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Sri Lanka's Telecommunications Industry: From Privatisation to Anti-Competition?

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Sri Lanka’s Telecommunications Industry: From Privatisation to Anti-Competition?

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Abstract
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. This was driven by a series of government initiatives to open up the sector to new entrants and greater competition. But after privatisation of the state-owned monopoly became a feasible policy option, and particularly after it was partially privatised in 1997, there has been an apparent shift in government policy away from its previous pro-competitive stance. This paper examines the evolution and present state of Sri Lanka’s telecommunications industry, the regulatory policy framework, and pertinent competition policy issues in the sector, with particular attention to the apparent shift of government policies away from its earlier strong pro-competitive stance.

1 The authors’ names are in alphabetical order. They gratefully acknowledge the help and cooperation of many people in the telecommunications industry. In particular they thank Prof. Rohan Samarajiva (who headed the Telecommunications Regulatory Authority until recently) for comments, assistance and encouragement, and representatives of the Telecommunications Regulatory Commission and the Public Enterprise Reform Commission, and several service providers for very useful discussions. However, none of them is responsible for the views expressed or any remaining errors in this paper; they are the sole responsibility of the authors.
Introduction

Telecommunications markets worldwide are undergoing fundamental and rapid changes, brought about both by technological developments and by competition-oriented reform policies. The shift toward a multi-operator sector with liberalisation and the dismantling of the old monopolistic structures; the transformation of the sector from one dominated by basic voice telephony to one where product differentiation is the key to survival; and the convergence that is emerging between telecommunications, broadcasting, cable television, and the Internet as well as within segments of the telecommunications market, all indicate the complex and dynamic nature of the industry. More importantly, the forces of change have recast the role of regulation, blurring conventional regulatory definitions and boundaries and making the job of balancing the political economy objectives of regulation much more complex.

These global trends are reflected in changes to Sri Lanka's telecommunications industry since the 1980s, driven by some major government initiatives to open up the sector to new entrants and greater competition. With the restructuring of the state-owned telecommunications entity, the deregulation of value-added telecommunications services, and the entry of two new players into the fixed-access sector in 1996, Sri Lanka's telecommunications industry was profoundly transformed, and became one of the most open and competitive among developing countries in the Asia-Pacific region. But some developments since the partial privatisation of the restructured state-owned entity in 1997 have demonstrated significant resistance to the progress of pro-competitive reforms. This paper examines the evolution and present state of Sri Lanka's telecommunications industry, the regulatory policy framework, and pertinent competition policy issues in the sector, with particular attention to the apparent shift of government policies away from its earlier strong pro-competitive stance.
Evolution, structure, and performance of the industry

Rationale for telecommunications reform

The changes in the telecommunications sector are directly linked to the broader policy liberalisation process in Sri Lanka. In addition, the impetus for telecommunications reform, as in other infrastructure industries, came out of the recognition that the benefits of liberalisation, particularly those relating to export-oriented activities and foreign investment, could only be realised if adequate infrastructure services were available.

Infrastructure development in Sri Lanka was largely the preserve of the state until around the early 1990s. This was a historical legacy from the British colonial era, and its economic rationale rested on the traditional arguments for public sector supply of infrastructure services: natural monopoly based on scale economies, high investment costs, long gestation periods, and universal service obligations. However, under-investment in infrastructure, other than in irrigation and, to some extent in hydro-power, has been a notable feature of post-independence Sri Lanka, with short-term political, rather than long-term development imperatives being the focus of infrastructure investment.

In this context, the telecommunications sector suffered greatly, and its deficiencies became increasingly apparent particularly with the increase in business activity in the post-1977 years. There was high unmet demand for

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2 See Jayasuriya and Knight-John (1998) for an account of the liberalisation process and the political and ideological background to economic reform.
3 The large number of Sri Lankan workers overseas, most of them from rural areas, has also generated a significant demand for telephone and fax access in the rural areas.
4 Even with the radical reform process initiated in 1977, infrastructure investment was almost entirely concentrated on three projects: the Accelerated Mahaweli Program, a politically favoured irrigation, settlement, and hydro-power project; a public sector housing program, a 'flag-project' of the then Prime Minister; and, the provision of infrastructure for the Free Trade Zone.
5 This was not because the telecommunications sector was unprofitable. In fact, the profitability of telecommunications firms in developing countries has been generally
telecommunication facilities, with long waiting periods, and transmission quality and system reliability were poor. Moreover, there was increasing recognition that an efficient, modern telecommunications network was essential if Sri Lanka's potential as a regional financial, commercial and communications hub was to be achieved. But, the state was unable to undertake the required investments with its own resources, being faced with continuing large fiscal deficits. Neither was it able to tap foreign aid or foreign borrowings as in the past because of the ideological shift in the donor community towards private sector funding of infrastructure investments in sectors such as telecommunications.

The preferred strategy for infrastructure development was via BOO/BOT type arrangements and strategic public-private partnerships. The government's own policy orientation, following on from the post-1977 liberalisation initiatives and changes in development strategies favoured private sector initiatives in potentially profitable services sectors, whenever that was politically feasible. This led to a range of institutional and policy changes in the telecommunications sector from the early 1980s onwards.

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 deregulation of value-added services, and the establishment of regulation.

Restructuring of the state-owned telecommunications entity
Until 1980, the telecommunications industry was organised on the lines of the Post, Telegraph and Telephone (PTT) model, with the state owning and operating both telecommunications and postal services. The decision to

higher than in developed countries (see Jayasuriya, Maddock and Tourky, 1997 for a discussion of the investment paradox in telecommunications).
6 World Bank (1994).
7 The donor agencies also disapproved of any attempt by the government to borrow from international commercial banks.
separate the two services was consistent with international experience, where it was found that rapid technological developments in telecommunications tended to make it functionally incompatible with the less dynamic postal sector.

