

Liberalization & Privatization of Utilities and the Case for Effective Regulation: *Some Lessons from Sri Lanka's Telecommunications Sector*

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The liberalization and privatization of utilities in both developed and developing countries has been paralleled by a substantial increase in regulatory agencies in these sectors, in the last decade. In the telecommunications sector for instance, the International Telecommunication Union (ITU) claims that there are currently 101 separate telecommunications regulatory bodies as opposed to only 12 in 1990 and that most of the new agencies are in developing countries.²

The rationale for private participation in infrastructure sectors has been dealt with extensively in the economic literature.³ However, neither liberalization nor privatization is sufficient to ensure an efficient outcome in the face of externalities and market failures. Moreover, the fact that utilities transferred from public ownership are typically monopolies at first, or have substantial market power means that they could exercise these powers in ways that are detrimental to the public interest.⁴

Contrary to earlier beliefs expounded by institutions such as the World Bank, the experience over the past decade has shown that market competition is not a substitute for government regulation.⁵ The market structures that emerge in reality are very different from the textbook case of competition and it is very likely that the utility sectors will continue to be characterized by a few large players or incumbents with monopoly power. As such, the justification for sector-specific regulators mandated to perform a range of functions such as regulating oligopolies and monopolies, facilitating and managing competition, and balancing efficiency

and equity concerns, will remain in the indefinite future.

The purpose of this paper is to address the criteria for the effective reform and regulation of utilities in a liberalized, developing economy, drawing from Sri Lanka's experience with telecommunications. The analysis is limited to the telecommunications sector for two reasons. First, the need for regulation to balance commercial and social imperatives is most clearly highlighted in this sector. This is because the pace of technological change in telecommunications has made it far more competitive than sectors such as water, gas and electricity and has attracted huge flows of private investment into the industry. At the same time, public interest remains a significant concern given the network characteristics of the industry, the fact that the incumbent operator tends to retain significant market power, and universal service obligations (USOs).

Second, in the case of Sri Lanka specifically, the telecommunications sector stands as the pioneer of utility regulation, with other utilities set to follow this example with the proposed introduction of market-oriented reforms into these sectors. Therefore, it is timely to take stock of the lessons learned from our first experience with infrastructure regulation.

The paper is organized as follows: Section 2 briefly lays out the conceptual framework of analysis. Section 3 critically examines Sri Lanka's experience with telecommunications reform and regulation. Drawing from the preceding sections, Section 4 discusses some important policy considerations relating to the reform and regulation of utilities. Section 5 concludes.

Conceptual Setting

The experience with telecommunications regulation over time and in several different countries indicates that governments regulate to achieve three broad objectives: economic, social and political. Underpinning this is the need to ensure fair competition, and to balance efficiency and equity considerations as well as the conflicting interests of different stakeholders in the industry. This section looks briefly at the nature of these objectives and at some of the regulatory difficulties that are a result of the inherent tensions between them.

The most fundamental social objective of regulation is to meet universal service obligations, which according to Sri Lanka's National Policy on Telecommunications is: "to achieve universal service covering the whole country including all villages. This implies easy access to basic telecommunication facilities such as telephone, telegraph and facsimile to all at affordable and reasonable prices".⁶

The thinking here, is that regulatory interventions are required to deliver services that would not otherwise be provided by the market. There is also an economic case for universal service in telecommunications that comes from particular network externalities. For instance, the greater the size of the network the greater the benefit to other users of the network; also, since telecommunications involves two-way traffic, users can generate considerable incoming calls even if they generate only a few outgoing calls.

However, although the universal service mandate may appear to be relatively clear-cut on the face of it, it involves a considerable degree of dis-

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cretionary judgement on the part of the regulator, given that neither reasonability nor affordability is a term that allows for an objective definition. Moreover, the provision of universal service also means that regulators often have to balance the interests of users already on the network and potential subscribers. For instance, cross-subsidies designed to raise the affordability and penetration of telecommunication services could raise the price of service to subscribers already on the network

From a purely economic perspective, the objective of regulation is to ensure that services are provided under conditions of optimal efficiency. Since the telecommunications industry is now driven mostly by private investment, it is important that profitability and the ability to earn a reasonable return on investment are secured both by establishing effective pricing rules and by signaling the government's commitment to institute an enduring regulatory system.

There are a range of economic pricing methods in telecommunications regulation, such as cost of service regulation, price cap regulation, and benchmark regulation. However, it is often the case that political rather than economic or even social factors determine telecommunications tariffs in most developing countries. Noll (forthcoming) refers to this process as "expropriation" and "capture"⁷, with expropriation referring to users' influence on the regulator and capture referring to firms' influence on the regulator.

