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## Privatization, Liberalization, and Regulatory Reform: The Case of Telecommunications

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### Abstract

The paper investigates: (1) the types of interests and values that are regularly considered in shaping privatization decisions, whether they be related to various development goals, social goals, external considerations, or intangible factors; (2) the political-economic aspect, namely, the institutional features of any system that give preference, weight, or force to any particular argument, recommendation, or claim. Item two has been particularly under-attended in prior research. The literature brings to light good theoretical understanding of the likely effects of privatization and competition and of the importance of regulation, as a monopoly service provider such as a state controlled telecommunications entity is privatized. This paper directs us toward a practical understanding of the interplay of the motivation for privatization, interests and values of interest groups, and their impact on policy makers that determine the nature of privatization. This practical understanding is crucial in obtaining a clear, strategic, and wise answer to the research question: under what circumstances clash between institutions making regulatory policy decisions and interests and values of interest groups is the likely result and under what circumstances the privatization decision is likely to translate into behavior that is consistent with development goals (as manifested in the motivation for privatization).

**Keywords:** Privatization, Liberalization, Regulatory Reforms, Telecommunications, Information Communications Technology (ICT), Telecom Regulatory Authority, Universal Service

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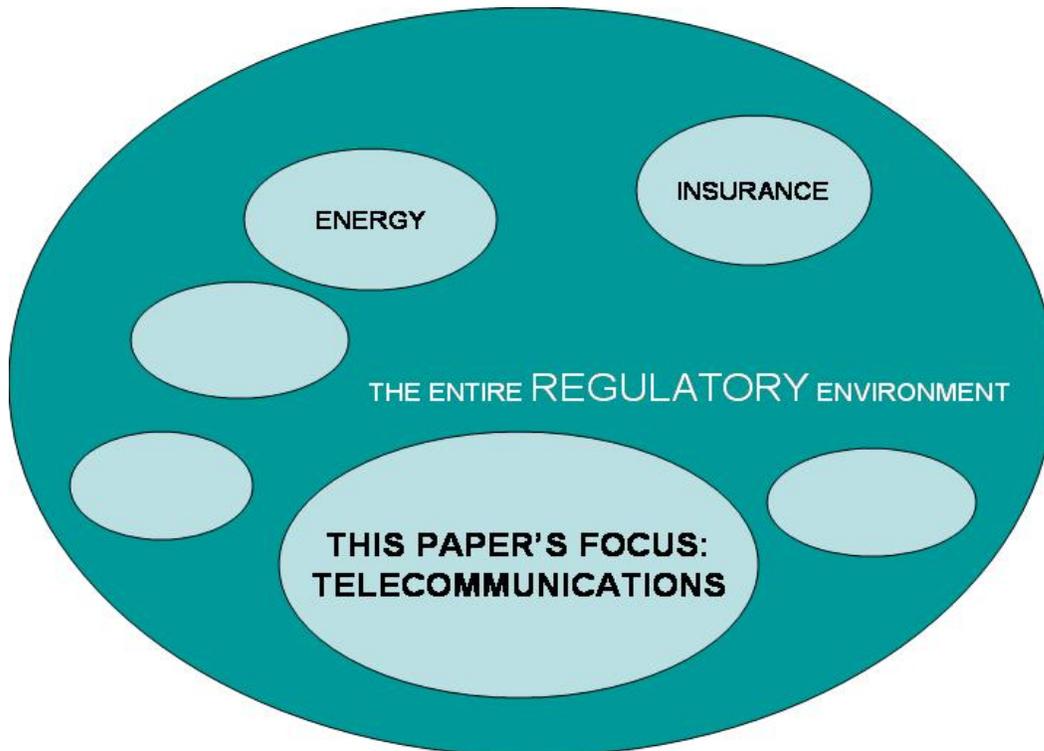
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## Introduction

This Concept Paper focuses on economic development attained under regulatory reforms to understand the lessons it might offer for the practitioners in the field. Regulatory reforms cover a wide range of ideas and policies, including privatization, liberalization, competition, and the establishment of independent regulatory regimes.

These ideas and policies vary from the eminently reasonable to the wildly impractical. These policy measures, however varied and at times unclear they might appear, have unambiguous political origins and objects. It is impractical to review regulatory reform without a context. This paper will, therefore, examine the reforms underway in the context of telecommunications service provider environment (figure 1).



**Figure 1.** The entire regulatory environment

### Policy Domain

Telecommunication is now universally acknowledged as one of the prime movers of the modern day economy. It is a vital infrastructure, affecting all national and public interests. For telecom policy makers, this means ensuring:

- Availability of telephone on demand;
- Universal service, which calls for the provision of access to all people for certain basic telecom services at affordable and reasonable prices;
- Availability of the widest permissible range of services to meet the customer's demand at reasonable prices;
- Protection of defense and security interests of the country.

**Technology Considerations**

Telecommunication is also technology intensive, which means that the administration of the policy in the telecom sector should strive to facilitate the inflow of technology so that a country does not lag behind in getting the full advantage of the emerging new technologies. One has to understand and appreciate the various technologies of telecommunications: analog and digital communications, landline and wireless communications, mobile cellular communications, data communications and networking, local area networks, wide area networks, microwave and cellular systems, satellite systems, interconnections facilitating local and domestic long distance calls, international long distance calls for voice, data, audio/video text services, video conferencing, radio paging, the Internet and its structure, World Wide Web, electronic mail, and more (figure 2). It is beyond the scope of this Concept Paper to consider all of these technologies and the degree to which these provide telecommunication services to the people in any given country or region and thereby promote and advance economic development. This brings us to yet another slicing of the total environment to which we now turn.



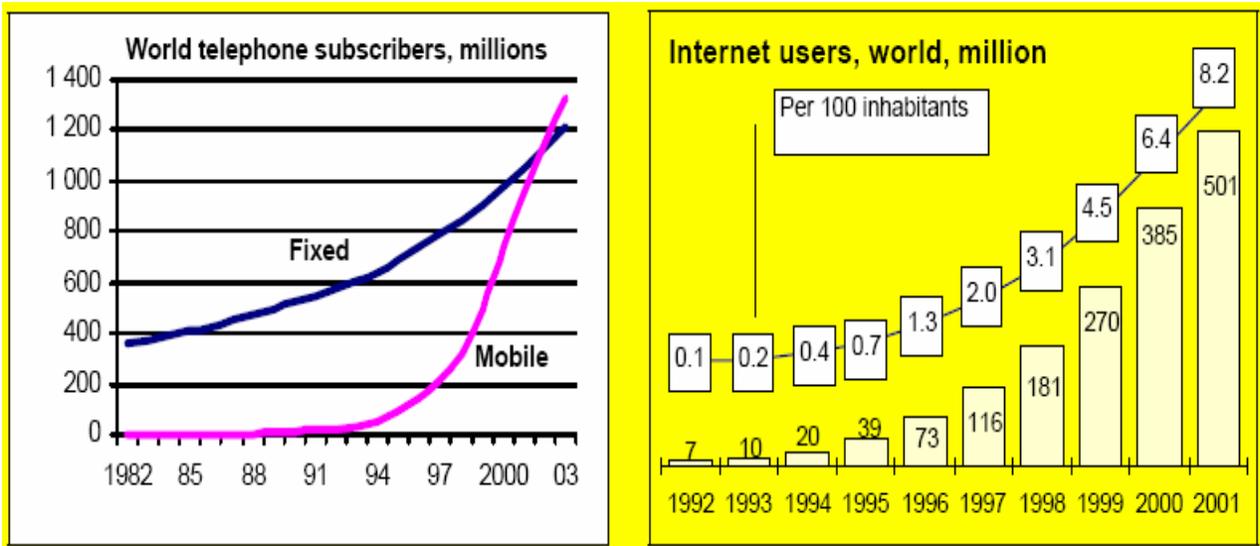
**Figure 2.** Various technologies of telecommunications

In keeping with the requirements for universal service which, as discussed above, calls for the provision of access to all people for certain basic telecom services at affordable and reasonable prices, this Concept Paper will limit the observation to

Information and Communication Technologies (ICTs) that have been used more and more extensively in social and economic development.

Many of the uses of ICTs for development are based on the straightforward capacity of ICTs to do standard tasks more effectively - for example, through the use of standard software such as word processing, databases and spreadsheets. Other new applications are also very important to the use of ICTs, and innovative applications are constantly being developed to maximize the value that ICTs can have for communities of various sizes in all regions of the world. With that in mind, this Concept Paper will draw on experiences involving mobile cellular services, the Internet and broadband, and Wi-Fi technologies.

Ever since becoming commercially available in the early 1980s, mobile cellular services have advanced rapidly in terms of coverage, services, technology, handsets and regulation. The number of mobile subscribers has outpaced the number of fixed-line subscribers. By the end of 2002, there were 1.155 billion registered mobile cellular subscribers worldwide, compared with 1.129 billion fixed telephone lines. One in five people around the world now has a mobile phone – up from one in 339 in 1991. Many of these new subscribers are in developing countries, given that mobile penetration in some developed markets has already approached 100 percent (figure 3).



Source: ITU World Telecommunication Indicators Database, 2003.

