control.

I have briefly introduced the control strategies that have been documented by magazines and newspapers throughout the history of Taiwan's cable TV industry. I hope this has shown the very complex nature of the strategic interactions in the market and also demonstrated the constituent dimensions of the market as a field of uncertainty control and power struggles. Of course, not every type of firm practiced strategies in each dimension and with equal weight. Each type of firm has its own "terrain of control" among the five dimensions of the market field. Indeed, a closer examination of the data set shows that independent channel operators have the smallest terrain, while the VIMSOs are the strongest in every dimension. However, the above analyses are still static and lack both the historical and structural depth to help us understand the market transformation in Taiwan's cable TV industry. The VIMSOs certainly did not emerge overnight. After showing the stage, it is necessary to introduce the actors, and the acts of market competition. Thus, a chronologi-

[14] Because these channels were once free, viewers in Taiwan tend to regard them as "basic channels."
[15] This of course did not apply to the VIMSOs' own channels.

cal investigation into the changing market dynamics in the industry's history is called for.

VI. THE INDUSTRY'S HISTORY REVISITED

The historical formation of the cable TV industry in Taiwan can be conceived as a contested process of competing firms exercising strategies to expand and consolidate their control in the market. Conflicts are therefore endemic and almost inevitable when expanding forces meets resistance. From the database mentioned earlier, I found 146 reported conflicts in the cable TV market of Taiwan between 1979 and 1998. They came out of specific conjunctures of power struggles in the market; typically, one economic player expanded its control at another firm's expense and the later refused to given in and resisted.[16] These conflicts provide important information about the power shifts in the market structure over the years.

The 146 conflicts have been coded with regard to the economic actor that was expanding its power, or rather the entity whose power was being resisted (see Table V). A total of 47 per cent of the conflicts were targeted against independent systems, 34 per cent against MSOs, and only 19 per cent against MCPs. These values only give a rough estimate of the frequency distribution. They do not take the intensity of conflicts into consideration (in other words, each conflict is given equal weight, even though their actual impacts vary significantly). In addition, the fact that the MCPs and MSOs emerged on the market quite late should also be considered. The data have been arranged chronologically to show the shift of power in Taiwan's cable TV market.

By 1993, most of the conflicts revolved around governmental or private efforts to control the expanding influence of independent cable systems. Nineteen ninety-four was the first year when conflicts surrounding the expanding power of MCPs exceeded those involving systems. That year inaugurated a new stage of MCP domination. Although it lasted only four years; it was a crucial transitional period that had path-dependent influences and showed the history of the Taiwanese cable TV industry to be a nonlinear process. I will discuss this in more detail later. The VIMSOs' domination became evident after 1997. In just two years, 1997 and 1998, forty-four conflicts related to the expanding power of the VIMSOs were registered. The data clearly show that the Taiwan's cable TV market has gone through three major stages: the system-dominated period, before 1994; the MCP-dominated period, from 1994 to 1996; and the VIMSO-dominated period, since 1997.

[16] It is important to remember that the initiator of a conflict is not necessarily a powerful firm preying on a weaker one. For example, one independent system, "Hsin-gan-hsien," announced a seemingly "predatory" price cut in 1998 and triggered an angry reaction from Eastern. In retrospect, this proved to be not a case of Hsin-gan-hsien being aggressive, but rather a last-ditch effort to avoid a hostile takeover.