According to the expropriation thesis, services could be provided below cost either because user groups are better organized than firms are or because electoral politics may favor users at the expense of firms. Firms are allowed to earn excess profits under the capture theory for parallel reasons. Deviating from economic and social standards of regulation can encourage anti-competitive practices such as predatory pricing or unreasonable terms of interconnection and dilute the mandate to enhance and sustain competition in the industry.

In short, a regulatory agency has to manage a web of contradictory interests. The agency is expected to protect users, both current and prospective and residential and business. It also needs to establish a good rapport with the industry that it regulates, since it is the industry players that provides it with the information required to perform its tasks. The agency is further expected to respond to the interests of the government from which it generally gets its funding. In addition to fulfilling these complex mandates, the fast pace of telecommunications development makes it imperative that the regulator be dynamic and forward-looking. The next section of this paper analyses Sri Lanka's telecommunications industry in light of the regulatory challenges raised here.

Reform and Regulation of Sri Lanka's Telecommunications Industry

Sri Lanka's telecommunications industry was profoundly transformed during the 1990s and became one of the most open and competitive among developing countries in the Asia-Pacific region. However, certain developments since the partial privatization of the restructured state-owned entity in 1997, have diluted the impact of pro-competitive reforms. This section describes the evolution and present state of Sri Lanka's telecommunications industry and highlights certain policy and regulatory developments and their impact on pertinent competition policy issues, in an attempt to draw important lessons for the effective reform and regulation of utilities in a liberalized, developing economy.

Institutional and policy changes in the telecommunications industry

Reforms in the telecommunications sector have had three inter-related strands: the restructuring of the state-owned telecommunications entity, the introduction of competition, and the establishment of regulation.

Restructuring of the state-owned telecommunications entity

Until 1980, the telecommunications industry was organized on the lines of

the Post, Telegraph and Telephone (PTT) model, with the state owning and operating both telecommunications and postal services. The first major reform involved a de-linking of the two services. This was a decision consistent with international experience that rapid technological developments in telecommunications tended to make it functionally incompatible with the less dynamic postal sector.

But even after the de-linking of the two sectors telecommunications continued to be inefficient, and the state-owned entity functioned as a monopoly shielded from competitive pressures⁸, and gained no significant injection of funds. Moreover, attempts to restructure the incumbent Department of Telecommunications (DOT) failed because of the climate of political instability and trade union opposition to the restructuring of state enterprises that prevailed in the late 1980s.

The conversion of the DOT into a government corporation, Sri Lanka Telecom (SLT), in 1991, did not change its basic administrative and financial dependence on the government.

Pervasive government interference in the operations of SLT prevented it from functioning as a commercial enterprise, and it was constrained for investment funds because government priorities lay elsewhere. In 1993, the government set up a state-owned company, Sri Lanka Telecom Services Ltd. (SLTS) as a subsidiary of SLT with more financial and administrative independence to accelerate network rollout. However, there was little improvement in service quality and both corporatization and the creation of a subsidiary entity were seen as threats by elements within SLT.

In 1996, SLT was converted to a public company, Sri Lanka Telecom Ltd. (SLTL), as an initial step toward partial privatization. In 1997, the government sold 35% of its shareholding in SLTL, through a competitive bidding process, to Nippon Telegraph and Tele-

phone (NTT)⁹, for US\$ 225 million, the largest privatization transaction to date. The government retained 61.5% share ownership and employees of SLTL were given the balance 3.5%.¹⁰ The employee share ownership plan was used to counter anticipated union resistance to the privatization of the incumbent.

In 1997, the government also signed a five-year management agreement with NTT to provide technical and management expertise to SLTL. The agreements signed with NTT, along with subsequent changes to the license of the incumbent operator, committed the government to issuing no further licences for wireline as well as international telephonic services until August 2002 and to a tariff re-balancing program that would yield a minimum 148% increase in domestic revenue, not adjusted for inflation, over a five-year period. The agreements also suggested that SLTL would enjoy a monopoly in international telephony until 2002.

Introduction of competition

The major changes in the sector came initially from pro-competitive reforms that progressively deregulated value-added services. These started in 1981, with the entry of private paging operators who started services initially without formal licences, and were only subsequently brought into the regulatory system. As of late 2000, the telecommunications industry had 37 telecommunication system operators, including three fixed telephony operators, four mobile operators, ten data communication service providers, six public payphone operators and five paging service providers.¹¹

In the first phase of deregulation, from 1981 to 1995, competition was introduced only in the periphery of the industry. Despite this cautious approach to competition, around twenty system operators, including the incumbent operator, were licensed during this period. The second phase of competition saw the entry of two wireless loop operators (WLLs), Sutel and Lanka Bell, in

1996, brought in to compete directly with SLTL in the fixed-access market.¹² These operators were given duopoly status in WLL services until the year 2000, with the possibility of a five-year extension if they met the performance targets, such as the provision of 100,000 lines by the year 2000, specified in their licenses. However, their duopoly status was eroded when SLTL was also permitted to operate WLL services within a specified range of frequencies.