**Figure 3.** Number of worldwide fixed and mobile telephoned subscribers (left); Number of Internet users (right)

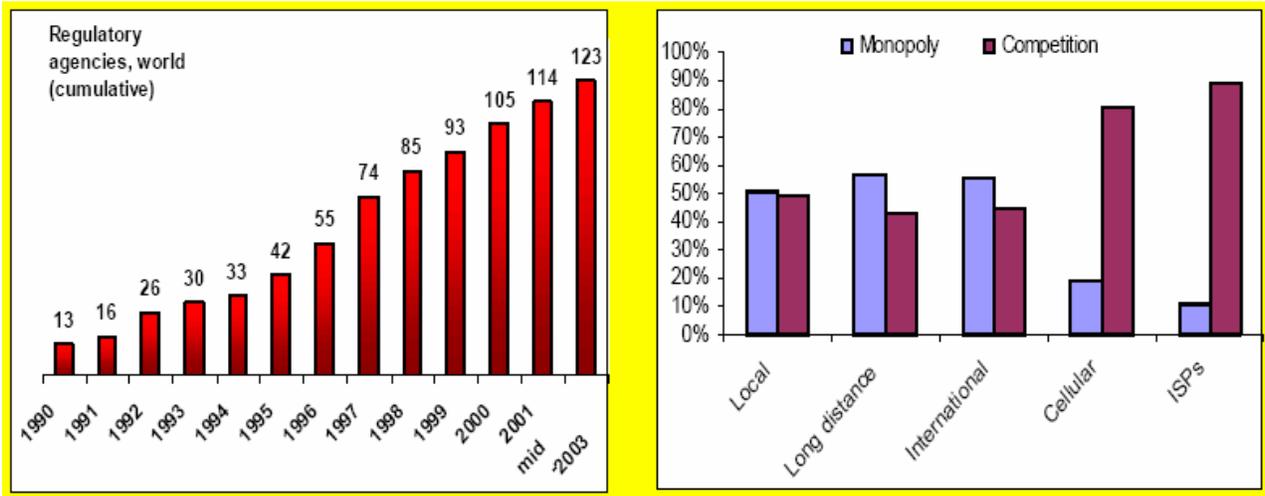
The Internet has also grown exponentially. At the beginning of 2003, there were an estimated 580 million Internet users around the world. Most countries in the world are now online. This pace of growth is driving demand for access at higher speeds. Broadband solutions are rapidly becoming available for both wired and wireless technologies, with success factors varying from country to country. These factors include platform-based competition (cable modem, DSL, fiber, and wireless), development of innovative broadband technologies and applications, and affordable pricing such as flat-rate packages. Factors that stifle broadband roll-out include continued monopolies and

low levels of competition, cross ownership between telephone and cable TV networks, and caps on data that can be downloaded under flat-rate pricing packages.

Another new technology burst onto the wireless scene in 2003: Wi-Fi or Wireless Fidelity, heralding a new era for the ICT sector. Suddenly, inexpensive and easy-to-use subscriber equipment, often employing “free” unlicensed radio spectrum, is opening the door to wireless broadband Internet access for the mass market and promising rural and remote access, given its potential for low-cost.

**Regulatory Developments**

The majority of countries worldwide have reformed, or are reforming, their telecommunication sectors, based on review and adoption of new legislation to adapt to the rapidly changing communication environment. They have opened some, if not all, market segments to competition, allowing private participation, and establishing a national regulatory authority. By mid-2003, as indicated in Figure 4 below, the International Telecommunication Regulatory Database showed 123 countries worldwide as recognizing the importance of establishing a regulatory authority to foster competition in the ICT sector in a fair and transparent fashion.<sup>1</sup>



**Figure 4.** Regulatory Agencies Worldwide (source see note 3), 1990-2003 (left); Status of Regulatory Reform, 2003 (right)

As the convergence of different types of network platforms and services becomes a reality, more and more countries are taking further actions. As Figure 4 indicates, countries are either merging their telecommunication and broadcasting regulatory authorities or improving coordination between various agencies involved in the ICT sector. Simultaneously, there are other regional initiatives underway to harmonize national ICT legislative frameworks and work together toward the ultimate goal of providing universal access, that is, widespread availability of telecommunications or ICT services (if not universal service), to all citizens of the world.

The liberalization of telecommunication markets through the introduction of regulatory reforms is changing the way countries approach universal access and service

<sup>1</sup> The idea of fostering “competition ... in a fair and transparent fashion” advances the cause for establishing an independent regulatory authority.

policies. This is due, in part, to the fact that services are being provisioned more rapidly, prices are falling, and new and innovative services are being introduced—all to the benefit of economic development. Notwithstanding these benefits, the public-private equity sharing balance still remains unresolved in the regulatory reform idea. With the author's commitment to practitioner-scholarship, this paper therefore aims toward contributing to the understanding and potential development of regulatory policy choices concerning a flexible and open regulatory environment conducive to sustaining advancement of telecommunications technology and services and through that of economic development, which are the practical concerns of national administrations<sup>2</sup> involved in the regulatory reform problem.

Contextually, as the telecommunications market was maturing at the turn of the twentieth century, most national administrations embraced the notion that telecom service could only be provided at the lowest average cost by one firm. Their beliefs produced two options: (a) government provision of the service; or (b) private provision with regulation of rates. The government provision of services reflected a profound faith in predictability, planning, and government expertise (i.e., strong state control and government knowledge), which the policy makers imbued with a sense of nationalism thought were better suited for social policy, allocating investment and determining output than market or private regulation. Scholars argue that the policy makers' reaction to the telecom service as a natural monopoly gave rise to the government provision of service.

By the early 1950s and 1960s, however, most countries were confronted with three challenges:

1. Rapid technological change;
2. Abysmal performance of state-owned telecom providers<sup>3</sup>;
3. Lack of adequate financial resources to deploy and integrate new technologies that could offer better and expanded services to the customers.<sup>4</sup>

The above factors influenced governments to think about reforming their telecom sectors. Senior policy advisors and international experts offered three basic recommendations:

1. Privatize the state-owned monopoly provider;
2. Introduce competition;<sup>5</sup>
3. Create independent regulatory agencies.<sup>6</sup>

<sup>2</sup> Administration refers to "... governmental department or service responsible for discharging the obligations undertaken in the Constitution of the International Telecommunication Union, in the Convention of the International Telecommunication Union and in the Administrative Regulations," (ITU, 1993).

<sup>3</sup> By the 1980s, it was evident that nationalized monopoly telecommunications firms in developing countries could not provide telecom services. Potential customers faced long waiting periods before getting connected to the network. A 1992 study by The World Bank indicated that many large firms bypassed the monopoly provider by building their own networks (Wellenius et al., 1992).

<sup>4</sup> The increased pace of innovation in the telecommunications sector necessitated significant investments that governments were unwilling or unable to make.

<sup>5</sup> The experts promoted competition to create the right incentives for superior economic performance.

<sup>6</sup> They also suggested the creation of independent regulatory authorities that "supervise" deregulation by simulating the effects of competition in a way that generates the right level of market competition.

It was up to each national administration to implement the various components in as many different ways and as extensively as they could.<sup>7</sup> Thus, initially, government often retained partial ownership of the incumbent.<sup>8</sup> In a few instances, government also allowed the newly privatized firm a temporary monopoly by barring competition to entice investors.<sup>9</sup> Regulation also took many forms, with its details impacting the sector performance and the incumbent's ability to exercise market power. In the context of building a conceptual model that has a moderate degree of generality, it is important to study as many countries as possible that made different responses to telecoms restructuring, including

1. Countries that have emphasized minimizing unemployment;
2. Countries that have responded to international organizational pressures;
3. Countries that were primarily seeking outside capital.

For pragmatic reasons, however, this research project will review and analyze only a select few countries, which, until recently, preferred monopolies involving authoritarian and centralized decision making procedures, but then suddenly caught a glimpse of the potential for rapid gain through telecommunications privatization and liberalization efforts and began making plans for entry into market based economy. That said, this paper continues its focus on yet another attempt at slicing the world --this time the slicing is about countries that might be of interest for comparative analysis. In many ways, Korea, China, Russia, India, Singapore, Malaysia, and Nigeria all have a common socio-political-economic base, in that the common legacy of these countries is central planning,<sup>10</sup> yet decisions (situation factors) and variations in industry structures are likely to present different perspectives on their respective government behavior, thereby giving rise to multiple concepts and hypotheses on telecoms restructuring (see figure 5 and figure 6).

The diagrammatic expositions in the preceding paragraphs illustrate some of the characteristics and complexities inherent in any planning undertaking on a societal scale. The success of planning a dissertation research on a topic of great complexity and scale calls for modesty and restraint in setting the research planning objectives and drastic simplification of the real-world situation in representing it for purposes of the research design process. Even with restraint and simplification, difficult topics or problems are often not easily communicated and represented. To remove any ambiguity and conflict of

<sup>7</sup> The reform idea seemed attractive to governments, as they viewed privatization as a unique opportunity to increase revenues.

<sup>8</sup> State control did not quickly disappear through privatization, particularly when the State retained partial ownership and golden shares. Michael Whincop et. al. underscore a problem, that is, many governments interested in privatization may have smaller short-term incentives to liberalize. These governments act under the pretense that an entity to be privatized could be sold for a higher value if it retains all or some of its monopoly power, permitting higher prices to be charged and then higher profits to be achieved (Whincop & Rowland, 1998).