TABLE V

FREQUENCIES OF DIFFERENT TYPES OF CONFLICTS

Years	Against System	Against MCP	Against MSO	Total
1979–93	36 (97%)	1 (3%)	0 (0%)	37 (100%)
1994–96	8 (27%)	16 (53%)	6 (20%)	30 (100%)
1997–98	25 (31%)	10 (13%)	44 (56%)	79 (100%)
Total	69 (47%)	27 (19%)	50 (34%)	146 (100%)

Fig. 1. Three Stages in the Development of Taiwan's Cable TV Industry

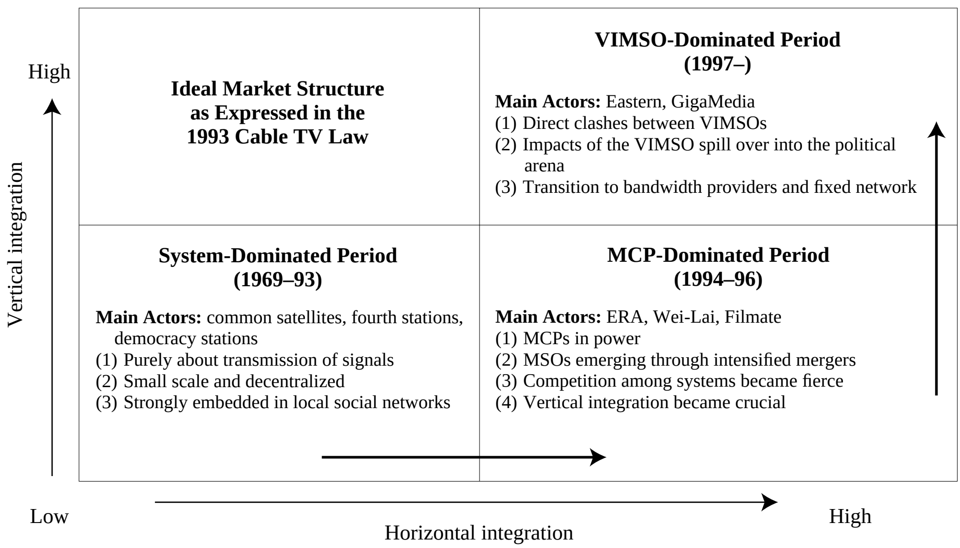


Figure 1 builds upon Table V, adding the dimensions of horizontal and vertical integration in order to highlight the structural transformation beneath the power shift. The historical path of Taiwan's cable TV industry followed the bold arrows. The original 1993 Cable TV Law envisioned a quite different cable TV market from what has emerged. It was to have been one in which the MSOs' expansion was constrained (i.e., lower horizontal integration) and in which system-produced and locally accessible programs were encouraged (i.e., higher vertical integration). This path, however, was never realized. History may prove that the ideal expressed in the law was simply wishful thinking or a futile effort; but the actual development and its underlying mechanisms still need to be explained.

A. *Informal Economy Period, 1970s–1993*

Before the enactment of the Cable TV Law in 1993, over 600 small independent system operators were spread over Taiwan, creating the densest cable network in Asia outside of Japan. It was another chapter in "Taiwan's economic miracle," very much echoing the vivid image of an economy powered by numerous small- to medium-sized businesses. These cable systems constituted an important sector of Taiwan's vast informal economies. They provided an underground medium for people to gain access to information and entertainment not available through the government-controlled wireless broadcasting companies. After the late 1980s, by helping to foster the freedom of speech, the cable TV industry played a critical role in Taiwan's democratization. The authoritarian government, which tried to enforce a ban on these systems for political reasons, triggered many conflicts during this stage.[17] For the same reason, the formalization of the industry would have been unimaginable without voluntary cooperation from the opposition.

There were three types of independent cable systems: the "common antenna operators," the "fourth stations,'' and the "democracy stations." The "common antenna operators" began in the mountain areas (e.g., Hualien and Miaoli counties) in the early 1970s. Most were spin-offs of local electric appliance stores who were promoting sales of TV sets. They provided cable wires that connected household TV sets to the company's antenna, which was placed to enhance the quality of signals. These "common antenna operators" were legalized in 1979, but this restricted their business operations to transferring signals from broadcasting companies. As competition intensified, they became indistinguishable from the "fourth station" companies that emerged in the 1980s. The fourth stations were basically an urban phenomenon, starting from the old communities in Taipei City, such as Peitou and Wanhua. They spread over the island, primarily through interpersonal networks between these early systems and their connections with cable and cable equipment merchants (*Zhongshi wanbao,* July 22, 1997; *Dacheng bao,* October 6, 1997).