Establishment of regulation

The foundation for telecommunications regulation was laid with the enactment of the Sri Lanka Telecommunications Act No.25 of 1991. This legislation led to the trifurcation of the sector, with operational functions being assigned to SLT, regulation to the Office of the Director General of Telecommunications (ODGT), and telecommunications policy to the Ministry.

The ODGT was a single-person authority, modeled on the lines of Britain's OFTEL, with the Director General handling regulatory issues and advising the Minister on policy matters. However, the ODGT, a government department with a wage scale lower even than that of SLT, was unable to attract well-qualified employees. The shortage of skilled workers in the ODGT led to the neglect of some of its key regulatory functions, such as consumer protection, public hearing procedures, and enforcement of licence conditions. Moreover, the separation of regulatory and operational functions, as envisaged in the 1991 Act, did not materialize in practice, with both the ODGT and SLT reporting to the Ministry and creating a conflict of interests.

Consequently, legislation was introduced in 1996, by way of the Sri Lanka Telecommunications Amendment Act, to strengthen telecommunications regulation. Under this amending legislation, the ODGT was converted to the Telecommunications Regulatory Commission (TRC) and the single-person authority was replaced by a five member Commission comprising three part-time members, with security of tenure, and two ex-officio members. The part-time members represented the fields of

law, finance, and management, whilst the two ex-officio members were the Secretary of the Ministry, serving as Chairman, and the Director General of Telecommunications, serving as the Chief Executive Officer of the Commission.

The responsibilities of the TRC included advising the government on the granting of licences and on tariffs, pricing and subsidy policies; determining, in consultation with the Minister, tariffs and methods for calculating tariffs; approving interconnection charges where operators reach a mutual agreement on these charges and determining the charges in the absence of such agreement; functioning as the sole manager of the frequency spectrum; ensuring that operators comply with quality standards specified in the 1996 Act; and protecting consumer interests. The TRC was also expected to approve the types of telecommunications equipment used by operators to ensure network compatibility.

The Commission was also expected to follow the broad objectives set out in the national telecommunications policy, drawn up in 1994.¹³ The objectives delineated in the 1994 policy document included the provision of telecommunications facilities to all at cost-based tariffs, the achievement of universal service, the provision of an acceptable quality of service, the elimination of waiting lists, and the protection of defence, security and environmental interests of the country. Unlike its predecessor, the TRC did not have to depend on state funds but could draw on licence and other fees to finance its operations. However, the independence of the regulatory authority was limited by the appointment of the Secretary to the Ministry as the ex-officio Chairman of the Commission. Its independence was further compromised when it absorbed several former employees of the SLT.

A new and more independent phase of regulation came in 1998, with the hiring and training of new personnel and the initiation of several pro-com-

petitive regulatory measures, such as the authorization of direct satellite access for data operators and reporting requirements for payphone installation in order to prevent unfair competition by the providers of loops. The TRC's mission statement developed at this time also emphasized consumer interests and competition¹⁴ The government decision to commit to the Regulatory Reference Paper¹⁵, a part of the Fourth Protocol to the General Agreement on Trade in Services of the World Trade Organisation (WTO) signaled a similar commitment.¹⁶ But subsequent developments to be discussed later demonstrated that implementing pro-competitive policies is not a smooth process.

Structure and performance of the industry

SLTL remains the dominant player with extensive market power in the overall telecommunications market, controlling approximately 60 per cent of the total industry.¹⁷ Although its main focus of operations is the fixed-access market, it is also the leading Internet Service Provider (ISP), operates its own payphones, and provides leased circuit and data communications services. It also controls 40 per cent of one of the mobile firms, though the 1994 national policy on telecommunications specifically states that fixed-access operators will not be permitted to provide mobile services. By Sri Lankan standards, SLTL is a massive corporate entity; its revenue in 1999 was equivalent to 1.7 per cent of the country's GDP.¹⁸

In the fixed-access market, where it has a formal monopoly in wireline services, SLTL has an 86.3 per cent market share, while Suntel and Lanka Bell have market shares of approximately 9.59 and 4.11, respectively.¹⁹ According to government sources,²⁰ the three fixed-access operators have invested around US\$ 600 million in the past five years and more investments have been foreshadowed. Having initially drawn most subscribers from residential customers, they are now attempting to make inroads into the corporate and business segments

by offering bulk discount packages and a range of sophisticated services, sometimes in conjunction with foreign firms. For example, Suntel has recently linked up with Airspan Networks, London, to provide high-speed access to the Internet and to public and private data networks, targeting corporates and small and medium businesses.