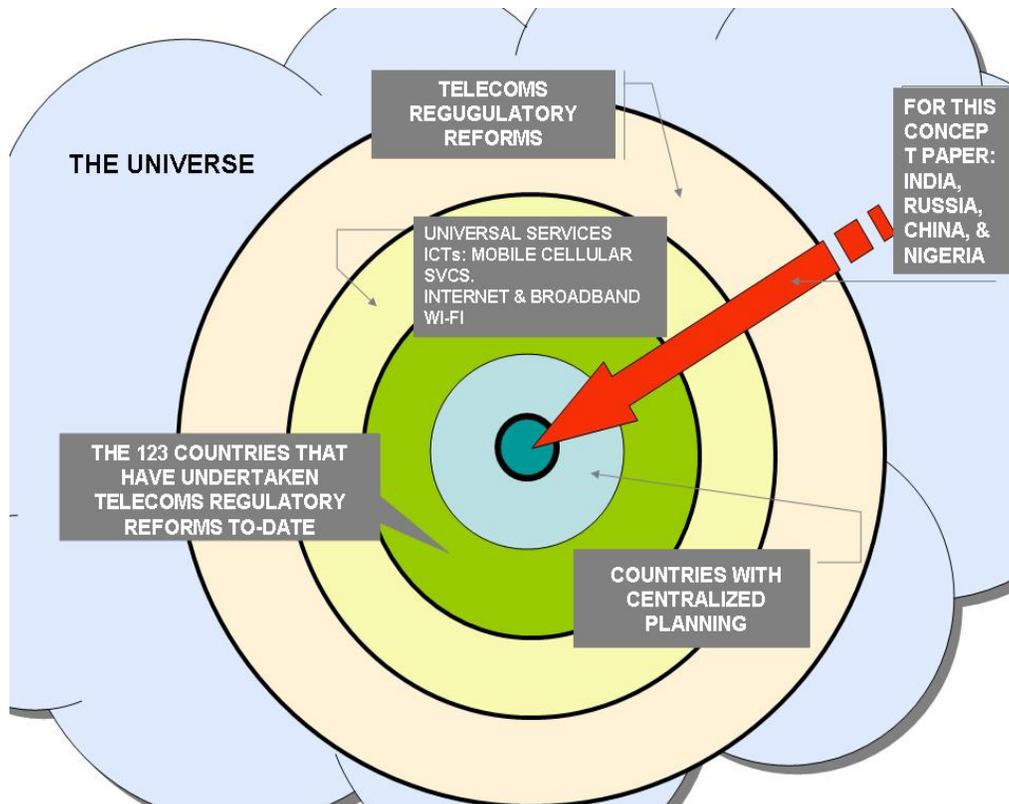
<sup>9</sup> British Telecom (BT) was privatized in 1984, but the British government allowed BT to maintain temporary monopoly power.

<sup>10</sup> The central planning in these countries is about the types of national interests and values to be considered in shaping privatization decisions, whether they are related to various development goals, social goals, external considerations or intangible factors like the ones mentioned in page 10 in reference to different responses to telecoms restructuring.

goals in this dissertation research, the author presents the following consolidated view of this study or Concept Paper's focus.



**Figure 5.** Countries underlying this study



**Figure 6.** Research focus

## Research Questions

Government motivations (as expressed by the types and values regularly considered in shaping privatization decisions, whether they are related to various development goals, social goals, external considerations, or intangible factors) and industry structures either clash or the governments make some decision(s) that influences the ICTs growth and expansion. For instance, as referenced earlier, one of the privatization options is to allow for private ownership, while regulating the owners to achieve certain goals. This option has been exercised in several Asia Pacific countries where the government privatized the telecoms entities but then asked the private owners to achieve certain goals, which influenced the attainment of those goals. To explore the structure of privatization, it is therefore pertinent to take a close look at the behavioral expectations or the requirements that the government may have. That is partly an empirical question, or the discovery that this research paper will make in the second year, while conducting the full qualitative research and analysis.

As a prelude to the second year's qualitative research and analysis, this Concept Paper will take a quick look at India, China, and Russia<sup>11</sup> in terms of each country's historical and economic circumstances, as well as its need for internal political accommodation that determined its pace toward telecommunications restructuring. Looking at the outcome of telecoms restructuring in these countries, one can ask a series of questions:

1. How are any of these privatization and liberalization outcomes similar?
2. How are they different?
3. If they have some things in common, what is the general category to which they belong?
4. If they are different, do they indicate that telecoms restructuring efforts are only as effective as a particular country's socio-political-economic environment allow them to be?

In this concept paper, question 4 is particularly important. There are three broad set of variables:

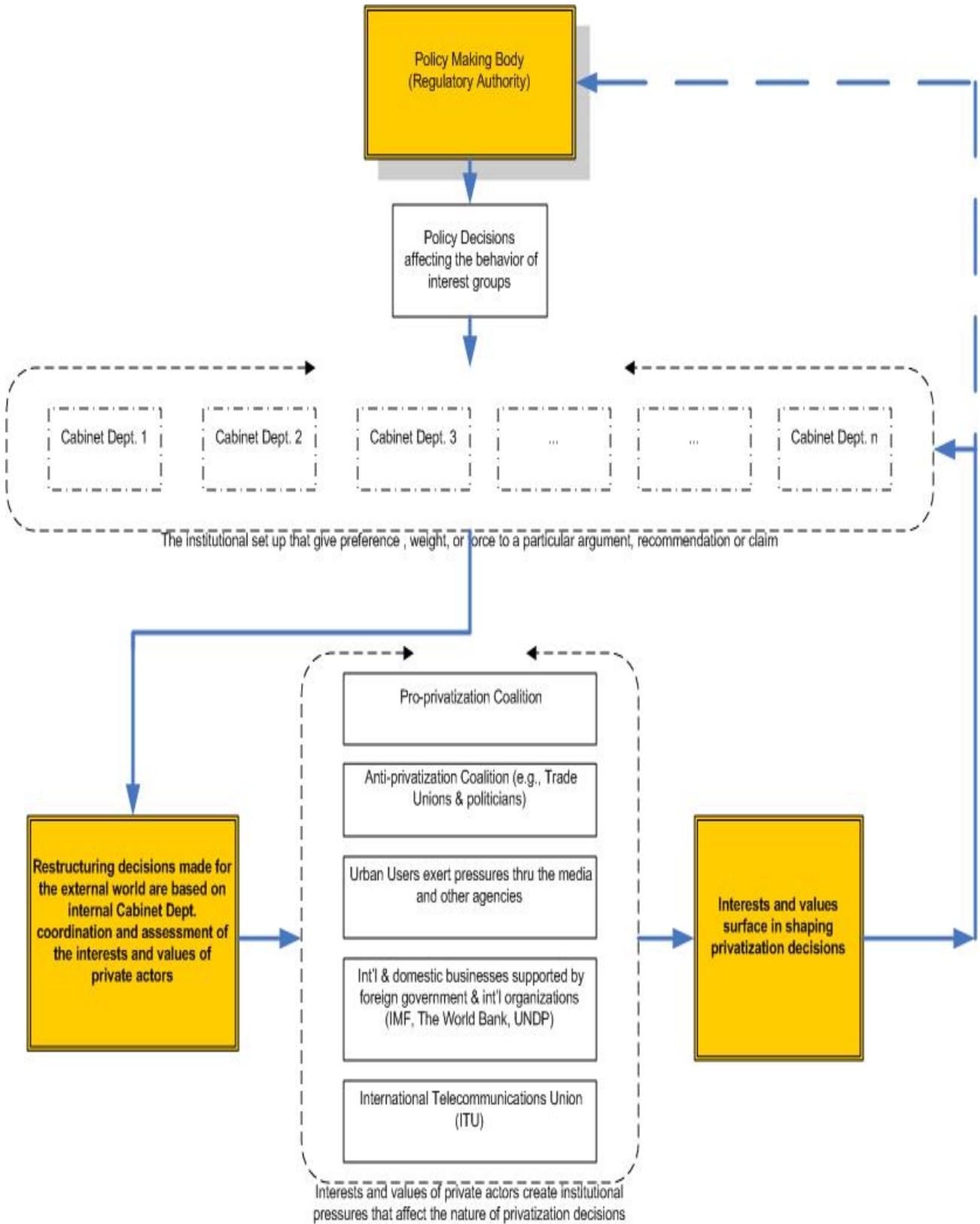
1. Motivation for privatization;
2. Interests and values of interest groups; and
3. Their impact on policy makers that determine the nature of privatization.

## Practice Question

Between the motivation for privatization and the interests and values of interest groups, there is the phenomenon of complexity to study (see Figure 7 below), for in the final analysis, the *practice question* has to be addressed: What is it that we want to affect?

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<sup>11</sup> If time permits, the author intends to include several other countries, including South Korea, Malaysia, Singapore and Nigeria.



**Figure 7.** Study of the phenomenon of complexity

It is not enough to say that we want to affect the structure of privatization process. However, by looking at the interplay among the three broad set of variables, we might get a practical understanding of:

1. How the interests and values of private actors create institutional pressures that affect the nature of privatization decisions;
2. How those interests and values get processed; and
3. The extent to which decisions affect the behavior of interest groups in ways that are consistent with regulatory policy choices for a flexible and open regulatory environment conducive to sustaining advancement of telecommunications technology and services and through that, economic development.

This practical understanding benefits us in more than one way. First, it provides a clear, strategic, and wise answer to the research question: under what circumstances clash between institutions making regulatory policy decisions and interests and values of interest groups is the likely result and under what circumstances the privatization decision is likely to translate into behavior that is consistent with development goals (as manifested in the motivation for privatization).

Secondly, our practical understanding forms the basis for affecting the structure of privatization process in future.

### **Trends in Telecoms Reform: Country Profiles**

The current burst of interest in restructuring telecoms shares many characteristics with the study of complexity. Much of the motivation is the growing need to understand and cope with large-scale planning and socio-economic development. But this motivation could not, by itself, tie attention to complexity for very long, unless novel ways of thinking were also offered. Before this Concept Paper investigates what the literature says, this chapter highlights case histories of telecoms regulatory reforms in India, China, and Russia. The regulators in these countries promote and enforce universal access through innovative wireless solutions, thereby increasing the prospect for rapid economic development.

