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Credibility and Reputation Building in the Developmental State: A Model with East Asian Applications

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Summary. — We use a game-theoretic model to analyze the role of credibility, reputation and investment coordination in a developmental state. Our model focuses on why a "soft" state serving narrow social groups so often obtains in less-developed countries and under what conditions a "hard" or developmental state can emerge. The model highlights the dilemma that although state and private sector alike may want economic growth, both must simultaneously invest to achieve it. But the equilibrium outcome—analogous to the prisoner's dilemma—is investment by neither. Even when initial conditions are favorable and a state is potentially developmental with the genuine capability to elicit private sector investment, this may not materialize and an equilibrium of low, or no, investment will prevail. To avoid this deadlock and foster growth, the successful developmental state must demonstrate commitment by promoting its "developmental" credentials through a process of reputation building. A consequent incentive to act "tough" together with seeming advantages of authoritarianism in implementing the developmental state may help to explain why it is often associated with an authoritarian political system. © 2001 Elsevier Science Ltd. All rights reserved.

Key words — developmental state, prisoner's dilemma, credibility, reputation, investment coordination, East Asia

1. INTRODUCTION

While many now regard the developmental state as an important concept, [1] a recent paper in this journal by Grabowski (1994) stands out as one of the few attempts to model credibility as a fundamental aspect of such a state (see also Grabowski, 1997). The purpose of the present article is to further this line of enquiry and to draw attention to the additional component of reputation building over time if the potentially developmental state is to succeed. We extend Grabowski's work to a simultaneous move, multiperiod game-theoretic model to capture more fully this dynamic aspect of reputation building, the developmental state's interaction with the private sector, and the possibility that even economies apparently on the road to sustained rapid growth can collapse into stagnation following a loss of state reputation and consequent end to complementary state and private sector investment. By contrast, prolon-

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ged willingness on the part of both government and private sector to invest in productive activity resolves in favor of high economic growth an otherwise prevailing deadlock—analogous to the prisoner's dilemma—of no, or low, investment by each party.

The remainder of our article is structured in four further sections. Section 2 sketches the concept of the developmental state, while Section 3 sets out the formal model. In Section 4 we examine how South Korea and Taiwan used credibility and reputation building in fashioning a developmental state. Section 5 brings together earlier observations on the emergence of developmental states, draws out policy implications of our analysis and comments on the frequently authoritarian nature of developmental states.

2. DEVELOPMENTAL STATE CHARACTERISTICS, CREDIBILITY AND REPUTATION BUILDING

The distinction between developmental and nondevelopmental states is important because virtually all governments declare themselves "developmental," as in post-colonial Asia, where nearly every leader "wished to be counted as a champion of economic development, and they and their associates uttered millions of words in behalf of this cause" (Scalapino, 1989, p. 45). It is evident, however, that in many cases governments, whatever their announced objectives or even actual intentions, turn out to be "soft" or "weak" states, originally analyzed by Myrdal (1968, I, pp. 66–67; II, pp. 894–900). Such states suffer from "various forms of lack of social discipline… a widespread disobedience by public officials [and] often their collusion with powerful persons and groups of persons." Rents created by the state and surpluses at its command are consumed by the government or channelled to narrow interest groups, frequently in import trade and import-substitution industries. Above all, attempts at economic growth suffer from a want of credibility that effectively blocks progress by opening a wide gap between what is rational for the society and for the individual: "the commonly shared knowledge that things are as they are and will remain so" (Myrdal, 1981, p. 518). Private sector perception of such a governmental reputation understandably discourages investment.

By contrast, (Leftwich, 1995, p. 405; see also Leftwich, 1994, pp. 378–380) elaborates six main components of the developmental state, namely (a) a determined developmental elite; (b) relative state autonomy; (c) a powerful, competent and insulated state bureaucracy; (d) a weak and subordinated civil society; (e) the effective management of nonstate economic interests; and (f) repression, legitimacy and performance. The developmental state typically begins from a complex mix of nationalism, shocks to the political system, developmental urgency, social structure and institutional inheritance. The first three of these components—a real commitment to economic growth; autonomy from specific interest groups or factions; and the recognized ability of the bureaucracy to implement a growth policy—are in effect important initial conditions and can be thought of as the microfoundations of the developmental state.

These three (largely political) attributes encompass Max Weber's (1968) bureaucratic ideal of a coherent, competent state able to pursue group goals through which state bureaucrats also realize their own self-interest. The modern developmental state, however, typically goes beyond the Weberian ideal due to greater interventionism and may become a benevolent force toward the achievement through collective action of a larger social objective of economic development. Carefully judged intervention opens the way to effective implementation of the developmental state's fundamental economic feature: government coordination of an accumulation function organized through the state's core economic power to tax and direct support to "targeted" industries, including selective credit given by nationalized financial institutions. On the basis of observing the strength of the state's political microfoundations—its credibility—and guessing at its likely future record of implementation—or reputation—the private sector and its investors must reach some initial judgement, however imperfect, of whether the state is developmental or not and decide whether to support it and invest in productive enterprise.