Even after the de-linking of the two sectors however, telecommunications services continued to be inefficient with the state-owned entity functioning as a monopoly shielded from competitive pressures, and lacking any 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, also brought little change in terms of its administrative and financial autonomy from central government. Here it must be emphasised that the more radical alternative of privatisation was not raised seriously in policy discussions in the early stages of the restructuring process: the international paradigm shift towards privatisation of public utilities had not yet developed the momentum it was to acquire later, and the political obstacles to its implementation would have been severe.

Pervasive government interference in the operations of SLT prevented it from functioning in a commercial manner and this was considered to constrain its ability to function effectively. 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, in an attempt to accelerate network rollout. However, there was little improvement in the quality of service to consumers. Moreover, both corporatisation and the creation of a subsidiary entity were seen as threats of competition by some elements within the incumbent entity.10

9 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 enterprise.

10 Samarajiva (http://www.tpeditor.com).
With the election of a new government in late 1994, considered to be pro-state interventionist and including representatives of socialist and communist parties, it was widely expected that radical restructuring measures would cease. However, the opposite proved to be the case. By this time, privatisation of public utilities had become ideologically acceptable across the broad mainstream political spectrum, though there was popular opposition to many privatisation measures that had been carried out under the previous regime and this had been exploited by the opposition during the elections. The new government unveiled an economic policy agenda that in fact committed it to an accelerated policy liberalisation process and it soon went public with restructuring plans for telecommunications. Though the term privatisation was initially avoided because of its political sensitivities, the government, utilising its close political links with the unions, effectively neutralised political opposition to privatisation.

In 1996, SLT was converted to a public company, Sri Lanka Telecom Ltd. (SLTL), as an initial step toward partial privatisation. In 1997, the government sold 35% of its shareholding in SLTL, through a competitive bidding process, to Nippon Telegraph and Telephone (NTT), for US$ 225 million, the largest privatisation transaction to date. The government retained 61.5% share ownership and employees of SLTL were given the balance 3.5%. The employee share ownership plan was used to counter anticipated union resistance to the privatisation of the incumbent.

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11 In fact, it was publicly stated in late1994 that there would be no privatisation, and plans for such privatisation were not announced in the President's Policy Statement in January 1995 (see Government of Sri Lanka, 1995).

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

13 Consequently 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.
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 licenses 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 indicated that SLTL will enjoy a monopoly in international calls until 2002, but the precise scope and legal validity of this has become the subject of dispute and is discussed in a later section.

SLTL's performance in terms of network expansion and modernisation, quality of service and customer relations, and internal operational efficiency has improved with privatisation. For instance, new connections provided increased from 72,457 in 1997 to 143,075 in 1998, the average waiting time for a line has been reduced from seven years to less than one year, call completion rates are around 40% and fault clearance has improved to 52%. This performance, together with optimism about future growth and profit prospects, raised its profile among the investor community. The US$ 1.5 million debenture issued by SLTL in March 2000 to finance its ongoing expansion program, was rated AA+ by Duff and Phelps Credit Rating Lanka Ltd. and was over-subscribed on the opening day. This encouraged the government to move on to divest itself of an additional tranche of shares, expecting to bring its stake in SLTL below 51%. The Initial Public Offering (IPO) was scheduled for June/July 2000 and was expected to raise around US$ 400 million, with these monies being earmarked to retire public

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14 Samarajiva (http://www.tpeditor.com).
16 The SLTL debenture issue has been hailed as a landmark issue since it is the single largest rated and listed debenture by an unlisted corporate in Sri Lanka.
17 A part of the sale was to be listed in the Colombo market and the remainder in a foreign market.
The IPO was indefinitely postponed, with the government citing increased country risk due to the intensification of the civil war and the plunge in international technology and telecommunications stocks as the main reasons for this delay. However, as will be discussed later, concerns about its future profitability arising from competitive threats may have played a part.

**Deregulation of value-added telecommunications services**

The pro-competitive reforms in the broader telecommunications industry were first initiated through the progressive deregulation of value-added services, at a time when the government was not in a position to implement far-reaching reforms into the state run telecommunications monopoly. These started in 1981, with the entry of private paging operators. Table 1 shows the current position in the industry.

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, following the enactment of the Sri Lanka Telecommunications Act No.25 of 1991. The second phase of competition saw

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18 The government had originally contemplated a private placement of 10.5% of its shareholdings, as a preparatory step, prior to the IPO. The aim of the private placement was to bring in technology-driven partners who would add value to the company. The government held extensive negotiations with Singapore Technologies, a subsidiary of Singapore Telecom, and the second largest company in Singapore next to Singapore Telecom, in this regard. However, this transaction fell through because Singapore Technologies was looking for a bigger management role than either NTT or the government was willing to concede.

19 These operators started service without formal licenses, and were brought within the scope of the 1991 Act subsequently. As such, the first license was that given to Celltel in 1989.
the entry of two wireless loop operators (WLLs), Suntel and Lanka Bell, in 1996, brought in to compete directly with SLTL in the fixed-access market. 20 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. 21

** Table 1: Licensed Telecommunications System Operators**

<table>
<thead>
<tr>
<th>Service</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Telephony</td>
<td>Sri Lanka Telecom Ltd.</td>
</tr>
<tr>
<td></td>
<td>Suntel (Pvt.) Ltd.</td>
</tr>
<tr>
<td></td>
<td>Lanka Bell (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Mobile Telephony</td>
<td>Lanka Cellular Services (Pvt.) Ltd.</td>
</tr>
<tr>
<td></td>
<td>Mobitel (Pvt.) Ltd.</td>
</tr>
<tr>
<td></td>
<td>MTN Networks (Pvt.) Ltd. (Dialog GSM)</td>
</tr>
<tr>
<td>** Facilities-Based Data</td>
<td>Celltel Lanka Ltd.</td>
</tr>
<tr>
<td>Communications Services</td>
<td>Lanka Communication Services (Pvt.) Ltd.</td>
</tr>
<tr>
<td></td>
<td>Electroteks (Pvt.) Ltd.</td>
</tr>
<tr>
<td></td>
<td>SITA-Societe Internationale De Telecommunications Aeronautiques</td>
</tr>
<tr>
<td></td>
<td>Lanka Internet Services Ltd.</td>
</tr>
<tr>
<td></td>
<td>Ceycom Global Communications Ltd.</td>
</tr>
<tr>
<td></td>
<td>ITMIN Ltd.</td>
</tr>
</tbody>
</table>

20 Suntel is a joint venture between 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 between Transmarco of Singapore, an infrastructure fund AIDEC, and Nortel, an equipment supplier.