In the next few paragraphs, the author provides snapshots of the roles played by various stakeholders, including the regulators, in India, China, and Russia in enabling or inhibiting universal access. The observations are drawn from quick studies of the countries presented in Appendices 1, 2, and 3.

#### **India**

India moved toward telecommunications liberalization in the face of a severe fiscal and balance of payments crisis in 1991. The Department of Telecommunications (DoT) - the state owned monopoly - however, could not be privatized to the degree required, due to resistance from its 480,000 workers (with tacit support by 18 million employees in other state owned enterprises).

Many influences are at work on the Indian government: a powerful liberalization coalition that includes international and domestic businesses supported by foreign governments and international organizations; urban users who are exerting pressures through the media and other agencies; and an opposing coalition, which includes trade unions and politicians supported by domestic businesses that benefit from the past or extant inward-oriented policies and have a stake in keeping multi-national corporations out of the market. The Indian government's juggling between these interest groups (including constituencies within the state owned monopoly) has produced one of the most complex liberalization programs ever undertaken. Indian telecommunication liberalization efforts, in essence, offer a perfect illustration of the idea of collusion.

### **China**

The collusion between powerful groups is also evident in China. The Ministry of Posts and Telecommunications (MPT), the Chinese telecommunications monopoly, faces challenges from other powerful ministries within the government and politically powerful groups of domestic and international large users.

There exists a reform coalition for restructuring telecommunications with access to the state's decision-making apparatus. "The reform coalition consists of ... major manufacturing and user ministries, large national users, local governments and interest groups and international equipment suppliers and service operators." Restructuring has mostly benefited the coalition partners: powerful ministries have access to networks, MNCs obtain equipment deals, and users in export-oriented areas obtain advanced services. The interests of these groups and those who wield power within the state's decision making apparatus govern the outcome of the telecommunications restructuring.

### **Russia**

The government is the largest shareholder in the Russian telecommunication holding company - "Svyazinvest" – formed in September 1995. In that capacity, the government exerts great influence on Svyazinvest's policy, decision-making, and management strategy. The case history of Svyazinvest is important in evaluating if a certain structure results in a certain outcome or if the outcome depends upon conditions or expectations that government puts on the privatization.

Our next step is to review what THEORY would predict about BEHAVIOR resulting from different industry structures—that is, under what circumstances clash is the likely result and under which circumstances the structure is likely to translate into behavior that is consistent with development goals?

## **Literature Review**

Privatization underlies the theme of regulatory reform. The current wave of privatization, as both a policy movement and as a process, shows every sign of reconstituting major institutional domains of contemporary society. Today, multiple advocates profess several distinctly different conceptions of privatization. This chapter reviews and analyzes the theories that provide the movement with its logic, intellectual coherence, and rhetoric.

## Privatization as an Idea

In the ideological world we occupy, competing interests and parties use "public" and "private" to describe and also to celebrate and condemn. We now turn to a discussion of those theoretical arguments.

***The Public-Private Distinction and the Concept of Privatization.*** The terms “public” and “private” are fundamental to the language of our law, politics, and social life, but defining what these terms mean has been the source of continual frustration. For example, an economist might say that the marketplace is private, while a sociologist or anthropologist who is concerned with culture might say that the marketplace is public - a sphere open to total strangers who nonetheless understand the same rules and gestures in what may be a highly ritualized process of exchange. While economists use the public-private distinction to signify the contrast between state and market, sociologists or anthropologists take the public sphere to include the market as well as politics.

The general meanings of privatization correspond to withdrawals from the variously conceived public spheres. This Concept Paper’s focus is on withdrawal from the state, not of individual involvements, but of assets, functions, and indeed, entire institutions. Public policy is concerned with privatization at this level.

While discussing the merits of privatization as public policy, it is appropriate to do so within a particular institutional or national context. The objective of this research is to do a comparative analysis of privatization in several countries, with the intent of developing a conceptual model that has a moderate degree of generality. No conceptual model or general theory about the performance of public versus private organizations is sustainable if it fails to distinguish among political systems and the structural variety of public and private institutions. Privatization describes a direction of change, but it does not denote a specific origin or destination. Its meaning depends on the public-private balance previously struck in a particular domain.

***The Political Meaning of Privatization.*** Since the late 1970s and early 1980s, privatization has directed our attention primarily to:

1. Shift of activities or functions from the state to the private sector; and,
2. More specifically, shift of the production of goods and services from the public sector to the private sector.

While several points need amplification, we can only address one or two major points, given the limited space and time available for this paper. First, the public sector here includes agencies administered as part of the state and organizations owned by it, like the state owned monopolies, the Department of Telecommunications (DoT) in India and the Ministry of Posts and Telecommunications (MPT) in China.

Second, in the definition this paper is using,<sup>12</sup> privatization refers to shifts from the public to the private sector, not shifts within sectors. Thus, the conversion of a state agency into an autonomous public authority or state-owned enterprise is not privatization, though it may well put the enterprise on a commercial footing. Changes within sectors

<sup>12</sup> The definition excludes deregulation and spending cuts except when they result in a shift from public to private in the production of goods and services.

might be described as commercialization. In the case of public agencies, commercialization is sometimes a preliminary stage to privatization.

Government policies that can bring about such shifts include:

1. The cessation of public programs and disengagement of government from specific responsibilities that represent an implicit form of privatization.<sup>13</sup>
2. The transfers of public assets to private ownership, through sale or lease of public infrastructure and enterprises.
3. The government financing private services through, for example, contracting-out or vouchers.
4. The deregulation of entry into activities previously treated as public monopolies.

These forms of privatization vary in the extent to which they move ownership, finance, and accountability out of the public sector. The spectrum of alternatives runs from total privatization (as in government disengagement from some policy domain) to partial privatization (as in contracting-out or vouchers). As discussed under country profiles in chapter two, privatization may include policies anywhere along this spectrum; however, the implications of privatization vary with its degree. In cases of partial privatization, the government may continue to finance but not to operate services, or it may continue to own but not to manage assets. Privatization therefore may dilute government control and accountability without eliminating them. Where governments pay for privately produced services, they must continue to collect taxes. Privatization in this sense diminishes the operational, but not the fiscal or functional, sphere of government action. By putting the delivery of services into the hands of a third party, governments may divert claims and complaints to private organizations, but they also risk seeing those third parties become powerful claimants themselves. The author will address the empirical question of whether or not this type of partial privatization reduces government spending or deficits during the second- and third-year qualitative and quantitative research and analysis phases.

Even asset sales sometimes involve only the transfer of a partial interest. Often governments sell some voting stock in an enterprise but refuse to surrender control. In these instances, privatization may amount to little more than a revenue-raising measure, as there may be no change in management, management behavior, or the enterprise's relation to state authorities. Although it may seem odd, the product of privatization is not always a private firm: privatization also yields hybrid enterprises with varying balances of influence.

The different techniques used to privatize assets affect what emerges from privatization. In the particular case of unprofitable businesses, for instance, governments may decide to guarantee the new owners future public contracts, tax benefits, or the monopoly on a franchise. Whatever methods are used, variations in privatization policy

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<sup>13</sup> At a less drastic level, the restriction of publicly produced services in volume, availability, or quality may lead to a shift by consumers toward privately produced and purchased substitutes (called "privatization by attrition" when a government lets public services run down).

complicate simple-minded predictions of the effects of privatization on economic efficiency and economic development.

Just as there are various methods for the divestiture of assets, so too, there are different methods available for shifting from publicly produced services to publicly financed private provision of services. Governments face a basic choice as to whether state agencies or private parties will do the purchasing. When governments give up producing services, they "empower" many different parties, which may give rise to new productivity increases and/or new competition.

A note of caution: privatization should not automatically be equated with increased competition. Two related processes, privatization and liberalization, need to be carefully distinguished. By liberalization, one generally means a reduction of government control: in this context, it refers to the opening up of an industry to competitive pressures. Entry deregulation of public monopolies is a form of privatization that is also liberalization. However, it is entirely possible to privatize without liberalization. By the same token, it is also possible to liberalize without privatization, that is, to introduce competition into the public sector without transferring ownership. Refer to the case involving the India Department of Telecommunications under country profiles in chapter two.

Finally, just as there are different routes out of the public sector, there are numerous destinations in the private sector to which privatization may lead. The destination that concerns us in this paper is the large-scale corporate sector, where hopes for improved performance rest not only on the profit motive, but also on professional management and economies of scale. This is a key point as one reviews the literature on privatization as theory and rhetoric. The following provides a quick study on these theories.

### **Privatization as Theory and Rhetoric**

The normative theories justifying privatization as a direction for public policy draw their inspiration from several different visions, with the most influential being the vision grounded in *laissez-faire* individualism and free-market economics that promises greater efficiency, smaller government, and more individual choice if the domain of property rights and market forces is expanded. Another perspective qualifies privatization as a political strategy for diverting demands away from the state and thereby reducing government "overload."

***The Economic Theory of Privatization.*** Even within the economic theory of privatization, there are some subtle, but important, differences between:

1. The radical view of privatization as a reassignment of property rights; and
2. The more moderate, conventional view of privatization as an instrument for fine-tuning a three-sector economy.

*Economic Model 1: Privatization as a Reassignment of Property Rights.* Private ownership and competitive markets are normally thought to go hand in hand, but ownership and market structure are often separate. For the economist devoted to both, the question then arises as to which is more desired: private ownership or competition. Here,

differences of opinion emerge among economists that correspond to preferences for either privatization or liberalization. Those who believe that efficient performance depends on private ownership prefer privatization, even in cases that are generally regarded as natural monopolies. Conversely, those who see competition as the critical spur to efficiency are more skeptical about the benefits of privatizing monopolies and often put more emphasis on other policies, such as deregulation. In the case of a government telecommunications monopoly, those who favor ownership may be willing to privatize the monopoly intact, whereas those who favor competition may prefer to break it up before sale or even to keep it in public ownership while allowing private firms to compete with it on equal terms.