The six components indicated, although necessary to the emergence and success of a developmental state, are not sufficient. Nor are the six likely to emerge simultaneously in mature form. No developmental state, however genuine and capable, can succeed unless it is perceived as such. The developmental state will not be given time, or a chance to prove genuineness or capability, unless the private sector is initially convinced, and then remains persuaded, of its credentials: vitally, it is the developmental state's credibility with the private sector which buys this time. Given credibility, followed by successful reputation building and reinforced by success, the developmental state's features (d)–(f) of repression and a weak civil society, delivery of economic growth and consequent legitimacy appear often to evolve significantly as the developmental state is established. At the same time, the state's own willingness to invest, its relationship with private economic interests and its economic performance all constitute important information. The private sector, an "always sceptical audience" as Evans (1998, p. 68) argues, uses this information to determine investment decisions. To bolster the confidence of the private sector and secure its investment, the state must therefore establish a reputation as developmental. Credibility and confidence, as well as bureaucratic ability and capital, drive the developmental state.

In emphasizing that the emergence of the developmental state is an historical process, we are aware of the wider questions of the developmental state's historical roots and the factors which give rise to a bureaucracy that works rather than one which does not (see, for example, Rodrik, 2000). Shocks to the system may create a "development imperative." It is not our intention in this article to elaborate these issues in any depth, however. Instead, we focus on the means by which a state possessing the ability to become developmental does so.

In the developmental state, government "planners," having convinced the private sector of their commitment to economic growth, and thus put themselves in real charge of the economy, effectively channel economic surplus toward state investment and, even more important, undertake investment complementary to private sector investment, including directed incentives and the provision of infrastructure, education and training (Jones & SaKong, 1980; Yusuf & Peters, 1985; Wade, 1990; Woo, 1991; Singh, 1996). In this article, when referring to the state the term "investment" is used to mean the state's productive use of economic surplus in the above ways. By contrast, the soft state may be deterred from implementing an investment-led growth strategy by the opportunity cost of foregone consumption. As described by the "Please effect," increased taxation may fail to raise the saving rate due to higher government consumption (Please, 1967). Thus, in India, despite successful resource mobilization, the bulk of potentially investable resources controlled by the government was "frittered away in current expenditures" (Bardhan, 1984, p. 61).

The process of reputation building in the developmental state goes beyond repetition of action, because the private sector has no way of knowing with certainty whether the state is genuinely developmental. Yet the state, by convincing the private sector of the genuineness of its developmental intentions, and thus securing more private sector investment followed by higher economic growth, can achieve a better outcome not just for the private sector but also for itself, provided it has a long enough time horizon and values the future benefits of successful economic development sufficiently highly. Decisive actions are more likely to convince an uncertain private sector of the government's developmental credentials than rhetoric, and these must be undertaken. Our model reflects the inability of the government credibly to act as a first mover strategically affecting firms' decisions. Rather the state is forced simultaneously to co-operate with the private sector and by its actions to build a reputation as truly developmental. [2]

3. THE MODEL

In less-developed countries a lack of cooperation between government and private sector in undertaking mutually beneficial investment often strands the economy in a "low-growth equilibrium trap." Such a persistence of suboptimal growth can be described as a prisoner's dilemma: the government and private sector would both benefit if both invested productively, but acting individually neither finds it rational to do so. The developmental state is so called because the government recognizes this dilemma and overcomes it by convincing the private sector of governmental ability and willingness to act developmentally. But until so convinced the private sector doubts the developmental nature of the government: the latter's initial credibility and ongoing investment in reputation are essential for the hard state's strategy to cultivate productive private sector investment. A dynamic game between the state and the private sector derives the conditions under which a developmental state can emerge. Key features of the game are the complementary government and private sector contributions to economic growth and the wedge between the social return to investment and the private return to the players, a wedge which tends to lead to rent-seeking instead of growth-inducing investment. Before turning to a formal analysis of the game, we highlight characteristics of the economy which determine the players' payoffs.

(a) *The prisoner's dilemma and the developmental state*

Typical of an economy capable of endogenous growth is a production technology exhibiting nondiminishing returns to capital. Various government actions can prevent diminishing returns to private capital. We focus on the complementarity between the provision of productive government activities, such as those indicated in Section 2, denoted by G, and private sector investment, symbolized by K. [3] The marginal productivity of private sector capital increases if complemented by, for instance, a higher availability of productive public services (and vice versa). [4] In a first-best world, a truly developmental state with the sole objective of maximizing growth invests in productive activities (i.e., $G = G^*$, where the asterisk denotes the social optimum) and the private sector, [5] knowing that the government is fully committed to this objective, allocates the socially optimal fraction of private resources to investment ($K = K^*$).