21 Samarajiva (http://www.tpeditor.com).

22 This list was valid as at May 11, 2000.
<table>
<thead>
<tr>
<th><strong>Facilities-Based Data Communications Services</strong></th>
<th><strong>Non-Facilities-Based Data Communications Services</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Millanium Communications (Pvt.) Ltd.</td>
<td>MTT Network (Pvt.) Ltd.</td>
</tr>
<tr>
<td>MTT Network (Pvt.) Ltd.</td>
<td>Metropolitan Telecom Services (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Internet-Based Data Services (ISPs)</td>
<td></td>
</tr>
<tr>
<td>Eureka Online (Pvt.) Ltd.</td>
<td>Pan Lanka Networking (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Projects Consultants International (Pvt.) Ltd.</td>
<td>D.P.M.C. Electronics (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Celltel Lanka Ltd.</td>
<td></td>
</tr>
<tr>
<td>Dynaweb Services (Pvt.) Ltd.</td>
<td></td>
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<tr>
<td>Victra-Soft (Pvt.) Ltd.</td>
<td></td>
</tr>
<tr>
<td>East West Information Systems Ltd.</td>
<td></td>
</tr>
<tr>
<td>Lanka Global Online (Pvt.) Ltd.</td>
<td></td>
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<tr>
<td>Visual Internet (Pvt.) Ltd.</td>
<td></td>
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<tr>
<td>Dynanet Ltd.</td>
<td></td>
</tr>
<tr>
<td>MTN Networks (Pvt.) Ltd</td>
<td></td>
</tr>
<tr>
<td>Public Payphone Services</td>
<td>The Payphone Co. (Pvt.) Ltd.</td>
</tr>
<tr>
<td>TSG Lanka Ltd.</td>
<td></td>
</tr>
<tr>
<td>Paging Services</td>
<td>Infocom Lanka Ltd.</td>
</tr>
<tr>
<td>Bell Communications Lanka (Pvt.) Ltd.</td>
<td></td>
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<tr>
<td>Fentons Ltd.</td>
<td></td>
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<tr>
<td>Intercity Paging Services (Pvt.) Ltd.</td>
<td></td>
</tr>
<tr>
<td>Equipment Traders (Pvt.) Ltd.</td>
<td></td>
</tr>
<tr>
<td>Trunked Radio</td>
<td>Dynacom Engineering (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Leased Line Services</td>
<td>MTT Network (Pvt.) Ltd.</td>
</tr>
<tr>
<td>Other</td>
<td>Air Lanka Ltd.</td>
</tr>
</tbody>
</table>

Source: Telecommunications Regulatory Commission of Sri Lanka

** Facilities-Based operators can set up their own transmission facilities (any line, radio, or other electro-magnetic or optical system or any other similar technical system); Non-Facilities-Based operators cannot establish their own transmission systems.
facilities, but can use the facilities of other licensed operators to connect subscribers and sites.

**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 being the responsibility of the Office of the Director General of Telecommunications (ODGT), and telecommunications policy remaining within the confines of the Ministry.

The ODGT was a single-person authority, modelled 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 license conditions. Moreover, the separation of regulatory and operational functions, as envisaged in the 1991 Act, did not materialise in practice, with both the ODGT and SLT reporting to the Ministry and creating an obvious conflict of interests.

A draft amendment to the 1991 Act, prepared in 1993 to address some of the problems faced by the regulatory authority, was not accepted by the then government. Arguably, the amendment would have created a more independent agency and reduced Ministry control over the ODGT. 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

Samarajiva ([http://www.tpeditor.com](http://www.tpeditor.com)).
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 licenses 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 by the new government. The regulatory authority could, however, influence these polices to some extent through its mandate to advise the Minister.  

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 whilst

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24 See *Sri Lanka Telecommunications (Amendment) Act No.27 of 1996.*
25 The 1994 National Policy on Telecommunications is currently being reviewed.
27 Defined as “easy access to basic telecommunications facilities such as telephone, telegraph and facsimile to all at affordable and reasonable prices” (*National Policy on Telecommunications, 1994*).
meeting the above. Unlike its predecessor, the TRC did not have to depend on state funds but could draw on license and other fees to finance its operations. However, the independence of the regulatory authority was compromised to some extent by making the Secretary to the Ministry the *ex-officio* Chairman of the Commission.

A new and more independent phase of regulation was enacted in 1998, with the hiring and training of new personnel and the initiation of several pro-competitive regulatory measures. The TRC appeared to believe that competition rather than excessive regulation should be the driving force in the industry during this period. The policy decision made by the government to commit to the Regulatory Reference Paper, a part of the Fourth Protocol to the General Agreement on Trade in Services of the World Trade Organisation (WTO) also contributed positively to developments in the regulatory authority. But since then there appears to have been a reversal of the pro-competitive processes, and an apparent failure to enforce competition, with the incumbent operator allegedly refusing to comply with important regulatory decisions. These regulatory policies have shaped the structure of the telecommunications industry and its performance.