Thus, the perspective that unequivocally points to privatization as desirable policy holds that property ownership is the fulcrum of political economy. It is worth taking note of the premises and implications of the strict property rights approach:

The theory holds that the form of ownership is the predominant explanation for the varying performance of different organizations.

The theory gives no importance whatsoever to organizational characteristics such as size, centralization, hierarchy, or leadership, nor does it recognize any variation in performance that might stem from task characteristics, such as poor information or ambiguity about goals.

The theory does not recognize the effects of economic incentives unrelated to property rights, such as those originating in various types of contracts.

The theory does not point to any contingencies in generalizing about public-private differences and does not identify any particular conditions or characteristics that might cause public institutions to perform well.

The inefficiency the theory detects in the public sector is permanent.

The theory takes the market as the standard for judging value and finds public institutions deficient because they fail to measure up to that standard, e.g., their "shareholders" cannot sell stock.<sup>14</sup>

The theory assumes that the market for corporate control is highly efficient and that the chief reason corporations are acquired is their management's poor performance. According to the property rights view, market discipline forces managers of private firms to be more efficient than public managers.

The theory gives no weight at all to the monitoring capacities of the state that routinely scrutinizes the performance of public institutions. The reasons for this dim view of public monitoring are spelled out in the theory of public choice.

A complete enumeration and analysis of the claims of the public choice school would be useful, but such an undertaking would be a book in itself. The appeal of the public choice school is precisely to those who are intuitively certain that whatever government does, the private sector can do better. Together, the property rights and public choice schools show that if you assume a purely individualistic model of human

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<sup>14</sup> Survival in the market, of course, depends on the capacity of organizations to produce a residual reward for the owners--a profit. This is not the standard that public institutions generally need to meet. The property rights approach says that society would be better off if, instead of meeting approval in the political process, public organizations or their assets were privately owned and had to meet the test of profitability.

behavior and treat politics as if it were a pale imitation of the market, democracy will, indeed, make no sense.

*Economic Model 2: Privatization as a Relocation of Economic Functions.*

Another school of thought views privatization as a relocation of economic functions. This school tends to have a more qualified view of public institutions (though still highly critical) than the property rights school. It is beyond the scope of this paper to discuss the details of this theory. Instead, we will first review the political effect in reducing demands on the state and then the political context and uses of privatization.

**Privatization as a Reduction of Government Overload**

This theory holds that privatization is desirable for its likely political effect in deflecting and reducing demands on the state. In the 1970s, some critics suggested that state-controlled monopolies were suffering from an "overload" of pressure, responsible for excessive spending and poor economic performance. In that framework, privatization represents one of several policies encouraging a counterrevolution of declining expectations.

The political theory of privatization has several different, overlapping elements. The element that should be emphasized is that privatization of enterprises is a privatization of employment relations. Another important element is that the privatization of public assets and enterprises is also a privatization of wealth to increase the proportion of the population who owns shares of stock and therefore takes a more positive view of profitmaking. "People's capitalism" is an old idea, but using privatization of public assets to bring it about is new.

The political theory of privatization, like the economic and sociological theories, contains empirical predictions as well as normative judgments. The predictions concern the probable effects of privatization on political consciousness and action; the normative judgments concern the desirability of weakening the political foundations of public provision. These prospects raise rather different issues from the usual efficiency-minded discussions of privatization: they demand that we consider privatization not only as a theory but also as a political practice that might impact the behavior of everyone involved.

**Privatization as a Political Practice**

The structural variety of public and private organizations, political systems, and national contexts makes it difficult to generalize about public-private differences and the effects of privatization. The task of generalization is not made any simpler by the fact that the forms of privatization vary so greatly. In this section, we will review some of the contextual factors and critical choices that shape what privatization means in practice and help explain why political practice is one of the crucial lenses through which to view the behavior of a society or nation.

*The Political Contexts and Uses of Privatization.* The meaning of privatization depends in practice on a nation's position in the world economy. In wealthier countries, it is easy to treat privatization purely as a question of domestic policy. In developing countries, where the likely buyers are foreign, privatization of state-owned enterprises

often means denationalization - a transfer of control to foreign investors or managers. Since state ownership often came about as an act of national self-assertion, privatization appears to be a retreat in the face of international pressure. In that sense, national memory colors the meaning of privatization. The more dependent a nation is on foreign investment, the greater the likelihood that privatization will raise the prospect of diminished sovereignty and excite the passions of nationalism. Where privatization raises such issues, it is often blocked, or citizens and domestic firms are reserved exclusive rights to publicly offered assets, shares, or contracts.<sup>15</sup>

The more parochial concerns of politically dominant racial and ethnic groups may also confound privatization plans. Even if privatization is adopted, the field of potential buyers may be so restricted that potential gains from more efficient management evaporate. Potential private owners of public assets and contractors for public services represent specific interests and groups. Privatization is unlikely to be carried out with indifference to those social facts.<sup>16</sup>

Many other issues could benefit from a thorough review and analysis. Time and space do not permit the author to cover the subject in great detail. Suffice it to say that in general, the political uses of privatization are bound to compromise the avowed efficiency objectives. Governments in a hurry to sell state-owned enterprises may make concessions to current managers, whose cooperation is instrumental in divestiture. Privatization then becomes an occasion for managerial enrichment and entrenchment. It is striking that in India, China, and other countries that have privatized state-owned enterprises, privatization usually brings about little or no change in top management. Moreover, governments commonly offer assets and enterprises up for sale to political allies. Some of these properties, such as state controlled telecom monopolies, are not simply economic but political assets; the incumbent government gains obvious advantage by placing them in the hands of political allies.

Privatization attracts support from both economists with a belief in liberalized markets and a lobby consisting of investment banking firms, government contractors, and other corporations whose businesses stand to benefit if the public sector cedes ground. Rather than being an escape from interest group influence and the politicization of resource use, privatization typically provides a prime example.

The above statements should not suggest that the view of politics as pure self-interest captures all that is going on in the case of privatization. On the contrary, privatization is a worldwide policy movement carried along by a combination of objective forces, imitative processes, and international financial sponsorship. For example, many countries whose public sectors expanded sharply in recent decades now

<sup>15</sup> Throughout the world, the privatization of enterprises with strategic military or economic significance raises especially sensitive questions of sovereignty and security.

<sup>16</sup> Government of India's Economic Survey of 1993-1994 noted: "Telecommunications is important not only because of its role in bringing the benefits of communication to every corner of India but also in serving the new policy objectives of improving the global competitiveness of the Indian economy and stimulating and attracting foreign direct investment." *Economic Times*, 1994.

Nonetheless, India decided to follow a relatively cautious path of telecommunications liberalization. The reasons were complex and varied, but the concern that prevented more rapid restructuring was the fear that in a region full of conflicts involving large businesses and other interest groups, privatization and liberalization would threaten national interest and national security

find themselves confronted by rising debt and strong resistance to higher taxes. Privatization of state-owned monopolies promises to bring some fiscal relief, particularly where the treasury has been heavily subsidizing unprofitable enterprises.

Privatization may help both to cut expenditures and boost revenues, and, by converting debt to equity, states may improve the overall financial structure of their economies and reduce pressure for even less palatable austerity measures. As in other institution-shaping movements, such as the postwar spread of public enterprises, privatization represents organizational forms that spread by imitation.

Institutional models are disseminated through a variety of political networks and the direct influence of international lending organizations. Privatization is now one of the policies that the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO) promote in negotiating loans with developing countries.

The proponents of privatization see the process more as learning than as imitation or imposition. They view the poor performances of public enterprise and, more generally, over-expanded public sectors and argue that privatization makes sense. But experience is never so transparent. Even where state enterprises are generally agreed to be highly inefficient, it is not necessarily clear that privatization will be a remedy. Moreover, the performance of some state-owned enterprises--for example, in Malaysia--has been excellent, and it is simply not true that as public sectors grow, rates of economic growth fall. It is true that the record of central government planning, as evidenced in Russia, China, and India, is dismal but that experience cannot simply be extrapolated to all publicly owned organizations, particularly in states with more autonomous forms of public sector management.

## Conceptual Model

### The Theoretical Underpinning

The literature review in the preceding chapter showed the extent to which privatization varies. The government may choose, for example, to:

1. Privatize a monopoly like a state controlled telecoms intact,
2. Break it up before selling, or
3. Keep it in public ownership while allowing private firms to compete with it on equal terms, as was done in the case of the Department of Telecommunications in India.

In cases of partial privatization, the government might

1. Continue to finance, but not operate, services,
2. Continue to own, but not manage, the enterprise, or
3. Sell some voting stock in the enterprise, but not surrender control.

The basic idea that emerges from these variations is that decisions made by a national government pertaining to the form of ownership will give rise to the predominant explanation for varying performance. The decisions are about the nature and

extent of privatization to be pursued. The key question to ask is what factors influence those decisions. Those factors help us identify the *independent variable* for a Conceptual Model.

The literature on the political theory of privatization pointed us toward impacts on:

1. Employment relations;
2. Wealth generation, i.e., how privatization can increase the proportion of population who own shares;
3. Passion of nationalism, particularly in developing countries when buyers and investors are from foreign countries. In India, privatization of the Department of Telecommunications excited the passion of nationalism, thereby causing blockage of privatization.