The independent systems of both kinds were typical Taiwanese family business. They gathered investment capital from interpersonal networks of family and relatives, utilized labor from similar sources, and expanded their markets through neighborhood networks. As the market expanded, competition between systems grew, and conflicts became common. However, "competition constraints" were also normal practices. Interviews with early founders reveal a striking picture: competing systems often knew and shared a tacit consensus on the geographical boundaries (e.g., a street, railway, or creek) of each other's markets. One crucial factor that turned the "prisoner's dilemma" into an "assurance game" is likely the heightened governmental repression in the late 1980s, especially the frequent cutting of cable wires. This threat from a third party created an environment in which common interests were more easily defined, and the social capital embedded in local networks was quickly mobilized to foster cooperation. The voluntary fixing of com-

[17] Especially during the years when military strongman Hau Buo-Chun was the premier.

petitors' disconnected cable wires was not unusual, because it was believed to be "mutually beneficial" in that the other would do the same (Yu 1997).

Therefore, for a long period in the early history of Taiwan's cable TV market (1970s–1980s), before the "democracy stations" turned it into bases for the political opposition, the industry was a typical informal economy tolerated by the authoritarian government. With regard to the informal nature of transactions, the literature on the "informal economy" has found that certain are less marginal than others, and can even be prosperous. Economists quickly seized this opportunity to argue that the informal economy could represent an effective resistance of the "free market" against the interventionist state. They claimed that it involved innovative entrepreneurship by small businessmen seeking to circumvent the rent-seeking behaviors of the state and to organize production in an efficient manner (De Soto 1989; Biggs 1988). However, detailed sociological empirical studies show that those active informal economies are contingent upon the interaction between local social networks and the resource environment (or "social capital") in which they are embedded (Mingione 1991; Wilson 1993).[18] Studies on the early history of Taiwan's cable TV industry side with the sociologists (Yu 1997; Chang 1998; Lin 1998). They better explain why the scales of cable TV systems in this period were very small and there was almost no market momentum toward natural monopoly. Economies are always embedded, and should be studied as such; it is the institutional governances and the disequilibrium created by these governances that characterize periods of market transitions.

The first "democracy station" was launched in Taichung County in February 1990. By the end of that year, the Taiwan National Association of Democratic Cable Systems had been founded, comprising twenty-four independent systems. The membership quickly grew, reaching forty-two systems in 1992 (Wang 1995). Opposition party leaders who were involved in local politics ran these independent systems. Local factions of the ruling KMT and the members of what later became the New Party quickly stepped into the market as well. The entrance of the "democracy stations" disturbed the existing cable TV market and brought about a new wave of competition. The center of gravity of the constraints on competition shifted from relatives and neighborhood networks to balances among local networks of factions.

Another source of uncertainty control concerned the protection of intellectual property rights. These underground cable systems showed programs obtained from satellites receivers, movie theaters, and video rental shops. These actions irritated

[18] Wilson (1993) offers a feminist critique. She argues that the "gender blindness" of the state regulation perspective can be observed in its failure to take into account the *concealment* of illegality that patriarchy plays inside households. This weakness also applies to "gender-blind" economics that overlooks the nonmonetary work of mostly female labor inside households and its underlying patriarchic regulation (Block 1990).

companies in neighboring markets.[19] The U.S. government and the major international filmmaking companies pressured the Taiwanese government to regulate its industry. In order to reduce hostility from the market and to prevent the government from having an economic excuse to intervene, the independent systems successfully began a self-governing behavior to stop pirating and regulate their program content (especially X-rated programming) in the early 1990s. The international film companies, however, desired more aggressive changes than simply self-constraints in local competition to not utilize their programs. After all, a formalized cable TV market would turn the already well-developed cable networks in Taiwan into an extractable market that promised lucrative profits. The KMT government, knowing that it had lost control of the new medium, was more than willing to go along with this. After a short period of political negotiations, the Cable TV Law was passed in 1993.