The performance in the fixed-access market has been mixed. Fixed phone tele-density increased from 0.73 in 1991 to 1.8 in 1997 and to 3.5 and 6.5 in 1999 and 2000, respectively.²¹ Approximately 55 per cent of these fixed-access lines are located in the Greater Colombo area indicating a continuing urban bias in this segment.²² Service quality has improved, the average waiting time for a SLTL connection has fallen from seven years to less than a year, and WLL operators have no significant waiting lists. A 1999 regulatory decision to compensate consumers for delayed connections probably helped cut waiting times. The WLLs have superior performance in terms of call completion rates and faults statistics. However, they complain that they have been unable to consistently achieve the 50 per cent and above call completion rate specified in their licences, allegedly because of call blocking by SLTL.²³ SLTL has revamped its billing procedure, particularly after a 1998 public hearing on billing issues initiated by the TRC,²⁴ and introduced itemized billing in 2000. Service quality is expected to further improve with the publishing of TRC's quality of service rules, and its linking of tariff increases to service quality.

There have been more extensive pro-competitive reforms in the mobile market, which is characterised by greater competition than the fixed-access market, with the four operators holding approximately equal market shares. For many customers, mobiles have been a substitute for fixed lines, and the sector has grown very rapidly. Its compound annual growth rate during 1995-1998 was 48.6 per cent as against 36.5 per cent in the fixed-access market.²⁵ Overall mobile penetration increased from 0.01 in 1991 to 1.35 in 1999, and the combined fixed-mobile tele-density reached 4.9 in 1999 and 6.3 in 2000.²⁶

Investment in the mobile market, over the past five years, amounts to around US \$420 million.²⁷ Intense competition amongst the mobile operators has led to a movement from analogue to higher capacity digital networks, a proliferation of value-added products such as Wireless Access Protocol (WAP) and other Internet-mobile services, extensive advertising campaigns, and prices have declined at an annual average real rate of 18 per cent to 20 per cent. According to ITU (1999), Sri Lanka's cost of US \$17.80 for a 100-minute basket of mobile tariffs compared favorably with average costs of US \$39.69 and US \$38.15 for, respectively, lower-middle income countries and the world. Although mobile rates in Sri Lanka are still above fixed-access rates, the introduction of home-zone pricing for mobile calls and the tariff re-balancing process in the fixed-access market is eroding this gap.

Though there are no formal entry restrictions in other sub-sectors, such as pay phones, data communications services, and pagers, they are growing at a slower rate. The pagers appear to be priced too high with respect to mobile phones and numbers have contracted in recent years. The dominant position of SLTL is a major issue in these markets. Suspicions exist that SLTL may be cross subsidizing its payphones. SLTL has also had conflicts with the large data communication service providers over the provision of enhanced voice services. Several small private telecommunications bureaux also provide informal competition, and provide a useful public service though the need for regulation has arisen because of alleged overcharging and other malpractices. The TRC recently implemented a scheme to regulate the activities of these bureaux by issuing permits to the three fixed-access operators and holding them responsible for issuing certificates to these resellers.

Internet access in Sri Lanka is still low, with only 0.29 hosts per 10,000 inhabitants in 1998, but is expected to grow. Internet connectivity is con-

strained by a number of factors including the relatively high cost of leased lines and computer equipment and the low level of computer literacy in the country. However, the recent emergence of public Internet centres and Cyber-cafes in urban as well as in sub-urban areas indicate that growth may accelerate in the near future.

Competition policy concerns

The transformation of the telecommunications industry from a monolithic, monopoly structure to a more competitive industry has resulted in better operational efficiency and a greater degree of consumer responsiveness. But much remains to be achieved. This section discusses some of the major regulatory issues in the industry, and assesses the success of the policy responses to these problems.

Interconnection

The importance of all-to-all connectivity in telecommunications requires the joint use of network facilities, but also helps incumbent or dominant operators to gain a strategic-competitive advantage over their rivals. In common with other countries, Sri Lanka also faces the challenge of how to establish a fair interconnection regime that ensures efficient provision of access to networks. Sri Lanka is a signatory to the WTO Regulatory Reference Paper that commits it to ensure that interconnection with a major supplier will be provided on non-discriminatory terms, in a timely fashion, and at cost-oriented rates that are transparent and sufficiently unbundled. But implementation has proved difficult.