Both players operate, however, in a second-best world where the private payoffs of their investment activities differ from the social return. For one thing, policy makers often have great difficulty in committing themselves credibly to an investment policy entirely geared toward attaining maximum growth. Governments may favor powerful groups to solidify political support or may simply decide to maximize public consumption (the "Please effect"). If so, public resources are redirected from productive investment ($G = \underline{G} < G^*$, with $\underline{G}$ referring to the level of G just high enough to prevent negative growth). Furthermore, the government levies taxes to finance its expenditures. We assume that (at least some of the) taxes affect the marginal productivity of private capital, thereby reducing the private return of investment for firms, inducing them to invest less than the growth-maximizing level [6] (hence, $K = \underline{K} < K^*$, with $\underline{K}$ referring to the after-tax, profit-maximizing level of K).

Table 1. *Payoff-matrix for "high" and "low" levels of private and public investment*

Government	Private sector	
	$K = K^*$	$K = \underline{K}$
$G = G^*$	S^*, π^*	S^-, π^+
$G = \underline{G}$	S^+, π^-	S^0, π^0

In our model, the government is not a benevolent welfare-maximizing agent moving strategically before the private sector, hence affecting its decisions and increasing the country's welfare. Instead, policy makers maximize their own objective function whether personal enrichment, transfers to interest groups or a coherent bureaucratic policy aimed at the wider social goal of economic development. The true intention of the government is not, however, observed by the private sector before it undertakes investment decisions; the government and private sector interact simultaneously. Table 1 represents the payoffs of the private sector (i.e., profits, denoted by π) and the government (i.e., policy makers' individual payoffs, symbolized by S) for various combinations of public and private investment, all of which are publicly known. If both players' investment activity is socially optimal ($G = G^*$, $K = K^*$), the economy's maximum growth potential is achieved. But if both players choose to allocate a minor part of their resources to investment ($G = \underline{G}$, $K = \underline{K}$), the economy is trapped in zero (or at best low) growth. A state which invests heavily in productive activities, but fails to convince the private sector to do likewise, is unable to derive any personal (or even social) gain from this allocation choice ($S^- < 0$). Similarly, if the private sector invests unilaterally without complementary public investment, firms make losses ($\pi^- < 0$). Both the government and the private sector would benefit from investment coordination leading to an escape from zero-growth ($S^* > S^0 > 0$ and $\pi^* > \pi^0 > 0$). Yet each party has an incentive to deviate from socially optimal investment and use its resources otherwise ($S^+ > S^*$ and $\pi^+ > \pi^*$).

(b) *Hard and soft state strategies*

We now show how, in a dynamic game, a truly developmental state can break the no-growth deadlock and enable the economy to move to a new, high-growth equilibrium. There is asymmetric information between the private sector and the state about whether the latter is hard or soft: only the state knows this with certainty. We argue, following a game theoretic approach suggested by Gibbons (1992, p. 225), [7] that the government payoffs are publicly known but crucially the government has private information about its strategies. In other words, although policy makers in two states potentially capable of becoming developmental face the same prisoner's dilemma type of problem and like payoffs, the important difference, as in Taiwan and South Korea, is the state's willingness to commit itself to the implementation of a pro-development strategy. Hence, depending on whether the government is hard or soft, different strategies will be chosen. A soft state is not able to commit itself to a particular strategy, rather choosing its investment "rationally," i.e., its strategy always implies maximizing the sum of its payoffs. The truly developmental or hard state, is characterized, however, by its commitment to a tit-for-tat strategy: the government starts with a socially optimal level of public investment, switching to low investment only if the private sector has invested very little in the previous period. Similarly, in observed developmental states, Amsden (1992, p. 61) has stressed "the principle of reciprocity, in exchange for concrete performance." Mason *et al.* (1980, p. 290) explain for South Korea how the private sector became "convinced that what the government could give, it could also take away," while Kim (1997, p. 112) describes "a delicate balance" between two autonomous partners and centrality of the "disciplinary relationship" established by the state.

By trying itself to "tit-for-tat," a hard state deliberately restricts its feasible strategy choices to this single strategy. Therefore, rather than emerging as a rational strategy from the game, the tit-for-tat strategy is played because the hard state, reflecting its commitment to economic development, has ruled out all alternative strategies. At the outset of the game although asymmetry of information prevents the private sector from knowing this strategy commitment, the observed microfoundations of the state, discussed in Section 2, contribute to a perception of the state as developmental. So too, as we argue in Section 4, does the government's willingness to tie its hands, with a consequent gain in credibility, through the choice of an export-oriented rather than import-substitution strategy.

The private sector knows that the government is hard with probability p, hence the government is soft with the complementary probability $1-p$. Confronted with uncertainty about the type of government, and hence in doubt about its strategy, investment decisions by the private sector are determined by maximizing the sum of its *expected* payoffs.

In the last period, both the private sector and the soft state will choose suboptimal levels of investment while a truly developmental government will choose G in accordance with the private sector's investment decision in the previous period. Thus, if cooperation prevailed previously, it will break down in the last period. Crucially, however, this is not necessarily true in the earlier stages of the game.