**Structure and performance of the industry**

The telecommunications sector, is, for the purpose of regulatory policy, differentiated according to market structure and technology, a formal monopoly in

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28 See *National Policy on Telecommunications (1994)*.
29 Samarajiva ([http://www.tpeditor.com](http://www.tpeditor.com)).
30 The mission statement developed by the TRC at this time, also emphasised commitment to serving the public interest in terms of quality, choice and value for money, ensuring that service providers had equitable access to spectrum and other common resources, and assisting the nation in its drive for socio-economic advancement through a skilled and ethical workforce (Samarajiva, 2000).
31 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/wtodocs.html](http://www.trc.gov.lk/wtodocs.html)).
the fixed wireline sector (SLTL), a duopoly in the fixed wireless sector (Suntel and Lanka Bell) and competition in the mobile sector (four mobile operators). However, many of these services are close substitutes and often they are necessary complements (as when a call originates from a mobile but terminates in a fixed wireline phone). Further, operators do not operate in only one market, and the development of convergence-friendly technologies enhances incentives for operators in one market to penetrate others. Hence the actual industry structure is quite complex, and market segments cannot be treated as independent for analytical or regulatory purposes.

SLTL remains the dominant player in the overall telecommunications market, controlling approximately 60%\(^3\) of the total telecommunications industry.\(^4\) Although its main focus of operations is in the fixed-access market, it is the leading Internet Service Provider (ISP), operates its own payphones, and provides leased circuit and data communications services. It also controls 40% of one of the mobile firms, in spite of the fact that the 1994 national policy on telecommunications specifically states that fixed-access operators will not be permitted to provide mobile services.

In the fixed-access market, where it has a formal monopoly in wireline services, SLTL has a 86.3% market share, whilst Suntel and Lanka Bell have market shares of approximately 9.59 and 4.11, respectively.\(^5\) As mentioned earlier, SLTL claims that it was granted a monopoly in international telephony in 1997; this was presumably done to increase government privatisation revenues by enhancing SLTL’s asset value. According to government sources,\(^6\) the three fixed-access operators have invested around US$ 600 million in the

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\(^3\) Incidentally, Sri Lanka is the only South Asian country to have made this commitment.

\(^4\) Whilst it is clear that SLTL has significant market power, the TRC has neither formally defined what constitutes market power nor made a formal determination involving the concept of market power. However, in countries such as the UK a ceiling of 25% is considered as indicative of significant market power.

\(^5\) Calculated using TRC statistics.

\(^6\) Calculated using TRC and service provider statistics.
telecommunications sector, in the past five years. Although these operators have had a relatively larger share of residential customers, they are now attempting to make inroads into the corporate and business segments by offering bulk discount packages and services such as faster Internet access, Integrated Services Digital Network (ISDN), and Frame Relay. SLTL has obtained a dealership for CONCERT services, an alliance between British Telecom and AT&T to offer wider service options for corporate clients. The newer fixed-access operators have also adopted several measures in this regard, with SunTel's link-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, being the most recent example of these initiatives.

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 in 1999. However, approximately 55% of the fixed-access lines are located in the Greater Colombo area indicating a continuing urban bias in the fixed phone segment. Service quality has improved, with the average waiting time for a connection from SLTL being reduced from seven years to less than a year, and the WLL operators having no significant waiting lists. The WLLs have a competitive advantage

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37 In 1999, SLTL's revenue stood at 1.7% of GDP (Central Bank of Sri Lanka, 1999).
38 More recently, SunTel announced plans to raise a Rs.3.7 billion syndicated loan from local banks and from a debenture issue, for future expansion programs, with these monies being under-written by the International Finance Cooperation and the National Development Bank, Sri Lanka. Lanka Bell, which has suffered heavy losses since inception, because of a high level of foreign debt, has recently been turned around into an operationally cash-flow positive venture (The Sunday Observer, July 30 2000, and The Sunday Times, June 18 2000).
39 SLTL's recently completed fibre optical Inter-Provience Transmission Ring is expected to enable extremely fast connections and facilitate ISDN services.
40 Duff & Phelps (2000).
41 Calculated using Central Bank of Sri Lanka and TRC statistics.
42 Gunawardene (1999).
44 Duff & Phelps (2000) and other industry sources.
over SLTL in terms of call completion rates and faults statistics. However, both Suntel and Lanka Bell have complained that they have been unable to consistently achieve the 50% and above call completion rate specified in their licenses, allegedly because of blocking of calls by SLTL. \(^{45}\) SLTL, has made progress in terms of revamping its billing procedure, particularly after a 1998 public hearing on billing issues initiated by the TRC\(^ {46}\), and introduced itemised billing in 2000.\(^ {47}\) However, the WLLs still have an edge over SLTL in this area. Perhaps service quality may further improve with the publishing of TRC’s quality of service rules, which have been complied following an inland-wide survey that took into account the views of fixed-access subscribers and operators.\(^ {48}\)

The more extensive pro-competitive reforms in the mobile market have resulted in the mobile market being characterised by greater competition than the fixed-access segment, with the four operators holding approximately equal market shares. The compound annual growth rate in the mobile segment during 1995-1998 was 48.6% as against 36.5% in the fixed-access market over the same period.\(^ {49}\) Moreover, 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.\(^ {50}\) Sri Lanka also has a very high mobiles to fixed ratio of around 40:100.\(^ {51}\) Given the severe constraints on fixed-access availability, particularly until the entry of the WLLs, this high mobile-fixed-access ratio is probably an indication that

\(^{45}\) 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 will be discussed later on in the paper.

\(^{46}\) Incidentally, this was the first public hearing initiated by the regulatory authority, despite the fact that the provision for public input in telecommunications regulation has been in place since 1991.

\(^{47}\) Samarajiva (http://www.tpeditor.com).

\(^{48}\) The TRC has also linked tariff increases to the operators’ quality of service as an additional performance incentive.