The regulatory authority intervenes in interconnection issues only if operators cannot come to a negotiated agreement on access. The TRC issued determinations on interconnection in the fixed-access market both in November 1996 and in November 1998, following the failure of the SLTL and the new WLL operators to reach a negotiated settlement.²⁸ However, disagreements among the three par-

ties persisted, even in spite of the TRC's efforts to bring the parties to agreement through alternate dispute resolution. While the WLLs complied with the regulatory directive, SLTL continued with the pre-1998 arrangement and took the issue to court. It may well be argued that the fact that the incumbent appealed to the courts, as provided for in the Act, rather than to the executive, as in the past, points to an improvement in the process. However, judicial appeals of regulatory decisions could, given the long delays in legal proceedings in Sri Lanka, fail to thwart anti-competitive behavior in time. Also, knowledge and resource constraints in the judicial system could make it ill prepared to deal with the complexity and dynamism of controversies in the telecommunications sector.

The interconnection issue also relates to another major legal dispute over use of enhanced voice services by the WLLs as cheaper gateways for international calls. The distinction between voice telephony and data communications, sharper at the time the three data communications licences were issued has been rapidly blurred by technological changes. At present, there are three facilities-based data communications operators in the market with licences to provide enhanced voice services, and they have provided this service to the WLLs. According to SLTL, its exclusive right over international voice telephony precludes any others from providing those services. The enhanced voice operators claim the right to do so on the basis that their licences were issued prior to the SLTL privatization. To add to the confusion, the WLL licences clearly state that they can interconnect with any licensed operator. Meanwhile, the courts have determined that SLTL had failed to establish a *prima facie* case that it had a monopoly.

Universal service obligations

USO obligations in Sri Lanka primarily involve provision of telecommunications facilities to the rural areas and to the low-income groups. Although twice as many connections have been provided in the past five years than in the entire previous century of telephony in

Sri Lanka, rural coverage remains low, with SLTL and the mobile operators recording rural penetration rates of approximately 1.70 and 0.01, respectively, and around 75 per cent of the WLLs' operations being concentrated in urban areas.²⁹ Rural demand for telecommunications services however, is high, with it cited as the second-most important unmet need in a rural survey conducted by the TRC.

The government's commitment to universal service is set out in the 1994 telecommunications policy document as well as in Sri Lanka's schedule of WTO commitments, where it is specified that USO's must be administered in a transparent, non-discriminatory, and competitively neutral manner. The government's main approach to universal service provision has been to connect remote post offices to the SLTL network using Treasury funds. However, this practice goes against the WTO principles that state that USO's have to be administered in a transparent and competitively neutral manner. According to the TRC, post office connections provide more limited access at a higher cost than payphones. The TRC implemented a scheme from 1999 to subsidize payphone facilities to rural and sub-urban areas using its own access and licence funds. The scheme is to be phased out when the set target of 100 payphones in each of the country's 25 administrative districts has been reached. In 1999, it recommended that all fixed and mobile-access operators bid to connect clusters of post offices, subject to a ceiling of US \$ 5400. This recommendation is yet to be implemented.

There seems to be a clear conflict between the current situation and WTO commitments: the SLTL has no legally binding universal obligations, but the WLLs do have some USO type commitments built into their licence agreements. SLTL statistics indicate that more connections are being provided in urban areas since privatization in 1997. The controversy over interconnection has also spilled over into the area of universal service.

SLTL has argued that because its profits from international calls are reduced when it has to pay the WLLs for international calls terminating on their networks, its ability to cross-subsidize and expand network rollout is diminished.

The question remains as to who should be responsible for universal service provision. In view of the special treatment it gets, it may be argued that SLTL should also bear the greater responsibility for universal service provision. In any case the experience in Sri Lanka, as in many other countries, may confirm that competition may produce better universal service outcomes than monopolies.³⁰

Tariffs

The government, both in its 1994 national telecommunications policy and through the WTO agreements is committed to provide access to telecommunications facilities at cost-based prices. But again, in the absence of sound cost data, implementing that policy through regulation is not easy.

At present, no formal principle on tariff regulation is applied in the telecommunications sector. While the licences given to SLTL and to the WLL operators contain provisions on price-cap regulation, rate regulation in the WLL segment is currently on hold and may not be imposed until the year 2005 if they meet certain performance criteria. The government decision to re-balance SLTL rates over a five-year period effectively suspends price-cap regulation for SLTL for that period. Although the licences given to the mobile and Internet operators contain price-cap language, light-handed regulation is practised in these segments. The other segments of the telecommunications industry are subject to price-cap tariff regulation.

The official justification for tariff re-balancing mirrors the ITU position that the practice of cross subsidizing the domestic market using net settlement payments from abroad should be abandoned. SLTL reduced international tariffs by 8 per cent in 1998,

and reached an agreement with the government to increase domestic tariffs to increase its domestic revenue in five stages between 1998 and 2002: 1998 and 1999: 25 per cent; 2000: 20 per cent; 2001 and 2002: 15 per cent. Whether these increases are justified on a cost basis cannot be assessed because of the absence of sound cost data, but the possibility that a dominant operator may use tariff re-balancing to charge anti-competitive, 'quasi-monopoly' rates in the domestic market cannot be ruled out. SLTL certainly extracted significant rents from the international segment.³¹ With that source of rents drying out, and amidst fears that rival operators such as Suntel, which are linked to large multinational companies, may divert substantial international traffic, the incentives for SLTL to exploit the domestic market more intensively are obvious.