(c) *Two-period game and state credibility*

We first consider a two-period game. Being committed to a tit-for-tat strategy, a hard state begins the game by investing at the socially optimal level. Unlike its hard counterpart, a soft state simply opts for the strategy that yields the highest payoff in the current period, which implies investing very little (since $S^+ > S^*$). There is no point in pursuing a hard state policy of actual investment, since the private sector always chooses to invest little in the final period. But even in a two-period game the soft state will pretend to be hard. If it succeeds in fooling the private sector into starting with investment K^* but not actually investing itself, the soft state attains its maximum gain (S^+), a payoff helping to explain why so many governments claim to be developmental whatever their true intentions.

The private sector will invest heavily in the first period, if it has higher expected profits from choosing K^* rather than $\underline{K}$, implying,

$$p\pi^* + (1-p)\pi^- + p\pi^+ + (1-p)\pi^0 \geqslant p\pi^+ + (1-p)\pi^0 + \pi^0,$$

which reduces to the following condition:

$$p\pi^* + (1-p)\pi^- \geqslant \pi^0,$$

or

$$p \geqslant \frac{\pi^0 - \pi^-}{\pi^* - \pi^-}. \tag{1}$$

Hence, investment cooperation between a truly developmental state and the private sector will occur at $t = 1$, provided that profits (π^*) are sufficiently high, profits under zero-growth (π^0) are relatively low, or alternatively that the probability of the state being genuinely developmental (p) is sufficiently high. In other words, history matters: the initial economic (π^*, π^0) and political (p) conditions (summarized by (1)) must make cooperation likely. Note that certain decisive actions, such as an early switch from import-substitution to export-orientation, can have significant commitment value (see Section 4), by making it seem more likely that the state is truly developmental (a relatively high p).

In contrast, with a very short time horizon, a soft government will never choose to direct a large fraction of the economic surplus toward productive investment. The time span leaves no scope for adopting hard state policies. Unless the government is truly developmental, and has enough initial credibility to convince private business of this, investment cooperation will not occur, implying that a developmental state can not emerge in a short time span. Thus, it appears difficult to achieve a developmental state in political systems where elections are likely to lead to frequent changes in government. In this respect there may be an advantage to an authoritarian government so long as it is genuinely committed to achieving economic development.

(d) *Three-period game and reputation building*

We now consider a three-period game to illustrate that, as the game becomes longer, a hard state is more likely to sustain a cooperative investment outcome by its tit-for-tat strategy. For maximum growth to be a perfect Bayesian equilibrium the private sector has to invest adequately in the first and second periods. The private sector knows that a developmental state is "tied" to investing sufficiently in $t = 1$ and that it will continue to invest as long as cooperation prevails. Rather than always choosing $\underline{G}$, the strategy of a soft state becomes more complicated in a three-period game. Investing little ($\underline{G}$) in the first period immediately reveals its true nature, leading in period two to the irretrievable loss of the private sector's cooperation. Suppose that the private sector's investment is expected to be high (see conditions (2) and (3) derived below). Investing $\underline{G}$ at the start may enable the government to "free-ride" (gaining S^+) on the private sector's investment effort for one period only, but forces the government into "earning much less" (S^0) in the remaining periods. At this point, a rational soft government realises the value of a strategy of investing adequately in the first period, and in the second, although claiming to be hard, of not in fact investing. By imitating the tit-for-tat strategy of a truly developmental state at the beginning of the game, the soft state is sure to earn a reasonable surplus (S^*) in the next period. Yet, unlike a truly hard state, in the second period the soft state deviates from socially optimal investment when this no longer pays off ($S^+ > S^*$). At that moment, when the soft state shows its true colors, investment cooperation breaks down (see Table 2).

Table 2. *Investment cooperation possibilities in a potentially developmental state*

	$t = 1$	$t = 2$	$t = 3$
"Hard" state	$G = G^*$	$G = G^*$	$G = G^*$
"Soft" state	$G = G^*$	$G = \underline{G}$	$G = \underline{G}$
Private sector	$K = K^*$	$K = K^*$	$K = \underline{K}$

Conversely, the hard state does not deviate from the socially optimal level of investment, unless the private sector invests too little in the previous period. The private sector will, however, invest adequately (again, the last period excepted) if cooperation is superior to any other strategy. In other words, alternative strategies must yield lower expected profits than cooperation. One alternative the private sector may consider consists of "investing little in both periods," thus persistently refusing to cooperate. The other available option involves "investing little in the first period (profiting from the state's investment) but cooperating in the second (forcing the hard state to invest a lot in the next period)." Given (1), sufficient conditions for these respective strategies to be inferior to cooperation are

$$\pi^+ \leqslant \pi^* + p(\pi^+ - \pi^0) \tag{2}$$

and

$$\pi^* + \pi^0 \geqslant \pi^+ + \pi^-. \tag{3}$$

Both conditions (2) and (3) are more likely if the private sector's payoff from investing adequately (π^*) is sufficiently high relative to the payoff from insufficient investment (π^+). [8] Conclusively, the hard state's commitment to invest in step with the private sector throughout the game (i.e., tit-for-tat) saves the economy from the zero-growth deadlock. Table 2 illustrates the outcome of the three-period game discussed, assuming that conditions (1) to (3) are not violated. [9]