These points underscore the types of interests and values that are important and regularly considered in shaping privatization decisions, whether they are related to various development goals, social/economic goals or other intangible factors. Further, they reveal how the variations in privatization policy could complicate simple-minded predictions concerning probable effects of privatization.

For policy analysts and decision makers, the basic tasks remain the examinations of trade offs. For instance, one option of privatization may be to allow for private ownership but then regulate the owners to achieve certain developmental and/or economic goals, as has been done in some of the Asia Pacific countries. The experiences of those countries demonstrate that privatization can be done in a way that asks or forces the private owners to achieve certain country-specific goals, which then influences whether those goals are reached. Likewise, other countries elsewhere in the globe exercised somewhat different privatization options, thereby validating that regardless of the country or region of the world, the policy analysts everywhere are required to examine the trade offs between a few decision-variables:

1. Should privatization take place, and if it should, to what the extent?
2. What continuing regulatory oversight to exercise?
3. Should competition be allowed or encouraged?<sup>17</sup>

During the quantitative research phase, the actual decisions that the policy makers formulate to target the nature and extent of privatization will form the basis for defining the *dependent variable* for the Conceptual Model.

The complications about the anticipated outcome of privatization arise because in some countries, the mode of public sector control depends on the structure of political-administrative relationships. In most centrally planned economies, the state is not necessarily a unitary actor. Public sectors often comprise a vast sprawl of organizations in public ownership, loosely connected to the centers of political decision-making. As noted in the case of China, there is a powerful network of domestic and international large users comprising influential electronics, railways and power ministries that the

<sup>17</sup> The industry experts, including policy analysts at the World Bank, argue that regulation and competition can be complementary or substitutable ways of approaching privatized entities (Wallsten, 2000).

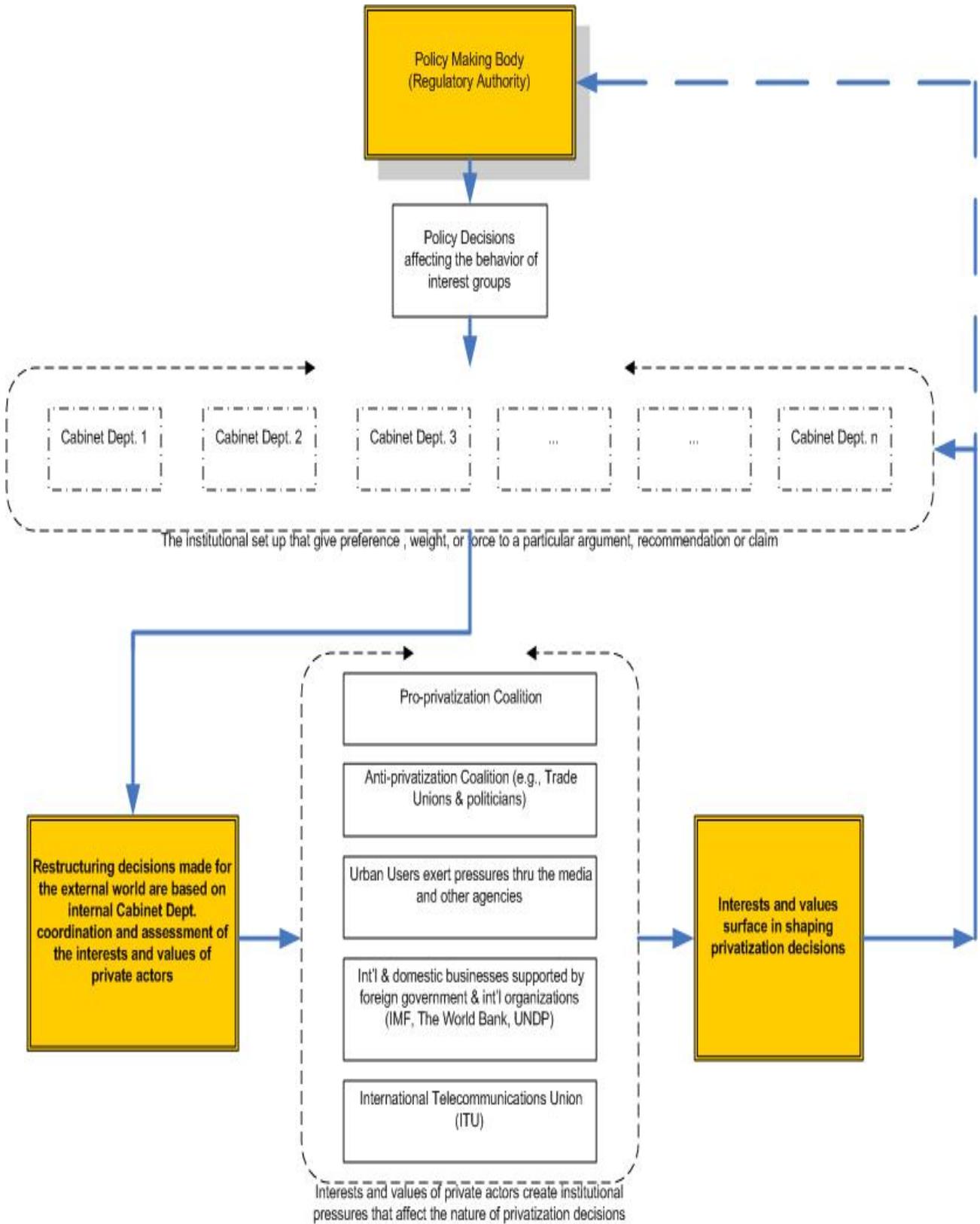
Chinese government uses as an instrument of patronage and power. In India, a coalition of trade unions and politicians plays a definite role, with support from domestic businesses that benefit from past or present inward-oriented policies and therefore have a stake in keeping multi-national corporations out of the market. . Another coalition, comprised of urban users, international businesses, and government administrators, is trying to influence the decisions of the government in a different direction. As depicted in Figure 8, it is the interplay of these actors and players that help us understand and evaluate how the interests that get expressed and are relevant to the decision get processed and how one can understand what weight they are given. To capture those issues, Figure 8 provides a methodological solution, based on ideas borrowed from cybernetics and engineering control theory, that captures the institutional environment in which the decision is made into our model. This institutional environment serves as a *mediating variable* for the Conceptual Model.

The third tier boxes in the figure represent the key Cabinet Departments, which decide what weight is to be given to the various interests that are communicated via the feed-back loops shown in the diagram. Earlier, in India and China case studies, we learned that the weight given to the various interests often depends on how closely aligned the interest groups are to the decision making bodies and, based on that alignment or lack thereof, how seriously those interests are taken into account in the institutional setting in which the decision is made. In China, for example, the railways minister is well positioned within the institutional decision-making; accordingly, railways' interests are given priority considerations. If, on the contrary, the minister of power is excluded, then the interests of that ministry are likely to be de-emphasized.

If we assume that the forces of privatization are the same in India, China, Russia and several other countries, the privatization that results from those forces will differ *if the decisions are made in different institutional frameworks*. With the theoretical construct proposed in Figure 8, the author will explore the impact of different institutional settings in which the decision will be made.

Figure 8 directs our attention to a directing or controlling sector (represented by the top three layers) and a controlled environment (represented by the entire lower tier of the figure). In order to understand the behavior of decision-making body of a total environment, the author is required to pay attention to the inter-relationship of the whole environment and its dynamic nature, taking note of the information feedback mechanism that operates between the inner environment (represented by the top three layers) and the outer environment (represented by the bottom tier of Figure 8). This feedback mechanism is the vital linkage provided by the political/institutional process.

To sum up, in an attempt to build a generalized theory that explains the interplay of broad sets of variables identified in section one, the Concept Paper has proposed a control theoretic construct which allows us to evaluate multi-conditional and ever-changing situations commonly witnessed in telecoms regulatory reform processes. The level of generality of this construct is an advantage in that it offers great flexibility in making a wide variety of changing situations understandable and it can also be readily reformulated, if it does not work in particular application situations.



**Figure 8.** Study of the phenomenon of complexity

During the second and third year qualitative and quantitative phases of research and analyses, there will be several countries to investigate—again, to address the research question:

*Under what circumstances clash between institutions making regulatory policy decisions and interests and values of interest groups is the likely result and under what circumstances the privatization decision is likely to translate into behavior that is consistent with development goals (as manifested in the motivation for privatization)?*

In view of that possibility, it is all the more important to present the theory in the discussion form. Our multiple country analysis calls for a strategy of comparative analysis for generating theory, which puts emphasis on *theory as process*: that is, an ever-developing entity, which underlies the theme of the theoretical construct presented in this section.

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## Glossary

**Users** refer to service consumers and service suppliers.

**Essential facilities** refer to facilities of a public telecommunications service that:

- Are exclusively or predominantly provided by a single or limited number of suppliers; and
- Cannot feasibly be economically or technically substituted in order to provide a service.

**A major supplier** refers to a supplier which has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for basic telecommunications services as a result of:

- Control over essential facilities; or
- Use of its position in the market.

### GSM

The Global System for Mobile (GSM) communications is a standard that embraces all areas of technology, resulting in global, seamless wireless services for all its customers.

### Interconnection

This refers to linking with suppliers providing public telecommunications transport network or services in order to allow the users of one supplier to communicate with users of another supplier and to access services provided by another supplier, where specific commitments are undertaken.

### MTN (Mobile Telephone Network)

A mobile telephone network operates with two communicating elements – the handset and the base station. The mobile phone handset transmits radio waves to the base station, and these carry the voice of the phone user. Similarly, the base station transmits radio waves to the mobile phone and these carry the voice of the person the phone user is listening to. The base station passes the signals to and from the phone network.