But what are the implications for the majority of users? The WLL operators appear to follow the SLTL as the market leader in tariff setting. This, together with the high and stable domestic rates is suggestive of tacit price collusion amongst operators in the fixed market. Although some price flexibility has been introduced (peak and off-peak prices, unbundling of customer premises equipment from installation and rental charges) overall rates remain high, given that the middle one-third of users pay between US\$5.70 and US\$14.30 per month for local and national calls, respectively, and that the lowest one-third pay between US\$2.60 and \$5.70 in a country where around 21 per cent of the population lives below US \$ 12.6 per person per month. TRC has recognized that if domestic prices continue to increase, affordability may become a serious problem for lower income subscribers and it introduced special tariff schemes to partially shield low and medium users from tariff increases in the first two years of rate re-balancing. Given that the vast majority of fixed-access customers subscribe to domestic call services, and only a small proportion have access to international direct dialing facilities, there can be little doubt that rate re-balancing will have a negative impact on the welfare of most consumers.³²

Some Policy Considerations

What is generally expected from regulatory agencies is that they base their rulings on expertise and conduct their business in a fair manner, that they stand independent of the government and the operators, and that they are successful in improving sector performance. However, the Sri Lankan case, as is the experience of most regulatory agencies throughout the world, suggests that meeting these expectations is no easy task. This section highlights some policy considerations that are important in the context of achieving better results.

Sequencing of reforms

The question for policy makers is, should ownership change or the privatization of the incumbent precede the introduction of competition or vice versa. Although starting off the reform process with liberalization tends to reduce the share value of the incumbent, it helps to infuse a competition culture and improve sector performance. That this was certainly the case in Sri Lanka's telecommunications reform process is seen from the fact that the incumbent's average connectivity increase in the pre-competition years (prior to the introduction of direct competition in 1996) was 12.88 as against 31.97 in the post-competition period.³³

Conflicting objectives

The issue here is the perennial tension between the government and the regulatory agency, which spills over into the reform process through conflicting objectives such as the maximization of privatization yields versus sector performance. As mentioned before, telecommunications sector objectives were given precedence when the WLLs were licensed in 1996. However, since the partial privatization of the incumbent the balance has tilted toward Treasury objectives with the granting of a monopoly in international telephony presumably done to enhance SLTL's asset value. It may be argued that involving the regulator in all phases of

the reform and decision process may alleviate some of the problems arising from the tensions between government policy and sector objectives; TRC was for instance, not involved in the decision to include the exclusivity clause in the privatization deal. However, even this may not work in an environment where the regulator is weak and there are opportunities for rent-seeking, as is discussed in the following section.

Rent-seeking

The argument is made that privatization is a one-off opportunity for rent-extraction by those with control over the state. But this is not always true. When what is being privatized is a public utility that was a state monopoly, the buyer of the incumbent monopoly has an incentive to avoid pro-competitive regulations. The regulatory body can either aggressively pursue pro-competitive policies or it can entrench the market power of the new private firm. If those who use their control over the state and the privatization process to extract rents can also have a hold on the levers of regulation, there is a double dividend from the process: privatization is all the more privately profitable for politicians if it is followed by anti-competitive regulations. This suggests a motive for, and an explanation of, the reasons why governments, apparently committed to pursuing quite radical market-friendly policies shift their position from pro to anti competition in privatized industries.

Although the intention is not to suggest that this political economy logic explains the policy shifts in telecommunications in the specific Sri Lankan case, the evolution of policy does seem quite consistent with such an interpretation and provides a possible illustration of the link between rent-seeking behavior, privatization and anti-competitive regulatory policies. As argued in Jayasuriya and Knight-John (2000), liberalization in the 1980s was linked to the political inability to make fundamental changes to the state entity. As such, the opening of new sectors was a potential source of rent extraction from licence

seekers. However, the situation changed when privatization, with its huge potential for rent extraction, emerged as a realistic option. But privatization offered even greater rents to those controlling the process if the enterprises to be privatized could be guaranteed monopoly profits. It helped that such policies could be lent legitimacy on the basis of maximizing revenues from the sale of state assets. From the view point of politicians and bureaucrats dealing with potential investors, regulatory restrictions that impeded future competitive threats was a complementary policy to privatization.