It should be emphasized, however, that if initial conditions in the economy violate any of the "prerequisites" ((1) to (3)), even a hard state's attempts to lead the economy toward a path of high growth will fail (resulting in $(G^*, \underline{K})$ in $t = 1$, followed by $(\underline{G}, \underline{K})$ afterward): the economic and political starting point is simply too unfavorable to persuade the private sector to invest adequately. Thus, if the probability of the state being truly developmental is vanishingly low (a want of initial credibility), the economy will remain stranded in a zero-growth equilibrium. Similarly, if initial conditions are such that even investment cooperation between state and private sector only yields modest profits, the same deadlock will prevail. The successful developmental state is a rare phenomenon partly because even governments with the best of intentions may fall prey to the private sector's perception of a weak bureaucracy or absence of other developmental microfoundations.

Conversely, if initial conditions are favorable, the model shows that reputation becomes increasingly important as the game becomes longer. Suppose the game represents the term of governance. At the end of that term, a soft state, devoid of commitment and corresponding lack of investment in reputation, is prone to "take the money and run." By contrast, a hard state that has built a reputation as being genuinely developmental increases its chances of gaining political "approval" (interpreted broadly as legitimacy or recognition of a right to rule by the electorate) for an additional term of governance, thereby starting the next game with a higher credibility (higher p), which in turn nurtures investment cooperation from the private sector. A long time horizon is more likely to prolong the duration of reputation-induced cooperation, raising the probability that a developmental state will emerge. [10] What is more, once the government has gained sufficient credibility through reputation-building, it may even become a Stackelberg leader in the next term of governance, bringing the economy further along the path of economic growth. A soft state, if it remains in power, is likely to take on the role of a Stackelberg follower, forced by the private sector into policies favoring powerful vested interests. [11]

4. THE DEVELOPMENTAL STATE IN SOUTH KOREA AND TAIWAN

The problem of commitment facing the potential developmental state with a consequent need for reputation building and its time requirements has not escaped acute observers:

> Stability and strength go together [but] time is not on the side of a government that faces strong opposition… If, however, the longer run can be realized… policies that benefit, or promise to benefit, the mass of people will confer legitimacy on the government… All these governments [South Korea, Taiwan and Singapore] perceived economic development as the primary means of establishing their legitimacy (Little, 1979, p. 466).

Similarly, Campos and Root (1996, p. 2) describe how in South Korea and Taiwan "the business community was courted to build a dynamic industrial base." In further stages, growth, widely shared among the population, legitimized the state which "reinforced the credibility of the regime, further stimulating investment and economic expansion."

(a) *Initial conditions*

Our model drew attention to the aspects, first, of credibility and, second, of reputation in the creation of a developmental state. Deficiencies in credibility—effectively "prerequisites" for the emergence of the developmental state—were shown to rule out virtually from the start the chances of many states in less developed countries ever to become developmental. The probability of the state being developmental is low for many sub-Saharan African regimes, or even essentially zero, summed up for Zaire under Mobutu as "anyone risking a long-term investment must be considered more a fool than an entrepreneur" (Evans, 1989, p. 571; see also Charap & Harm, 1999). Latin American states have often been unable to match their development rhetoric with observable developmental state characteristics able to win even the private sector's early belief in the state as developmental. In addition,

> the more unfavorable the initial conditions, the more likely there would be an effort to 'over-sell' the potential for change, leading to a widening gap between achievement and promise… Once the precious asset of credibility is lost and rent-seeking becomes the main game in town, getting out of this box becomes increasingly difficult (Ranis, 1994, p. xi).

Thus, government "support" typically becomes merely crude transfers to private sector interest groups. The latter, in turn, typically manipulate the state for their own ends.

By contrast, Taiwan and South Korea had a favorable legacy from which to begin. Kohli (1994) analyzes specifically for the Korean developmental state the importance of the inheritance from Japan, and in both countries colonial rule "established a strong administrative state structure and suppressed dominant classes" (Leftwich, 1995, p. 410). After WW II, military threats from China in the case of Taiwan and the North for South Korea conferred on rapid economic development an urgency which also enhanced its credibility as the best available option. It would appear that, at least in East Asia, the possibility of a developmental state gained a vital early boost born out of an historical conjuncture of favorable initial conditions and perceived necessity of economic development to counter external threat.