### Teledensity

Teledensity refers to the number of telephones per 100 people in a region.

### Universal service

The goals of Universal Service are to promote the availability of quality services at just, reasonable, and affordable rates; increase access to advanced telecommunications services throughout the Nation; advance the availability of such services to all consumers, including those in low income, rural, insular, and high cost areas at rates that are reasonably comparable to those charged in urban areas.

### Telecommunications Regulatory Authority (TRA)

*The TRA promotes and balances the interests of subscribers and other users, and promotes effective and fair competition among new and existing licensed operators.*

The TRA is required to carry out its duties and exercise its powers in a non-discriminatory and transparent manner.

**Subscriber Identification Module (SIM)**

The Subscriber Identification Module SIM offers a flexible wireless design solution for mobile or fixed applications.

**Allocation and use of scarce resources**

Allocation and use of scarce resources refer to frequencies, numbers and rights of way, etc. that should be carried out in an objective and timely manner.

## Appendix 1. The Structure and Change: The Indian Experience

Indian telecommunication liberalization efforts offer a perfect illustration of the idea of collusion that was advanced in the concluding section of chapter one. The country's efforts in the 1990s could be characterized as slow, faltering, and unsteady, even though businesses, urban residential users, and government administrations were asking for a liberalized telecoms environment to meet growing demands for better services. India was pushed toward telecommunications liberalization after a severe fiscal and balance of payments crisis in 1991, which empowered many businesses to demand liberalization. Specialized services, including cellular, were liberalized during 1991-94. The national telecommunications policy, announced in 1994, intended to liberalize the telecommunications sector further. The state owned monopoly, the Department of Telecommunications (DoT), could not be privatized due to resistance from its 480,000 workers (tacitly supported by 18 million employees in other state owned enterprises). Figure 9 summarizes the opposing views on India's telecommunications reform initiatives.



Source: India: Adopting a Pro-Competitive Policy for Telecommunications, <http://www.commercialdiplomacy.org/powerpoint/ashokppt/ashok8.htm>

**Figure 9.** India's policy rationale

Since the passage of the 1994 policy, the DoT has been competing with a private player in each of the 21 regions (known as Telecom Circles) announced by the state. There are many influences at work on the Indian state. There is a powerful liberalization coalition that includes international and domestic businesses supported by foreign governments and international organizations. Urban users are also exerting pressures through the media and other agencies but so far, they are not formally part of the business coalition. An opposing coalition, which includes trade unions and politicians who may be supported by domestic businesses continuing to benefit from the past or extant inward-oriented policies and with a stake in keeping multi-national corporations out of the market, is also playing a definite role. The Indian state's juggling between these interest groups (including constituencies within the state owned monopoly) produces one of the most complex liberalization programs ever undertaken and this is meaningfully relevant for the author's dissertation research, for his goal is to explain the behavior under study, i.e., the juggling between interest groups.

Many groups with high demands for services (large businesses, exporters, urban users) continue to be denied services because the state must also hedge between providing services to these groups and rural areas, where more than two-thirds of Indian voters live but where the teledensity is only 0.4. Most importantly, four years after the terrestrial and cellular liberalization program was announced and two years after the licenses were awarded to potential providers, very few actual operations had begun because of political hurdles, mostly erected by the incumbent department of telecommunications.

India offers the interesting case of a state facing pluralistic pressures which has liberalized its marketplace, but safeguards and checks against unrestrained authority are few. Political institutions have long succumbed to the party in power, usually driven by special interests, and only recently have opposition parties started playing a significant role. The creation and sustenance of the regulatory authority, the Telecommunication Regulatory Authority of India (TRAI), has been marred by opposition from the DoT, which resisted giving up its authority. From 1994-97, the government hedged on establishing the TRAI creation and even after the TRAI came into being, the DoT publicly challenged and did not implement TRAI decisions. The high license fees and interconnection charges under the DoT stalled the progress of private providers in both terrestrial and cellular telephony. The former government had moved toward strengthening the TRAI and the minister of communications had explicitly told DoT to comply with its decisions.

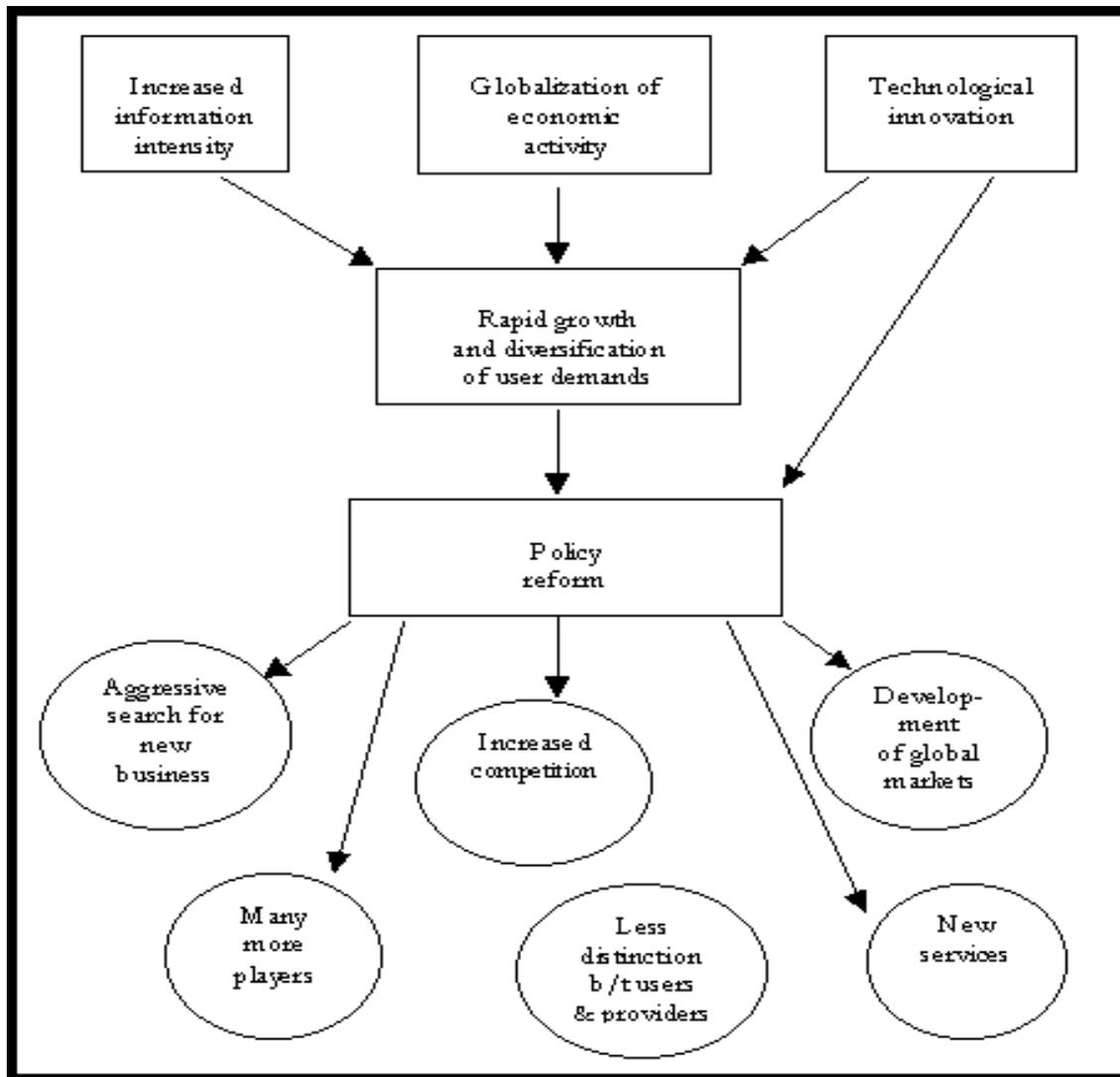
Figure 10 identifies the forces that shaped and accelerated the telecoms reforms in India, stimulating India's economic growth. In the process, and notwithstanding already low tariffs, these regulatory reforms have expanded the revenues of India's operators – and, with that, the vendors who supply them. The evidence is already compelling.<sup>18</sup>

Wireless is becoming an increasingly important means of access<sup>19</sup> and the differences between core networks are disappearing. India's deregulation has erased what have been the

<sup>18</sup> (Springham, 2004; Sharif, 2004).

<sup>19</sup> Cellular operations began in 1995 when services were launched in the four largest cities: Mumbai, New Delhi, Calcutta and Chennai. The cellular networks have been spreading to smaller cities and towns in the states of Haryana, Karnataka, Uttar Pradesh, Gujarat, and Maharashtra, among others. There are now 23 licensed GSM cellular operators, of which 22 are joint ventures with foreign telecoms, including, Australia's Telestra, US West, AT&T, and British Telecom. In the aggregate, these wireless networks have more than 800,000 subscribers today. As a result of inadequate subscribers and losses, numerous cellular operators in the country have formed two

artificial boundaries between classes of service, whether “wireless,” “mobile,” “fixed,” “landline,” “broadband,” “long distance,” “international,” “Internet,” or other, enabling Indian operators to become integrated telecommunications providers.