\(^{49}\) ITU(1999).

\(^{50}\) Samarajiva (http://www.tpeditor.com).

\(^{51}\) TRC sources.
mobile telephony is still largely a substitute for fixed telephones, and perhaps an increasingly more attractive substitute.  

Investment in the mobile market, over the past five years, amounts to around US $420 million. 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 that, according to industry sources have been falling at an annual average real rate of 18% to 20%. According to ITU (1999), Sri Lanka’s cost of US $17.80 for a 100-minute basket of mobile tariffs compared favourably 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 in mid-2000 were still above those in the fixed-access segment, the introduction of home-zone pricing for mobile calls and the tariff re-balancing process in the fixed-access market, could lead over the next few years to mobile prices that are more competitive with fixed-access rates. Further, there are no waiting lists in the mobile market, and mobile operators offer services such as pre-paid card schemes, tri-lingual customer services, and easy international direct dialling (IDD) facilities in direct competition with SLTL. On the other hand, mobile penetration rates have only been around 0.1% in the rural sector despite the fact that mobile technology has a distinct advantage over basic telephony in rural areas given the difficulty in laying cables in rough terrain.

There are no formal restrictions on entry into the other sub-sectors of the telecommunications industry. However, growth rates in some of these markets have fallen, with payphones going from a 22.65% growth rate in 1997 to 29.30%

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52 This however, may not be the case at the higher end of the market, where the "family effect", with each member of the family owning a mobile phone to complement the household’s fixed-access phone, is spreading.
54 Samarajiva (http://www.tpeditor.com).
55 Duff & Phelps (2000).
in 1998 and to 21.80% in 1999; and data communications services and paging services decreasing from 185.77% to 77% to 32.30% and from 1.01% to -2.94% to -4.86%, respectively, over the same time span.\textsuperscript{56} The poor performance of the payphone and data communications segments may be at least partly a consequence of the lack of adequate competition in the telecommunications sector. For instance, SLTL, which operates almost a third of the total payphones in the country, also supplies essential inputs to competing operators.\textsuperscript{57} The data communications sector has experienced conflicts between the dominant operator and the larger data communications operators over the provision of enhanced voice services, while the paging market has lacked adequate niche marketing and, in any case, pagers appear to be priced too high with respect to mobile phones.

Internet access in Sri Lanka is still low, with only 0.29 hosts per 10,000 inhabitants in 1998, but is expected to grow.\textsuperscript{58} Internet connectivity is constrained 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.

Several small private telecommunications bureaus also provide informal competition. Whilst these resellers provide a useful public service by taking telecommunications services to many parts of the island, they allegedly charge arbitrary rates for their facilities. The TRC recently implemented a scheme to regulate the activities of these bureaus by issuing permits to the three fixed-access operators and holding them responsible for issuing certificates to these resellers.

\textsuperscript{56} TRC statistics.
\textsuperscript{57} The TRC has not been able to investigate the issue of a possible cross-subsidisation of SLT payphones due to a lack of comprehensive cost data.
\textsuperscript{58} ITU(1999).
**Competition policy issues**

The above review of performance indicators suggests that 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 responsiveness to consumer needs. However, there is still a considerable distance to go if the industry were to be truly competitive. In this section, we discuss some of the major regulatory issues in the industry, and assess the extent to which the policy reactions to these problems have been successful in moving the industry towards a more efficient and dynamic sector.

*Barriers to entry and exit and anti-competitive strategic behaviour*

In any industry, the most direct barriers to competition are constraints on free entry and exit. These may take several forms, ranging from legal/regulatory barriers to technological and economic barriers, sometimes erected by existing players in the market place. In the case of the Sri Lanka telecommunication sector, as already mentioned, there are several barriers to entry that operate both for specific market segments, and more generally. Here we briefly mention again some of the main legal/regulatory entry barriers and also note some other factors that deter new entrants and impede competition because consumers find it costly to switch between operators; the detailed discussion of several others, particularly those pertaining to actual or potential strategic behaviour on the part of the dominant operator, is left to following sections on specific regulatory issues.

The existing legal monopoly status enjoyed by SLTL in fixed wireline phones, the (disputed) restrictions on international calls, the duopoly in the fixed wireless sector, and limitations on licences in other sectors are clearly legal or regulatory
barriers to entry. How many operators can be sustained under competitive conditions in a particular market segment? In a market characterised by rapid technological changes and demand preferences, this is not a matter that can be easily determined by a regulator. Certainly the argument that strong restrictions on further entry are needed to attract (or retain) operators does not seem supported by international experience. While an issue that affects all industry segments, a decision on the number of operators is an immediate issue in the mobile telephony market as current restrictions on issuing licenses for mobile telephony, as per the 1994 policy document, expires in 2000. Incumbent operators of course claim that the mobile market is saturated and cannot sustain more operators, but the experience of other countries suggests that there is no simple answer to the question of how many mobile operators should be allowed. In the matter of license allocation, transparent bidding for licenses has many advantages; they can not only reveal market valuations of entry, but also enhance government revenues by enabling more efficient rent extraction, and make confidential payments and backdoor deals more difficult.

There are less direct obstacles to competition that can arise because of differences in the levels of competition in industry segments. For example, a firm that is able to generate significant rents in the fixed market (where it enjoys market power advantages) can use those rents in a predatory manner to cross-subsidise its operations in the mobile market and undercut competitors. This is an important consideration in Sri Lanka because SLTL, with its powerful position in the fixed market, also operates in the mobile market.

The significant switching costs that have to be incurred by consumers moving from one operator to another create a serious barrier to competition that deters

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59 Technological considerations such as limited spectrum available for sharing can limit the number of operators, but this is not so binding as to preclude a large enough number for effective competition to occur.

60 In the UK which has four mobile operators for instance, prices tend to be higher than in the Nordic countries with fewer operators (ITU, 1999).