At the outset the developmental state also faces the problem of how effectively and yet acceptably to put in place some external determination of credibility—the demonstrated willingness to limit one's options and so the political discretion associated with rent-seeking. Grabowski (1994, 1997) has argued that, because of difficulties in acquiring the technology to make exports competitive, the size of the domestic market deriving from successful agricultural development must furnish credibility: unless there is a sufficiently large, and therefore potentially profitable, internal market the government's tit-for-tat strategy will do little to persuade the private sector against noncooperation. In other contexts, Brunetti and Weder (1994), Weder (1999) and Campos and Esfahani (2000) indicate a number of possible indices of credibility. Among the suggestions is one that submission to international regulation, or even the more extreme solution of United States jurisdiction, could serve as needed institutional anchors.

Although in some areas never abandoning an import-substitution strategy, for both South Korea and Taiwan initial credibility depended significantly on a shift to export orientation which occurred simultaneously with the rise of their developmental states, in Taiwan dating from the late 1950s and in Korea the 1960s. Because export orientation could be objectively seen to succeed (or not), it afforded an independent check on economic competitiveness and so the credibility of the state and its developmental rhetoric. As Bruton (1998, p. 921) notes, policy change "convinced many observers that the two countries were reducing distortions, moving toward getting prices right, and—most evident of all—were exporting." For the private sector the new possibility of profits in an unlimited world market increased the expected gain from productive investment. In South Korea at the Monthly Export Promotion Meeting chaired by President Park government and business met face to face with the aim of cooperating over export strategy and investment. Beginning in 1962 the Ministry of Commerce and Industry formulated annual export targets classified by commodity, region and country (Jones & SaKong, 1980, p. 97). Export goals were not mere words: "Firms that did not meet targets suffered the consequences, giving Korea's interventionist policies a credibility that few other governments have been able to achieve" (Roemer, 1996, p. 15). An ability to export, as in South Korea and Taiwan, also bolsters the developmental state over time because it avoids the balance-of-payments difficulties and stop-go policies associated with import-substitution regimes, allowing the continued economic growth which helps to substantiate state reputation.

(b) *Reputational strategy*

The other aspect to which we have drawn attention—the developmental state's need to establish reputation—is fundamental to its dynamic character. The state which emerges as developmental does so only over time, and in this process policies and actions do matter. They have a reputational impact and are important since for the achievement of the developmental state private sector cooperation must be sustained (in terms of our model, high private sector investment or $K = K^*$ in each period). The state therefore needs to build a sufficiently high reputation to secure confidence. Thus, in South Korea as late as 1960 the regime "certainly seemed more predatory than developmental." Although "historical legacies provided important foundations for… subsequent success," the eventual realization of a developmental state involved, together with some good luck, a protracted process of interaction between state and private sector (Evans, 1989, p. 575). Taiwan's experience was similar to South Korea's, although for the government a fear of the political potential of native Taiwanese economic power and the lack of a securely legitimized political structure made long-term strategic cooperation with important private economic groups difficult, though not impossible (Wade, 1990, p. 296 and see Evans, 1995, pp. 55–58). In consequence, there was more government reliance on public enterprises and agencies to achieve growth than there might otherwise have been, and the government felt under particular pressure to deliver an "economic miracle" to secure legitimacy.

(c) *Economic growth, legitimacy and reputational equilibrium*

In reality, the private sector consists of both investors and the electorate generally. Ultimately, however, under the developmental state the interests of the two may be made to overlap in important economic respects: investment delivers growth basic to a wider public confidence and legitimization of the state. Legitimacy, in turn, encourages investment and so growth, thus helping to convince investors that the state is developmental, and that its government will remain in power for the foreseeable future. There develops a virtuous circle of confidence, investment, growth and legitimization: the private sector and state can settle into the maximum growth equilibrium of complementary and mutually beneficial investment.

For South Korea, Mason *et al.* (1980, pp. 44–54) describe precisely this creation of reputational equilibrium during the two decades after the 1961 coup which brought the Park government to power and marked the beginning of a drive to development. Economic stabilization programs were followed, after 1965, by "the growth of a civil-military bureaucracy [and] the development of the politico-economic strategy" in which "economic growth became the primary objective to government and political stability was considered to be indispensable to growth." The Park government showed its credibility and powerfully built its reputation by a demonstrated willingness to provide directed incentives and contribute to private sector productivity with spending on programs like education. When the government's development strategy shifted from import substitution to export-led growth in the 1960s, a range of government incentives were mobilized and effectively promoted manufactured exports (Cole & Park, 1983, pp. 175–196). Educational expenditure rose sharply starting in the 1960s, as the developmental state began to take shape. Although private individuals also spent heavily on education, during 1960–75 government outlays on education more than trebled in real terms (McGinn *et al.*, 1980, pp. 15–16).