B. *The MCP-Dominated Early Formalization Period, 1993–96*

The original draft of the Cable TV Law (i.e., the Cabinet's version) adopted the common practice of allowing only one system to operate in each broadcasting area. This was strongly criticized by the opposition parties because it would only have served to extend the ruling party's control into the new medium. The KMT conceded on the number of licenses issued in each area, but demanded in return that party ownership be allowed. The political opposition was more than happy to accede to, as it was something they themselves desired. The design of multiple-license bidding, which was rare if not unprecedented internationally, was defended as free market competition. Considering the political environment at the time, the twist in policy was understandable, but not inevitable. The opposition declared the enactment of the law "a victory for democracy" since it had long been argued that legal monopolies were the economic basis of the authoritarian KMT regime, and consequently, that "free market" competition was the equivalent of an economic discourse on democratization. There is insufficient space here to discuss in detail how the rules of competition, combined with the competitive strategies of firms, shaped the market transformation, but I will give an overall picture of what happened after 1993.

The law inaugurated several years of cutthroat competition among systems. The existing systems (called "cable broadcasting systems" or CBAs) were allowed to continue operation until the first franchiser in that area passed the equipment in-

[19] The cable TV systems were technically in the same market as movie theaters and video rental shops. Their commodities are highly exchangeable. This pirate behavior created much uncertainty among movie theaters and rental shops with regard to returns on investment, and was therefore regarded as something that needed to be controlled. Indeed, similar tension also existed between movie theaters and video rentals before the uncertainties that video players brought to market boundaries were controlled institutionally. It was essentially a process of power negotiation.

spection and began business operations. The law therefore created a complicated two-tiered form of competition in the market field that proved to have long-term impacts on the industry's development. The first-tier competition between licensees began with franchise bidding and with the speed of building networks and equipment. However, in order to reduce the uncertainty in investment return, licensees had to grab a certain subscription base during the construction period, to ensure a continuous cash inflow and a sufficient startup scale. In the face of this situation, there emerged what I call "aggressive quitters" and "second-tier competition" between them and the usual systems. The "aggressive quitters" were CBAs who expanded their viewer base with low-quality cable wires and cheap subscription rates, simply to make a fortune once the system was sold to the competing licensees. The cable networks that were bought from those CBAs were inferior in quality, and turned out to require larger-than-expected investments to fix or replace. The "second-tier competition," fueled by the competition among licensees, tried to lure away the licensees' viewers with much cheaper costs and fees, and deteriorated their cash flows. Ironically, the measures that the licensees adopted in order to control uncertainty, under the two-tiered competition, actually created more uncertainties.

The "structural holes" created by the intense competition among systems in the downstream business are crucial to explaining why channel providers enjoyed the commanding height during this stage of the development of Taiwan's cable market (Burt 1992). The two-tiered ultra-competition could not be sustained without the existence of another control strategy that was conducted by channel providers. The famous international program providers—such as HBO, Discovery, and ESPN—and their regional counterparts—such as the TVBS (i.e., ERA)—charged only a small royalty payment or none at all during the first year, despite the fact that intellectual property rights and the Cable TV Law protected their interests. This "kind" move on the part of the channels significantly reduced the costs that systems involved in fierce competition would supposedly bear when struggling for subscribers using deep price cuts.[20]

This control strategy, combined with the two-tiered ultra-competition, also explains why Taiwanese cable viewers see what people in other countries regard as premium channels—for example, HBO, Cinemax, Discovery, Disney, and ESPN—as "basic channels." It created a certain rigidity in price adjustments when channel providers later started to ask for royalty payments, and systems were forced to raise subscription rates. After 1994, the channel providers started to harvest their strategic layout by significantly raising the royalty payments. Systems involved in merg-

[20] The MCPs also worried that the systems in competition might be pushed to a corner and revert back to informalization. The best strategy was to influence the subscribers' viewing habits so that when royalty payments were raised, it became difficult for systems to withdraw.

ers and acquisition battles were in a weak position to pass on the costs to their customers; they fought back, unleashing a whole new wave of conflicts with the MCPs, the new "emperors" in Taiwan's cable TV market.