61 Sometimes these differences arise from different regulatory practices.
entry, both in the fixed-access and in the mobile markets. The high non-refundable connection charges in the fixed market effectively tie consumers to a particular provider’s network. Moreover, the standards problem, where the technology used by one operator is not compatible with the technology used by another, also creates a lock-in effect both in the fixed and mobile segments. It is possible however, that the standards issue will become less of a problem in the telecommunications sector in the near future, if convergence becomes a reality.

The absence of telephone number portability across service providers also remains a potential barrier to entry in the industry. The numbering system that currently exists in the Sri Lankan telecommunications market, distinguishes operators by allocating particular pre-fixes and a particular number of digits to a given provider.\(^\text{62}\)

\textit{Interconnection}

A unique feature that arises from the network aspect of the telecommunications industry and distinguishes it from most other industries, is the importance of all-to-all (any-to-any) connectivity in the provision of telecommunications services. This requires the joint use of network facilities. However, incumbent or dominant operators have an incentive to use their dominant position to gain a strategic-competitive advantage over their rivals, though such behaviour may not be in the public interest. The establishment of a fair interconnection regime that ensures efficient provision of access to networks, and the terms under which such access is granted is one of the most difficult and important competition policy issues faced by telecommunications regulators world-wide. This remains a major issue in Sri Lanka.

As mentioned earlier on in this paper, Sri Lanka is a signatory to the WTO Regulatory Reference Paper, where it is specifically stated that interconnection with a major supplier will be provided on non-discriminatory terms, in a timely

\(^{62}\text{Attempts by the TRC to adopt a closed numbering plan have been stalled by SLTL.}\)
fashion, and at cost-oriented rates that are transparent and sufficiently unbundled. However, the regulatory authority has encountered several problems in implementing these WTO commitments, with the dominant operator apparently failing to comply with the 1998 interconnection determinations until a few months ago.

The basic approach to interconnection charges followed in Sri Lanka is one where the regulatory authority intervenes only if the operators are unable to come to a negotiated agreement on the terms and conditions of access. In November 1996, a determination on interconnection in the fixed-access market was issued by the TRC, following the failure of the SLTL and the new WLL operators to reach a negotiated settlement. This arrangement, which was operative until November 1998, followed the principles of sender-keeps-all for domestic calls; a 35% rebate on the collection rate for outgoing international traffic from the WLL networks and no payment for incoming international traffic to the WLL networks; and the costs of physical links being fully borne by the WLLs. Interconnection charges between the WLLs, Suntel and Lanka Bell, was on a sender-keeps-all basis with the two operators splitting physical interconnection costs on a 50:50 basis.

Given the international traffic profile in Sri Lanka, with inbound traffic far exceeding outbound traffic, and with accounting rates being generally accepted to be well above costs, the "no payment for incoming international traffic" clause in the 1996 determination became a bone of contention amongst the fixed-access operators. Clearly, this clause combined with SLTL's (disputed) exclusive gateway rights in the international segment put the WLL operators in a disadvantageous position in terms of international call revenues. In 1998, the TRC initiated Alternate Dispute Resolution (ADR) measures to break the gridlock in the sector. However, the operators were not able to reach an agreement even

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64 Gunawardene (1999).
with the ADR initiative and the TRC was compelled to make a new determination in November 1998.

The basic ingredients of the new determination were as follows: the sender-keeps-all system to be replaced by a mutual compensation arrangement for local call termination, with the transition to the new arrangement being subject to conditions such as the provision of common directory services and the elimination of the surcharge on local calls made by SLTL customers to WLL customers; national call transit and termination to also be on the basis of mutual compensation; the WLL operators to remit 80% of the collection rate to SLTL for all international calls originated from WLL networks and SLTL to pay a fee of Rs. 9.50 per minute (approximately US $ 0.120) to the WLLs for international calls terminating in the WLL networks; the WLLs to bear the full cost of physical interconnection links up to the interface connection unit and SLTL to be responsible for providing the interface unit. Given the difficulties in obtaining acceptable cost data in Sri Lanka, the interconnection rates were benchmarked on European Union (EU), International Telecommunication Union (ITU) and Federal Communications Commission (FCC) rates.

 Whilst this new arrangement paid more attention to the costs and revenue requirements of the wireless loop operators, none of the three parties was satisfied with the determination. However, whilst the WLLs were complying with the regulatory directive, SLTL was, until a few months ago, continuing with the pre-1998 arrangement and took the issue to court. At present, SLTL is complying with the 1998 determination, pending the court decision. The WLLs had also charged that SLTL was blocking calls originating from the WLL networks to SLTL’s fixed line network. Subsequently, the WLLs succeeded in obtaining enjoining orders restraining the SLTL from indulging in such anti-competitive behaviour, until a full inquiry is made. Moreover, the issue of unfair

65 See http://www.trc.gov.lk/onews.html
interconnection practices, relating in particular to the dispute between Suntel and SLTL may be taken up at the WTO.

This issue of call-blocking relates to another controversy in the sector, one over use of enhanced voice services being used by the WLLs as gateways for international calls. At present, there are three facilities-based data communications operators in the market with licenses 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 other operators from providing such services, whilst the enhanced voice operators argue that their licenses were issued prior to the SLTL privatisation.  

SLTL, claiming significant losses of international call revenue with the infringement of its monopoly rights, allegedly blocks WLLs' calls because they use the enhanced voice operators' gateways, although the WLL licenses clearly state that they can interconnect with any licensed operator. SLTL also filed legal action against the enhanced voice operators. However, the courts held that SLTL had failed to establish a *prima facie* case that it had a monopoly, and suspended an earlier enjoining order restraining the enhanced voice operators until a full inquiry was completed. Meanwhile, one of the enhanced voice operators filed action against the Sri Lankan government at the International Center for Settlement of Investment Disputes claiming US$ 200 million in damages for contravening their investment protection agreement.