A landslide election victory for Park in 1967 "set the seal of majority approval... on economic growth [rather than social welfare measures and redistribution] as the preferred objective." Political stability was supported by repression and "After 1972, President Park made full use of his emergency powers, and the political opposition was kept firmly in check by a long series of prohibitions." Nevertheless, during the 1970s it could be said that so long "as rapid economic development continues, which is an important factor conferring legitimacy, the opposition is unlikely... to mount an effective attack" (Mason *et al.*, 1980, pp. 51, 53). Private sector investment which accompanied an expectation that the same political regime would remain in power also promoted structural change in the economy since an "assured political stability tended to lengthen time horizons and made manufacturing a much more feasible alternative to commerce as a field of entrepreneurial activity" (Mason *et al.*, 1980, p. 267 and see Jones & SaKong, 1980, p. 97). Wade (1990, pp. 253–254, 295–296) describes a similar government-private sector high investment equilibrium in Taiwan although here there was perhaps a greater authoritarian component.

In both South Korea and Taiwan, however, rapidly rising real wages and increased life expectancy were indicative of the shared growth necessary for the leaders of the developmental state to make their economic policies credible to the business community and citizens which bought time and built the developmental state's reputation (Campos & Root, 1996, pp. 1–2, 28–29). Export orientation also reinforced reputational equilibrium since the labor-using bias of export production, consistent with South Korea's and Taiwan's comparative advantage, led easily to a sharing of the fruits of growth and so conduced to popular support (Srinivasan, 1997, p. 37).

5. FINAL REMARKS

Modern economic growth, Kuznets (1971, p. 346) points out, requires a modern nation state to serve as a clearing house for institutional innovations and to possess the ability to act as "an agency for resolution of conflicts among group interests; and as a major entrepreneur for the socially required infrastructure." Performance of these functions, in Syrquin's (1988, p. 265) analysis, constitutes the "minimal development state." Such a state is similar to the administratively efficient, non-corrupt but limited government recommended by the New Institutional Economics (Bardhan & Udry, 1999, p. 222).

What is now called the developmental state goes well beyond these functions actively to foster private sector investment. Our article has focused on such a state and conceptualized state–private sector relations as a dynamic game with simultaneous investment by each player. We have drawn on the experiences of South Korea and Taiwan to illustrate the developmental state's need not just for favorable initial conditions to encourage a high probabilistic belief in its investment credentials but, even with this start, the requirement for continuous reputation building. It is precisely because of weak reputation—due to the inherent uncertainty of a perpetuation of any given government in absolute dictatorships—that economies associated with autocracies rarely succeed for very long (Olson, 1993). By contrast, in the successful developmental state performance, measured by rapid economic growth, the distribution of its fruits among much of society and a measure of political repression, all help to confer legitimacy and increase the probability that the government will remain in power. When this occurs, the developmental state creates a self-fulfilling prophecy through the emergence of convergent expectations around an equilibrium of mutual government and private sector investment which in turn fuels growth.

The East Asian financial crisis reinvigorated debate on the role of the government in South Korea's and, to a lesser extent, Taiwan's, development and the advisability of pursuing a developmental state model (Wade, 1998). In response, we would draw attention to the state's important role in the industrial transformation of the South Korean and Taiwanese economies. Considerable economic success over more than 30 years is inconsistent with seriously dysfunctional economies. The fact that East Asia's financial difficulties seem primarily to have resulted from panic leading on to a self-fulfilling crisis reinforces this argument (Radelet & Sachs, 1998; Miller & Luangaram, 1998). So too does the uneven impact of the crisis on East Asian countries and its relatively great effect on a nondevelopmental state, Indonesia (Hill, 2000).

A developmental state does not last forever and, indeed, success in promoting development, as Evans (1995, p. 229) observes, leads to this type of state becoming its own grave digger. South Korea and Taiwan, in part as a consequence of having succeeded as developmental states, now face the problems of transition toward a more liberal economic system. Among these are the construction of mechanisms for raising capital and making investment decisions which are less interdependent with state actions, that is to say, different from the nature of interaction between the government and private sector during the building process of the developmental state described by our model. [12] Accordingly, a large literature now emphasizes that the developmental state model becomes less attractive as economies mature and coordination problems become less acute; and, at the same time, that in East Asia private sector financial and investment institutions need to become stronger and the state to assume an effective regulatory role (Furman & Stiglitz, 1998; Snowden, 1999; Crafts, 1999).

The South Korean and Taiwanese problems of transition are not ones that many developing countries are fortunate enough to have. For them, the questions are, rather, what policies should a state interested in development pursue, and should an attempt be made to emulate the East Asian developmental model. One main policy implication of our article is that the East Asian developmental state cannot be mimicked in the face of unfavorable initial conditions. Where these are present, governments are best advised first to try to establish state autonomy and administrative capacity—an effective but limited state more in keeping with that described by Kuznets and the New Institutional Economics. No doubt, as emphasized in this article and elsewhere (Kohli, 1994; Leftwich, 1995) South Korea and Taiwan had, partly due to historical context and partly reflecting "developmental imperative," significant advantages in having particularly favorable initial conditions from which to embark on becoming developmental states. But that does not mean that some of today's developing countries may not also be able to fashion favorable initial conditions, if along different paths. Aspects of the East Asian model might also prove useful in fashioning the means to deal with collective action problems. These issues face any state anxious for economic development and, if unresolved, block that development.