TVBS was the dominant MCP at the time. Its flagship channels were TVBS News, TVBS Sports, and, indirectly, HBO. The TVBS News was the first local news channel to focus exclusively on news reporting. It quickly took over the market space, that the former underground cable stations had left behind, as an alternative to the KMT controlled broadcasting companies. The tremendous popularity of its political talk show, which became *the* window for different political parties to "face the nation" and enhance their visibility, gave the owner of TVBS (Chiou Fu-sheng) salient political leverage. In a volatile competitive environment with tremendous uncertainty, TVBS's unparalleled success offered a legitimated business model that other firms eagerly imitated. The oversupply of cable news channels (over ten) in Taiwan today and their highly homogeneous operation pattern (e.g., political talk show a must, the heavy and trivial use of SNG (satellite news gathering) reporting, in-house surveys as news, and promoting star anchors) were not a result of efficiency competition or a reflection of consumer preferences, but rather a process of institutional isomorphism in Taiwan's unique cable TV market (DiMaggio and Powell 1991).

TVBS Sports was a strong force behind Taiwan's first professional baseball league, as it created a mass islandwide audience. Live broadcasts of the games were lucrative. In April 1996, GigaMedia bought up the broadcasting rights for professional baseball games with an unprecedented offer of NT$1.5 billion a year (seventeen times ERA's previous bid). The VIMSOs had learned from ERA that a strong presence in the channel sector would secure their ability to expand among systems. An angered ERA retaliated by using its own political leverage to organize Taiwan's second professional league, in 1997. ERA quickly expanded its channel family. The MCPs took advantage of the growing number of "structural holes" brought by the intensified competition in their direct downstream. They quickly became the dominant players in the market. Relying on its market power, ERA started to push packaged sales with a sharp increase in royalty payments, and also demanded that downstream systems give its family channels the best signal positions. Ironically, while those strategies represented the climax of the power of the MCPs in the market field, they were also a detrimental blow to the independent systems that had managed to survive in the two-tiered competition between VIMSOs and CBAs. They became increasingly dependent on the VIMSOs both for financial support and in their alliance against MCPs. The closing-up of structural holes in the MCPs' downstream opened up a new era for VIMSOs. The new market regime did not last long (less than four years) because the two VIMSOs were gathering momentum and catching up from behind.