Independence

As discussed in the preceding section, the closer the ties between regulatory agencies and those in charge of the privatisation process, the greater the opportunity to maximize rents to politicians and new investors at the expense of public interest. The experience from several countries points to the fact that regulators almost never have the independence to make professional decisions due to political interference.³⁴ The question then is how to establish effective regulation in such sub-optimal circumstances.³⁵

Samarajiva (2001) argues that true independence can only be achieved if the regulatory agency builds and maintains legitimacy in the eyes of the public, by effectively communicating its expertise, transparency and commitment to the public interest and by showing results. In this respect, ensuring that disagreements on regulatory rulings become public information is actually extremely healthy for the regulatory process. An example, is TRC's decision to call for a public hearing on billing at the end of which SLTL voluntarily withdrew its opposition to itemized billing. Given the pressures on TRC to toe the maximizing privatization yields line, facilitating public debate on regulatory policy may be the only hope for Sri Lanka's telecommunications reform process.

Conclusion

International experience has shown that effective and, at times aggressively as-

sertive, regulatory interventions are necessary to foster competition, if utility reforms are to result in efficient, dynamic, technologically innovative industries that deliver cheaper, better quality services to consumers. This was the rationale for the setting up of the TRC.

In practice however, regulatory agencies have to function in sub-optimal circumstances where there are tensions between government policy objectives and the regulator's mandate to improve sector performance. The conflict between the Treasury objective of maximizing the asset value of the incumbent and the TRC's mandate to encourage competition in the sector is a typical example of the inherent tensions in government-regulator relations. This problem is exacerbated in countries with a tradition of weak governance where the independence of the regulatory agency and its ability to take decisions based on expertise is under constant threat.

The analysis in this paper has addressed some important considerations that policy makers need to take note of if the TRC were to be a credible and effective entity. Ensuring the independence of the regulatory body and transparency of its procedures is the central political task facing the government, if its claims to uphold public interest are to be credible. It is time to move from managing the industry to insulate the dominant operator from competitive pressures, and focus on enhancing market competition, improving consumer welfare and stimulating dynamic growth.

References

- Antelope Consulting (1998), Case Study of the Impact of the Changing International Telecommunications Environment on Sri Lanka, A study by Antelope Consulting for the ITU and the Commonwealth Telecommunications Organisation.*
- Central Bank of Sri Lanka (various years), Annual Report, Colombo: Central Bank of Sri Lanka.*
- Galal, A. and B. Nauriyal (1995), Regulation of Telecom in Developing Countries: Outcomes, Incentives and Commitment, Washington D.C.: World Bank (mimeo).*
- Gunawardene, P. (1999), 'Interconnection: The Sri Lankan Experience', Journal of the Asia Pacific Telecommunity, 2 (1), 16-19.*
- International Telecommunication Union (1999), World Telecommunication Development Report 1999: Mobile Cellular, Geneva: ITU.*
- Jayasuriya, S. and M. Knight-John (1998), 'Liberalisation and*

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Privatisation: Telecommunications Reforms', in Sri Lanka, in S. MacDonald and G. Madden (eds.), *Telecommunications and Socio-Economic Development*, Amsterdam: Elsevier Science B.V., 353-373.

Jayasuriya, S. and M. Knight-John (2000), *Sri Lanka's Telecommunications Industry: from Privatisation to Anti-competition?*, Discussion Paper No. A00.12, School of Business, Melbourne: La Trobe University.

Klein, M and N. Roger, 'Back to the Future: The Potential in Infrastructure Privatization', Silver Award Essay reproduced from *Finance and the International Economy*:8.

Knight-John, M. (1997), 'Private Participation in Infrastructure Development', in *Infrastructure Development in Sri Lanka: Regulation, Policy and Finance*, Hong Kong: Euromoney Publications (Jersey), 25-50.

Melody, William (ed.) (1997), *Telecom Reform: Principles, Policies and Regulatory Practices*, Denmark: Den Private Ingeniorfond, Technical University of Denmark.

Noll, R. (forthcoming), 'Telecommunications Reform in Developing Countries', in Anne O. Krueger (ed.) *Economic Policy Reform: The Second Stage*, University of Chicago Press.

Samarajiva, R. (2000), *Communicating Legitimacy: Key to Effective Regulation*, Graduate Colloquium Series, School of Public Policy and Management, Ohio: The Ohio State University.

Samarajiva, R. (2000), *The Role of Competition in Institutional Reform of Telecommunications: Lessons from Sri Lanka*, (<http://www.tpeditor.com>)

Samarajiva, R. (2001), *Telecom Regulation under Suboptimal Conditions: The Roles of Independence and Legitimacy* (mimeo).