Source: Saunders et. al, Telecommunications & Economic Development

**Figure 10.** Forces that drove telecoms reform in India

In the process, India’s historically inadequate telecommunications infrastructure has become an advantage. Most operators – in particular those in the private sector – are constructing networks virtually from scratch. They are not constrained by legacy networks. They are no longer bound by artificial distinctions of service-specific licenses. They are not burdened by the

consortia, World 1 Network and Global Connect to provide national and international coverage to subscribers. To attract private sector investments in the wireless sector, the Government has decided to offer up to 40 percent of all available frequencies to the private sector, while reserving a second 40 percent for DoT and the remaining 20 percent for defense and other government uses. New Jersey Institute of Technology, Newark, New Jersey ([www.electronex.com/electronweb/marketing/india/indiapr.htm](http://www.electronex.com/electronweb/marketing/india/indiapr.htm)).

economic inefficiencies imposed by overbearing regulation. As a consequence, India is now deploying what is becoming one of the most modern telecommunications networks in the world. During the 2<sup>nd</sup> year qualitative research and analysis phase, the author will explore in greater depth the process of India's regulatory reform--what we foresee as its impact, and what the world can learn from India's evolving experience.

## Appendix 2. The Structure and Change: The Chinese Experience

Chinese infrastructure is impressive, but like its southern neighbor India, the Chinese state is also primarily driven by awarding of favors to groups with the most access to state decision-making. Given that the state seems so insular, it does not seem right that it is dominated by special interest for telecommunications. However, its highly authoritarian and centralized decision-making procedures reveal the influence of powerful groups, which account for everything from awarding of lucrative economic contracts to widespread corruption within the government. In telecommunications, the challenge to the telecommunications monopoly, the Ministry of Posts and Telecommunications (MPT), has come from other powerful ministries within the government and politically powerful groups of domestic and international large users. In China's centralized context, where channels to the elite decision-making are limited, the challenge to MPT coalesced around the two newly formed inter-ministerial service providers known as Liantong and Jitong. Liantong is more powerful, with its shareholders coming from the influential electronics, railways, and power ministries, and is poised to become China's second carrier. Jitong is owned by 26 state institutions and will provide a variety of specialized services. The ministry of radio, film and television may also provide telephony. Provincial administrations are also being given more power to provide telecommunication services. While not providing services, multinational corporations (MNCs), led by Alcatel, AT&T and Motorola, are selling a lot of equipment to a country which has one of the most ambitious service enhancement programs in the world.

While decision-making is not as transparent as in other developing countries, two things nonetheless stand out in China's context. First, a coalition for restructuring telecommunications with access to state's decision-making exists. "The reform coalition consists of a powerful group which includes the major manufacturing and user ministries, large national users, local governments and interest groups and international equipment suppliers and service operators." Restructuring has, in turn, mostly benefited the coalition partners. This is evident from the networks available to powerful ministries, equipment deals for MNCs, and availability of advanced services for users in export-oriented areas such as Guangdong and Fujian.

Chinese restructuring continues the devolution of power to provincial bodies and alternative providers. Privatization of a few telephony services may also be allowed as witnessed in the first sale of cellular licenses last year. Apart from the networks built by large users, provincial autonomy in building networks is important. It accounts for the accelerated deployment of services along the eastern and coastal areas. Many of the provinces even took the lead in collaborating with foreign providers such as Shenzhen did with Cable and Wireless in 1984. In the mid-1990s, AT&T and Singapore Telecom planned on building business user and fixed line networks in Shanghai. The seemingly devolved nature of the network is in appearance only, given its hierarchical structure and the ultimate controls through Beijing's elite central decision-making bodies like the State Council. Furthermore, the ministries of posts and telecommunications, electronics industry, and radio, film and television have been combined under the umbrella ministry of information industry. Foreign providers have actually been kept quite disciplined by Beijing, and even the steps announced by the 1997 Central Communist Party plenary excluded most of telecommunications from the list of sectors to be deregulated and privatized.

The tightly controlled telecommunication restructuring in China, however, may become difficult in the future, as its political system adjusts to the post-Deng and post-Hong Kong eras,

successive international pressures (such as China's membership with the WTO) and internal pressures. China has by far the most ambitious service enhancement program in the world. Whether or not it can reach all its targets in the coming years depends on how well it controls its political pressures. The neat ordering of its "reform coalition" can break down with China's inability to control its provincial or reformist pressures and as international manufacturers and providers get aggressive. Summing China's development experience with special reference to telecommunication, Milton Mueller observes that China's "development is thus driven by a jarring dialectical tension between economic freedom and political authoritarianism, between decentralization and centralization, between capitalist practice and socialist ideology."<sup>20</sup> As a follow up to this Concept Paper, the author will continue the evaluation of the behavior or collusion under study through the second and third year qualitative and quantitative analysis phases, to see what the world can learn from China's evolving experience.

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<sup>20</sup> (Mueller, 1994).

### Appendix 3. The Structure and Change: The Russian Experience

Until 1993, the Russian telecommunication network was fully controlled by the Russian Ministry of Telecommunications. In 1993, local network operators were privatized so that each region received at least one telecommunication provider, and more than 80 companies were established. A Russian telecommunication holding company “Svyazinvest” was formed in September 1995. The main objective of the company is to attract investments to develop the regional telecommunications networks, with the Russian government keeping 50 percent of the Svyazinvest shares and selling the remaining shares at auctions.

Despite Svyazinvest being an independent company, the government, as the largest shareholder, has great influence on its policy, decision-making, and management strategy. In July 1997, the government sold 25 percent shares of the Svyazinvest holding for USD 1.875 billion. The tender was won by the Cyprus based consortium, Mustcom, which included George Soros’ Quantum Fund, Russian Uneximbank (owned by Interros Group), MFK, the Renaissance Capital Investment Fund, Deutsche Morgan Grenfell, and Morgan Stanley. The money raised went almost entirely to the **government budget**, with Svyazinvest retaining only \$95 million.

In June 1998, the Russian government announced a decision to sell another 25 percent (minus two shares) of Svyazinvest stock. The government would retain controlling interest, owning slightly over 50 percent. The Commission hoped to sell it for USD 1.1 billion and attached investment obligations of USD 400 million, making the total price of USD 1.5 billion. At that moment, Svyazinvest was among the most profitable Russian companies, with a net profit of USD 1.2 billion in 1997. However, as a result of the August 1998 financial crisis in Russia, the tender was cancelled. Telecommunication providers’ debts were increasing, and the fall in the dollar/ruble rates resulted in a major devaluation. Russian carriers were not solvent to pay foreign producers for imported equipment. At the end of 1998, 35 of 89 Svyazinvest companies finished the year in the red.

Quantum Fund presently owns 53 percent of Mustcom. Quantum Fund has been increasing its share of Mustcom by buying shares from partners, most recently in August 2001. This demonstrates Quantum’s commitment to the Russian telecommunications market, and confidence in liberalization and privatization reform. Mustcom presently owns only 25 percent of Svyazinvest, making it a minority shareholder dominated by the 75 percent share of the government. However, if the government agrees to sell an additional 25 percent (minus two shares), Mustcom will attempt to buy them. In that case Mustcom, while not having controlling interest, would be a near equal partner, with an investment that yields significant influence. To appreciate what it might be acquiring, the author offers the following quick references to:

#### Sectoral Overview

The telecommunications infrastructure of Russia is not sufficient to handle the demands of the country’s population. Over 6 million Russians are currently on the waiting list to receive phone lines. By the year 2005, the list will rise to 8 million. The telecom infrastructure is characterized by inadequate capacity, low penetration (21.3 percent), poor call completion rates (56 percent of long-distance calls are incomplete), and a lack of modern communications services:

***Inadequate Capacity.*** Prior to 1992, a mere 0.15 percent of GNP was devoted to telecom infrastructure investment. The network has weak intercity, interregional and international connectivity, trunk line bottlenecks, and limited regional interconnectivity.

***Low Penetration and Call Completion Rates.*** Main line penetration is low throughout Russia, and telephone densities are considerably lower than those of most other European countries. The basic network has roughly 22 million telephone lines and 34,000 switching stations. The national penetration rate is about 21.3 lines per 100 people. Only 2.5 million lines have digital switches, the rest are served by outdated crossbar technology. The network is still poorly prepared to serve the needs of the general population or the emerging business community.

***Lack of Modern Communication Services.*** Until recently, the Russian public network had only one significant international exchange in Moscow. Although access can now be made through one of three gateway switches, they are insufficient to handle the current load of 110 million calls per year. Businesses used to enjoy many international service options, and many companies used to hold licenses from the Ministry of Telecommunications for international communications in European Russia. Unfortunately, the Ministry of Telecommunications has recently dictated that this service can only be provided via Rostelecom, the Russian long distance carrier.

The long-distance network for calls within Russia is a mixture of radio relay, cable and satellite. Of the 1.2 billion long-distance calls made annually, only about 44 percent of domestic calls are successfully completed. In Moscow, the city network (MGTS) and intercity telephone network (MMT) have long been inadequate for international business. This condition is changing with the introduction of newer technological equipment and foreign investment. For instance, the first cellular system appeared in the early '90s. The lifting of Coordinating Community on Militarily Critical Technologies (COCOM) restrictions paved the way for these changes. However, these changes have been slow and, as a consequence, telecommunications has not contributed much toward the overall economic and societal development in Russia, and Russia's integration into the world economy. The slowness is partly due to the risks associated with investment and non-transparent and arbitrary policy in telecom.

The arbitrariness, though not quite as evident as in the Russian environment, has always been an issue in all countries predominantly over the shareholder equity balance, i.e., who would hold what equity, including controlling authority, under an international joint venture partnership agreement. The arbitrariness may also be due to other concerns, including what impact privatization would have on employment, national sovereignty, and similar other factors.

Through a literature review, the author wishes to provide the audience with a set of regulatory reform policy options based on theories within the rhetoric of privatization that underlies the theme of regulatory reform. To that review and discussion of what the literature says, we now turn.

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