The terms and conditions imposed by SLTL in the case of the fixed-mobile interconnection regime that prevailed until 1999 showed similar apparently anti-

66 Although the distinction between voice telephony and data communications may have been clear at the time the three data communications licenses were issued, rapid technological changes have blurred this distinction over time.

67 This operator also plans to seek legal redress against the Sri Lankan government at the United Nations Human Rights Commission (UNHCR), New York, for arresting one of
competitive behaviour. For instance, mobile operators had to pay the higher national rate calling charges for calls terminating on SLTL’s network, and full retail charges for international calls originating in their networks; they could only interconnect at one point and had to bear the full costs of physical interconnection; and, SLTL did not pay the mobile operators for terminating calls on their networks. In contrast, the WLL-mobile and mobile-mobile interconnection arrangement is sender-keeps-all, with these operators sharing physical interconnection costs on a 50:50 basis.

Whilst a 1999 TRC determination on fixed-mobile and mobile-mobile interconnection addressed most of the anti-competitive elements mentioned above, the proposed implementation of a calling party pays (CPP) system in the mobile sector still hangs in the balance. Under the current mobile party pays (MPP) system, the mobile operators pay SLTL for calls terminated on its network but are not compensated for calls terminated by SLTL on their networks. As such, the mobile user bears the cost of termination in the form of an incoming call charge. For outgoing calls, mobile operators charge a fixed rate other than for intra-network calls. Fixed operators have some differential rates for outgoing calls.

Mobile operators argue that the MPP system has resulted in low call completion rates, because users prefer to keep their handsets switched off to avoid the incoming call charge, and that CPP schemes are emerging as an international standard. The fixed-access operators have opposed CPP, arguing that it will impose a greater burden on fixed-access users, most of whom, they claim, are from the poorer segments of the population. The mobile operators dispute that

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68 Samarajiva (http://www.tpeditor.com).

69 However, CPP can bring in a problem of market power in termination charges on the supply-side, given that a customer cannot choose how a given call will be terminated...
mobile users are any more affluent than fixed access users.\textsuperscript{70} In any case, this seems a rather weak argument against CPP. Although the regulatory authority initiated public hearing on the feasibility of CPP in June 1999, it has yet to make a conclusive determination on the implementation of this system.

\textit{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 an entire century of telephony in Sri Lanka\textsuperscript{71}, 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\% of the WLLs’ operations being concentrated in urban areas.\textsuperscript{72} Rural demand for telecommunications services however, is high, with telecommunications being cited as the second most important unmet need in a rural survey conducted by the TRC.\textsuperscript{73} 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 universal service obligations (USO’s) must be administered in a transparent, non-discriminatory, and competitively neutral manner.\textsuperscript{74} But there seems to be a clear conflict between the current situation and these WTO commitments: the SLTL has no legally binding universal obligations, but the WLLs do have some USO type commitments built into their licence agreements.

\textsuperscript{70} Statistics cited by the mobile operators on mobile usage indicate that 40\% of users spend less than Rs.1000 per month, that 20\% spend less than Rs.500 per month, and that nearly 50\% of mobile subscribers are low-users (Wijayasuriya, 2000). While not conclusive, this suggests that they may not be much more affluent in general than the fixed access users.

\textsuperscript{71} Samarajiva (\url{http://www.tpeditor.com}).

\textsuperscript{72} These statistics are for 1999 and are gathered from personal communications with SLTL, WLL, and mobile sector sources.

\textsuperscript{73} TRC sources.

\textsuperscript{74} See \textit{WTO Reference Paper} (\url{http://www.trc.gov.lk/wtodocs.htm})
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. Moreover, according to the Commission, one post office connection, which would be accessible to the public for less than a quarter of the time a payphone would be available for use, costs between US $3800 and US $ 5400. As such, in 1999, the TRC recommended that all fixed and mobile-access operators bid to connect clusters of post offices, subject to a ceiling of US $ 5400. At the time of writing however, this recommendation had not been implemented.

During the same period, the TRC also suggested that a targeted payphone installation subsidy, using the Commission’s cess and license funds, be put in place to extend payphone facilities to rural and sub-urban areas. This scheme, which gives an operator installing a new payphone outside municipal and urban limits a subsidy of US $ 750 per payphone for up to 25 new installations per district, has been in operation since late 1999. The scheme is to be phased out when the set target of 100 payphones in each of the country’s 25 districts has been reached. Although the management agreement signed between the government and NTT contains incentives for SLTL network roll-out in all areas, the shareholders agreement signed by the parties at the same time explicitly protects the dominant player from formal universal service obligations In fact, SLTL statistics indicate that more connections are being provided in urban areas since privatisation in 1997. It can be argued that SLTL’s accountability to Parliament could impose a form of de facto obligation, though this is not at all obvious. The controversy over

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75 Samarajiva (1999).
76 Ibid.
77 Gunawardene (1999).
interconnection has also spilled over into the area of universal service, with SLTL arguing that it will not be able to expand network roll-out due to the fee it has to pay the WLLs for international calls terminating on their networks that thereby lessens its capacity to cross-subsidise such operations.  

The WLLs, on the other hand, are required to have at least ten working telephones in each secondary switching area by the end of this year, with one telephone in the rural area being considered equivalent to ten telephones as an additional performance incentive. Moreover, these operators face an annual penalty of US$ 80,000 if they fail to meet these targets. Although it maybe too early to make any conclusive projections, the indications are that the WLLs are not likely to reach these rural roll-out targets, with interconnection problems being cited as the main reason for failure. 