Sri Lanka (1991), *Sri Lanka Telecommunications Act, No. 25 of 1991 as amended by Sri Lanka Telecommunications (Amendment) Act, No. 27 of 1996*, (<http://www.trc.gov.lk/telecom1.html>)
Sri Lanka (1994), *National Policy on Telecommunications*, (<http://trc.gov.lk/nrp.html>)

Wagle, D. and L. Carter (1995), *Infrastructure and Private Sector Development: Lessons from IFC's Experience*, paper presented at HIID Conference, Harvard, July 1995.

Wellenius, B. (2000), 'Extending Telecommunications Beyond the Market: Toward Universal Service in Competitive Environments', *Public Policy for the Private Sector*. Washington DC: World Bank.

World Trade Organisation (1997), *Fourth Protocol to the General Agreement on Trade in Services*. Geneva: WTO, (<http://www.wto.org/wto/services/tel20.html>).

World Trade Organisation (1997), *WTO Reference Paper: Schedule of Specific Commitments of Sri Lanka*, (<http://www.trc.gov.lk/wtdocdocs.html>)

Foot Notes

² Samarajiva (2001) citing ITU (2001) and presentation by Ben Patrazzini at ITU BDT Development Symposium for Regulators, November 2000

³ See for example, Klein & Roger (Silver Award Essay, reproduced from *Finance and the International Economy*:8), Galal & Nauriyal (1995), Wagle and Carter (1995) for a general analysis and Knight-John (1997) for an analysis of the Sri Lankan case.

⁴ Public interest here is defined as including both competitors - as when incumbent firms restrict entry to bottleneck facilities or resort to anti-competitive practices such as predatory pricing-, and consumers - as when firms raise prices of their goods and services above competitive levels or sell low quality goods and services.

⁵ Melody (1997)

⁶ Sri Lanka (1994), p. 1

⁷ Noll, p. 39

⁸ Although limited steps toward competition were introduced in some sectors in 1981 (paging) and 1985 (customer premises equipment), these sectors were of marginal importance in the overall operations of the incumbent state enterprises.

⁹ NTT is the incumbent state-controlled operator in Japan, with a reputation for anti-competitive behavior (see *The Economist*, July 22nd - 28th 2000).

¹⁰ Subsequently some employees exercised the option to sell their shares to NTT, at the initial divestment price, before March 31, 1999. As such, NTT currently holds 35.2% and employees hold 3.3% of SLTL shares.

¹¹ Central Bank of Sri Lanka Annual Report (2000)

¹² Surtel is a joint venture among Telia of Sweden, Townsend Ltd. of Hong Kong, and the Metropolitan Group of Companies and the National Development Bank of Sri Lanka. Lanka Bell is a joint venture among Transmarco of Singapore, an infrastructure fund AIDEC, and Nortel, an equipment supplier.

¹³ The 1994 National Policy on Telecommunications is currently being reviewed.

¹⁴ Samarajiva (<http://www.tpeditor.com>)

¹⁵ The WTO Reference Paper sets out regulatory principles on

competitive safeguards, interconnection, universal service, public availability of licensing criteria, independent regulation, and allocation and use of scarce resources (see <http://www.trc.gov.lk/wtdocdocs.html>).

¹⁶ Incidentally, Sri Lanka is the only South Asian country to have made this commitment.

¹⁷ The TRC itself has neither formally defined what constitutes market power nor made a formal determination involving the concept of market power.

¹⁸ Central Bank of Sri Lanka Annual Report (1999)

¹⁹ Estimated on the basis of data from TRC and industry sources.

²⁰ Daily News, 23 February 2000

²¹ Calculated using Central Bank of Sri Lanka and TRC statistics.

²² Gunawardena (1999)

²³ This issue relates to the controversy in the industry over enhanced voice operations and the alleged infringement of SLTL's monopoly rights in international telephony, and is discussed later.

²⁴ Incidentally, this was the first public hearing initiated by the regulatory authority, despite the fact that the provision for public input into telecommunications regulation has been in place since 1991.

²⁵ ITU (1999)

²⁶ Samarajiva (<http://www.tpeditor.com>) and Central Bank of Sri Lanka Annual Report (2000)

²⁷ Calculated using figures cited in *The Daily News*, 19 August 2000.

²⁸ See Jayasuriya and Knight-John (2000) for a detailed account of both determinations.

²⁹ These statistics are for 1999 and come from personal communications with SLTL, WILL, and mobile sector sources.

³⁰ See Wellenius (2000) for a discussion of universal service in competitive environments.

³¹ See Antelope Consulting (1998)

³² According to industry sources, in 1999, SLTL's international sector penetration was a mere 2.28 IDD lines per 1000 persons and the WILL's subscriber base showed that only around 30 per cent of their clientele had IDD facilities.

³³ Samarajiva (<http://www.tpeditor.com>)

³⁴ Melody (1997)

³⁵ For an excellent analysis of telecom regulation under sub-optimal conditions see Samarajiva (2001).