C. *The VIMSO-Dominated Monopoly Period, 1997 and After*

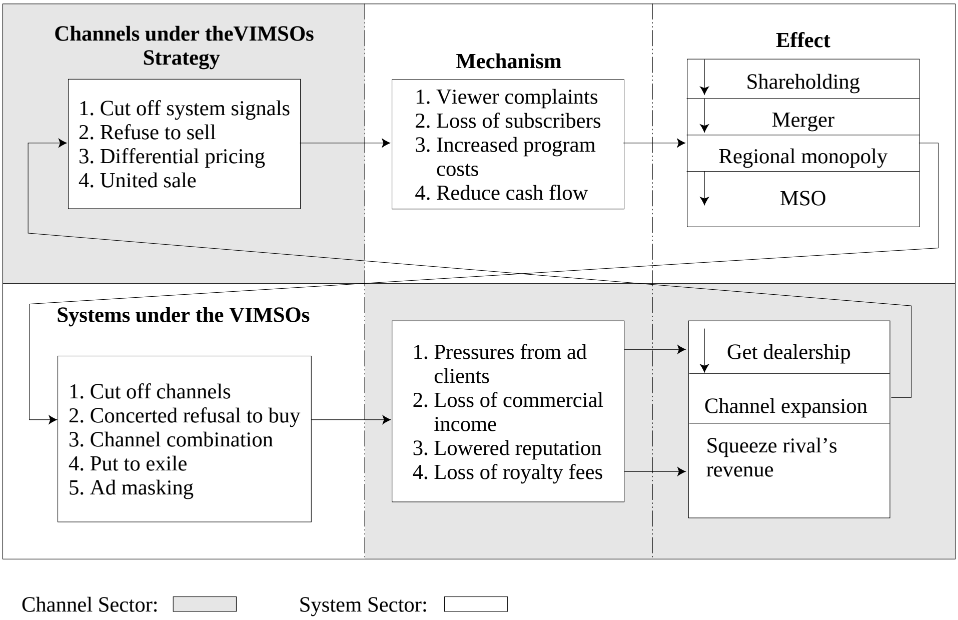
GigaMedia began investments in cable systems some years before the enactment of the 1993 Cable TV Law. In 1996, its aggressive expansion in the system sector suffered a serious setback in Taipei City. The cable system evaluation committee organized by the city government, which for the first time in Taiwan's history was being run by the opposition party, turned down six GigaMedia licenses in order to prevent concentration. Learning from ERA's success, GigaMedia shifted its strategic focus to backward linkages by building its own lines of channels. In contrast, Eastern began from a position similar to ERA's. It began as a video rental business and stepped into the industry after the enactment of the Cable TV Law. When GigaMedia suffered the setback in 1996, Eastern seized the opportunity, expanding aggressively into the system sector. It quickly surpassed GigaMedia in Taipei City. Both VIMSOs were primarily interested in the market potential of wide bandwidth infrastructure and the multiple usages for which it could be used. Although they originally came from different sectors, aggressive vertical integration, especially after 1996, pushed them to become more like each other. The newly opened markets for fixed network and bandwidth services offered the VIMSOs a new field for economic game plays.

Conflicts centering on the expanding power of the VIMSOs escalated to make up 56 per cent of the total in 1997 and 1998, while the percentage directed at MCPs dropped sharply to 13 per cent (Table V). The MCPs knew that as the MSOs became consolidated, the structural holes in their downstream would be closed and the basis for their market power shaken. ERA adopted a differential pricing strategy in an attempt to maintain competition in the downstream sector. In 1995, an MSO-led system alliance protested against differential pricing by launching a widespread signal cutoff targeting ERA's channels. This was an early sign that ERA was losing its power. During the series of confrontations between the two giants after 1996, the MCPs were forced to choose sides. After 1997, they were no longer the leading force in the market.

The VIMSOs added a new dimension of control to their MCP predecessors. Figure 2 provides an illustration of how they used the interplays of strategies to create cross-sector advantages and to expand their market power over time.[21] The control of channels by the VIMSOs gave them a competitive advantage in the system sector. The channels could help a VIMSO expand its control in the sector by adopting strategies to shorten the cash flow of targeted systems. After negotiations, the VIMSOs could gain shareholding, acquisitions, mergers, or effective area monopolies. The VIMSOs could also take advantage of their hold over systems to consoli-

[21] Strategies aimed at controlling intrasector uncertainties were natural follow-ups of the cross-sector strategies, but are not shown here.

Fig. 2. Interplays of Strategies across Sectors by the VIMSOs



date their influence in the channel sector by, for example, jostling against channel competitors, snatching broadcast rights to famous programs, reducing competing channels' visibility, or curtailing competitors' commercial incomes.[22] The MCPs were, of course, influential players in the market, especially when systems in the downstream were involved in fierce competition. However, their impact was unidirectional and fundamentally limited. Only the VIMSOs were positioned to enjoy the interplay of strategies across sectors. The reciprocal interactions between control strategies and their effects explain why the market power of the VIMSOs expanded exponentially once their control over the channel or system sector reached a certain scale.