The article's other main policy implication for a state interested in development objectives is the key role of state reputation, showing that commitment to a path of investment coordination is crucial, even when favorable initial conditions exist. Important here is a consistency of government approach as opposed, for example, to policy regimes often found in Latin America. Ranis (1994, p. xii) describes these as

> alternating between episodes of horizontally focused interventionism and market-oriented episodes, all of which probably led to a worse development experience than would have been produced by a more consistent (if, on the average, less "good") set of policies.

In East Asia a substantially consistent set of policies aimed at infrastructure, education and cooperation-contingent rents for the private sector built the strong government reputation basic to securing the developmental state.

Unlike South Korea and Taiwan, the developmental state can be constructed under a democratic government, Japan being the obvious example (Johnson, 1982, 1987). But the present article does throw some light on the observation that, while there is no necessary connection between authoritarianism and economic development, developmental states have often been semi-authoritarian (Leftwich, 1994; Ruttan, 1991). If the government is truly committed to growth as its priority and has a cooperative disposition, a degree of authoritarianism may be advantageous to development. An authoritarian government can effectively gain reputation by zealous actions, ensure mobilized economic surplus is invested in growth and enforce a shift to export orientation. In terms of this paper's emphasis on initial conditions and ongoing reputational considerations as fundamental in moulding the developmental state, at least certain kinds of authoritarian governments may have greater initial credibility, decrease the private sector's anxiety about political volatility and so extend sufficiently the time horizon over which the state can prove its capability for private entrepreneurs to fall in with the state's pro-investment, pro-growth stance. By contrast, democracy, defined as "a form of regularized conflict between political forces," may make it difficult for the state to achieve the reputation, and so gain the time needed, to build a developmental state (White, 1998, p. 42). In Japan, described as a dominant party democratic developmental state, the conflict (and accordingly the uncertainty) inherent in democracy was minimized due to the unbroken rule of the Liberal Democratic Party during 1955–93 (Leftwich, 1998, p. 64).

It should be noted, however, that in practice even semi-authoritarian states may be subject to the danger that reputation building will become an end in itself, akin to a kind of rent-seeking which seriously narrows and perverts the goals of a developmental state. Put somewhat differently, the state may overemphasize its autonomy at the expense of its embeddedness or dense ties to the private sector which underpins the basis for a successful cooperative outcome in the game analyzed in our model.[13] If so, the developmental state now begins to evolve in a direction which undermines rather than strengthens its contacts with the private sector and the role of the state in promoting a collective action solution to the problem of achieving economic development becomes open to question.

NOTES

1. For example see Bardhan (1988, 1990), Rodrik (1992, 1995), Grabowski (1994, 1997), Stiglitz (1996), Wade (1984, 1990), Evans (1989, 1995, 1997), Leftwich (1994, 1995, 1998), Cotton (1995), Huff (1995), Clapham (1996), White (1998), Johnson (1999).

2. For discussion of this issue see Dixit (1996, pp. 71–73), and Fudenberg and Tirole (1991, pp. 367–386).

3. The underlying growth model draws on Barro and Sala-i-Martin (1995, pp. 152–158).

4. The Cobb–Douglas production function $Y_i = AL_i^{1-\alpha}K_i^{\alpha}G^{1-\alpha}(0 < \alpha < 1)$, where labor ($L_i$) is fixed, exhibits this technology feature. Y_i denotes output of a representative firm i with $\partial^2 Y_i/\partial K \partial G > 0$ and $\partial^2 Y_i/\partial G \partial K > 0$.

5. The model assumes perfect competition in the private sector.

6. Barro and Sala-i-Martin (1995, pp. 152–158) assume similarly in discussing productive government services.

7. See also Kreps, Milgrom, Roberts, and Wilson (1982).

8. The third alternative strategy of cooperating in the first period and deviating from this in all the following periods is excluded by condition (1).

9. Inevitably, cooperation breaks down in the last period. By then, however, there has been substantial economic growth due to the fact that the hard state was able to sustain cooperation in all the preceding periods. Intuitively, this is similar to saying that the developmental state does not last forever but is undermined by its own success, an argument increasingly being developed in the literature (Evans, 1995; Kim, 1997).

10. Kreps *et al.* (1982) and Gibbons (1992) have shown that, under certain conditions, even the uncommitted agent may invest for a long period in reputation, mimicking his truly committed counterpart, given that the time horizon is sufficiently long. In the context of our discussion of the developmental state, however, this theoretical possibility is unlikely.

11. When there is no uncertainty about the type of government, the natural way to model a hard state is by Stackelberg leadership (Rodrik, 1992).

12. Formally, the current situation in these economies could be captured by a game where the government and the private sector move sequentially. In each period, the government first sets its policies regarding investment, subsidies, taxes and regulatory framework, while the private sector invests in the second stage, taking these policies as given.

13. For a discussion of this constant tension between autonomy and embeddedness in the developmental state, see Evans (1997, pp. 73–74).

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