Eastern and GigaMedia learned, in the wake of the 1998 conflicts over the nationwide signal cutoff, that uncertainties from political interventions could be controlled if cooperative relationships could be built among the major players in the

[22] James Murdoch, the chairman and CEO of Hong Kong–based STAR TV, delivered a scathing attack at a public speech on Taiwan's cable TV MSOs, which he said threaten the industry as a whole. "Theft and resale of advertisement [space] coupled with the cartel-driven distribution model threatens the viability of broadcasters," he said. He also said that the potential for Asia's TV industry was threatened by short-sightedness and profiteering from within the industry, which includes ad-theft (through advertisement masking that replaces advertisements of channel providers with their own) and under-reporting of subscriber numbers (http://www.taipeitimes.com/news/2001/11/21/story/0000112450).

market. The next year, the “three-in-one” alliance between the two VIMSOs and the second-largest MCP was formed. When ERA joined the club, the Taiwan’s cable TV market finally seemed stable after years of turbulence. However, the stabilization opened new arenas of conflicts in the market.

In 1999, after the “four-in-one” (see Table I) coordinated a simultaneous rise in viewing fees, the anger of cable TV viewers boiled over and quickly turned into an urban movement for consumer rights (Cheng Li-chung 2000). In fact, Taiwan’s cable TV industry has never had a period without viewer complaints. Their complaints have generally not been unreasonable, because it was consumers who ultimately suffered from the firms’ control strategies. There have been a multitude of troubles: the destructive impact of rushed network construction on the appearances of neighborhoods and building facades; frequent and unpredictable signal cutoffs; the abrupt disappearance, reassignment and combination of channels; the under-regulated broadcasting of indecent content; poor and unreliable after-sale services (partly due to frequent changes of ownership); messy masses of cable wires that block sewers; and so forth. Viewers, however, generally (though not silently) tolerated these troubles because they were content with their relatively cheap viewing fees. However, once the monopolistic “four-in-one” had full confidence that the market was under its full control, it started to touch the nerves of consumers. Viewing fees were raised sharply and extensively. In a period when the market power of the VIMSOs was firmly consolidated and had even penetrated into other social spheres, it seems only natural that it was the people, rather than competitors in the market, who rebelled.

VII. CONCLUSION

In this article I focus on the market dynamics of the cable TV industry in Taiwan during the country’s democratization in the 1990s. Before the enactment of the Cable TV Law in 1993, the industry was a vibrant informal sector that was highly differentiated, and which constituted an alternative to the authoritarian government-controlled formal media. However, in less than ten years, a monopolistic structure took shape following drastic merger activities, and the abuse of monopolistic power is now pervasive. To explain this unexpected historical twist that surprised and disappointed democracy activists, this article offers a sociological explanation, one that emphasizes firms’ competitive strategies in controlling sources of uncertainties and the path-dependent nature of market development, with a focus on the institutional and network constraints on competition.

The extensive collection of competitive strategies in the market allows us to examine the fuller spectrum of competitive behaviors. We can gain a better understanding of the categories of control strategies and the constituents of market fields through analytic induction, rather than through the imposition of a predetermined abstract model on complex realities to test its fitness. Fligstein's (1990) famous study on the changing industrial structure of the United States focuses closely only on the structural features of the market, measured by the two dimensions of integration (related/unrelated and vertical/horizontal) over a long period of U.S. industrial history. The control strategies of firms that target a wider spectrum of market dimensions with a shorter time span are largely overlooked. In addition, his analysis focuses mainly on the interplay between state antitrust policies and the coping strategies of the dominant firms, while tending to downplay the dynamism of control *among* firms and *inside* markets over a relatively *short period of time*. I hope that this research has contributed toward filling these voids. The sociological perspective of "market as politics" (Fligstein 1996) is substantiated and further developed by analytically embedding it in the experiences of Taiwan's cable TV industry.

After presenting this perspective, I revisit the history of the industry to show the path-dependent mechanisms in the market's development trajectory. Like other informal economies, the cable TV market was competitive and free from governmental regulation in its early years. However, given the technologically defined economy of scale and the scale of market that the industry had achieved, there were no initial signs of development toward a natural monopoly. The intuition of economics would tend to regard an informal economy like this as a typical "free market." However, closer empirical examination shows that it was embedded in the business logic of family enterprises, local networks of neighborhood and factions, and reciprocal cooperation among competitors aimed at stabilizing the market from the disturbance of outside hostility (e.g., firms in "other" markets or the government).

The 1993 Cable TV Law designed a competitive system with five licenses issued in each area; it was touted as a victory for democracy by the opposition parties. It represents a unique case of the large-scale, "voluntary formalization" of an underground economy that was once a force of political resistance against governmental control. However, a monopolistic structure centered on two VIMSOs quickly grew out of a seemingly endless string of conflicts, and business misconduct has ironically turned the new medium into a threat to democracy. A typical explanation would be that it was a "legal monopoly" created by the artificial imposition of a franchise system. However this cannot be said for Taiwan's cable TV industry. The bidding system was competitive, and governmental intervention was almost nonexistent.

I argue that the interactions between the competitive strategies of firms (e.g., MCPs and "aggressive quitters") and the rules of the two-tiered competition broke the existing social equilibrium and brought about ultra-competition in the market field. Firms in a field that is full of uncertainty look to each other for any hints of the "fittest" business pattern, making legitimacy more crucial than efficiency. The unique business pattern of Taiwan's cable TV channels and vertical integration as an axial strategic layout were largely influenced by the success of ERA in the early legalization period.

In this ultra-competitive market, even independent systems with well-planned investments and efficient operations stood little chance. In the absence of private or governmental governance, the only stabilizers were mergers and collusion (i.e., "hierarchy" through the internalization of transactions or "quasi hierarchy" through coercive networks) supported by the financial power of big companies. Even when it is fierce, socially disembedded competition, conceived of as homogeneous and beyond regulation, can select or discipline the players who are less, if not least, efficient.[23]

In the Western context, economic formalization entailed the imposition of public constraints on market competition that threatened a society's common values. Institutions, such as the prohibition of child labor, welfare provisions, organized labor, minimum wages, and environmental regulations, infused the public interest into market competitions that earlier were driven by private interests alone (Portes, Castells, and Benton 1989; Cheng and Gereffi 1994).[24] Ironically, Taiwan's cable TV industry in its informal stage was originally part of the country's democratization, as it involved the struggle for freedom of speech and was a medium that nurtured public values. The result of the formalization of Taiwan's cable TV market was a trajectory opposite to its western counterparts. It became an irresponsible and unaccountable medium that not only obstructed the qualitative improvements of the newly born democracy, but also intervened aggressively into legislative and administrative processes for its own interests. This historical twist could be called "private formalization," or more precisely "formalization without the public," in comparison with formalization in the western context where public values were enhanced. Retrospectively, the democrats in Taiwan failed to foresee the disappointing consequences when they gave in, because they were constrained by the cognitive framework of being a political opposition aiming to "fight against the authoritarian state with a freed market." The experience of Taiwan's cable TV industry represented a vivid lesson and a challenge for newly democratized countries: how to create a better market with a better politics in which institutional arrangements are deliberately debated and carefully implemented, instead of naively believing in laissez-faire, and that the lack of institutional arrangements will spontaneously bring a harmonious order to existence.

[23] Akerlof offers this as one mechanism, among others, in his analysis of "lemon" cars (1984). He shows how information asymmetry (or quality uncertainty) can lead to a reversed selection effect of market competition.

[24] This historical background is important for us in understanding why the reemergence of "informal economies," both in the cores and the peripheries of the world economy, became a focus of human concern and research interest after the late 1980s.

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