Thus the question remains as to who should be responsible for universal service provision. The experience in Sri Lanka, as in many other countries, suggests that competition may produce better results than monopolies in terms of universal service. As such, USO’s should not be the sole responsibility of any one operator and funding for universal service should ideally be allocated through market mechanisms; the TRC proposal for a competitive-bid post office policy is in line with this view. However, the implementation of a competitively neutral policy would also require that no operator has special rights or responsibilities, which is clearly not the case in Sri Lanka, where SLTL enjoys a privileged position following its privatisation in 1997. In view of the special treatment it gets, it may be argued that SLTL should also bear the greater responsibility for universal service provision.

78 However, this fee amounts to less than 20% of settlement revenues (Samarajiva, http://www.connect-world.co.uk/docs/arti...sia1q99/samarajivasrilankacwasia1q99.asp).

79 Moreover, it is questionable if the penalties to be imposed on these operators are sufficient to enforce compliance.

80 See Wellenius (2000) for a discussion of universal service in competitive environments.
**Tariffs**

As mentioned in a previous section, the government, in its 1994 national telecommunications policy, committed to provide access to telecommunications facilities at cost-based prices. Moreover, the WTO commitments entered into under the Regulatory Reference Paper also hold Sri Lanka to ensuring the prevention of anti-competitive practices such as cross-subsidisation. However, in the absence of sound cost data, the extent to which the TRC can achieve the objective of cost-based pricing and effectively investigate anti-competitive practices such as cross-subsidisation, price discrimination, or predatory pricing, remains limited.

At present, no formal principle on tariff regulation is applied in the telecommunications sector. Whilst the licenses given to SLTL and to the WLL operators do contain provisions on price-cap regulation, these provisions are currently on hold. The policy decision taken by the government to re-balance SLTL rates over a five-year period, effectively suspends price-cap regulation for this operator until the re-balancing process is complete. Rate regulation in the WLLs segment is on hold until the end of this year, so as to provide these operators with an opportunity to establish their presence in the market. Moreover, although the WLL licenses specify that this moratorium will expire at the end of this year, there are further provisions in their agreements with the government that allow for the suspension of rate regulation until the end of the year 2005, if these operators meet certain performance conditions. Whilst the licenses given to the mobile and Internet operators contain price-cap language, light-handed regulation is practised in these segments. All the remaining segments of the telecommunications industry are subject to price-cap tariff regulation.

The official justification for tariff rebalancing mirrors the International Telecommunications Union (ITU) position that the practice of cross-subsidising

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81 See *National Policy on Telecommunications* (1994).
the domestic market using net settlement payments from abroad is no longer sustainable and that international rates need to be cost-based. The unilateral decision taken by the United States' telecommunications regulatory authority, the Federal Communications Commission (FCC), to establish lower benchmarks on settlement rates also impacts on developing countries like Sri Lanka which have long benefited from the transfer of financial resources from developed countries under the current international telecommunication settlement rate system.  

SLTL, who reduced international tariffs by 8% in 1998 and in 1999, reached an agreement with the government to increase domestic tariffs so as to increase its domestic revenue in five stages between 1998 and 2002, as follows: 1998 and 1999: 25%; 2000: 20%; 2001 and 2002: 15%. Are these domestic rate increases fully justified? No definitive answer can be given in the absence of reliable data to assess the cost-basis of SLTL's rates. But the possibility that a dominant operator may use tariff re-balancing as a pretext to charge anti-competitive, "quasi-monopoly" rates in the domestic market where it enjoys a privileged status cannot be ruled out. Clearly SLTL was able to gain rents in the international segment, particularly given its low price elasticity. Reduced rents from that segment, and fears that rival operators such as Suntel, which are linked to large multinational companies that can potentially generate significant international traffic, will be placed in a more advantageous position once SLTL's monopoly on international telephony expires, certainly provide incentives to squeeze revenues from its still largely captive domestic segment.

84 Utsumi (2000).
85 According to the FCC transition schedule, Sri Lanka has to reach the benchmark rate of US$ 0.23 by January 1, 2002. Currently, US carriers pay SLTL a settlement rate of approximately US$ 1 per minute for terminating calls originating in the US.
86 Duff & Phelps (2000).
87 See Antelope Consulting (1998).
The WLL operators appear to follow the tariff rates set by SLTL, the market leader. This behaviour, together with the high domestic rates, and their relative stability are suggestive of a form of tacit price collusion amongst operators in the fixed segment. If this continues, and domestic prices continue to increase, affordability may become a serious problem for lower income subscribers, even for the low and medium users. Given that the vast majority of fixed access customers subscribe to domestic call services, and only a small proportion have access to international direct dialling facilities, there can be little doubt that rate re-balancing will have a negative impact on the welfare of most consumers.

The political economy of anti-competition

These issues in the regulatory sphere highlight the fact that the movement towards a more competitive market in telecommunications is not a smooth one. Indeed, it is possible to discern a shift in the attitude of the government towards competition in this market, after privatisation of the state telecommunications entity emerged as a realistic option on the policy agenda. It seems clear that the enthusiasm for fostering competition has waned perceptibly, and some moves can be interpreted as being anti-competitive. What explains the shift in government attitude since the 1980s, from pro-competition to privatisation to a position that is seemingly one of ‘anti-competition’? In this context, the rather

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88 Although provisions such as peak and off-peak prices and the unbundling of customer premises equipment from installation and rental charges have been introduced, the 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, according to 1995/1996 statistics around 21% of the population lives below a lower poverty line of US $ 12.6 per person per month (calculated using, Samarajiva (http://www.tpeditor.com), Annual Central Bank Reports and personal communication).

89 It is also likely that the WLL operators cannot engage in favourable strategic behaviour such as price competition, given the "deep pockets" of NTT.

90 See News Releases of TRCSL (http://www.trc.gov.lk/news.html) for details on TRC’s determination on SLTL’s 1999 tariffs. The low and medium users were partially shielded from tariff increases in the first two years of rate re-balancing due to the introduction of special tariff schemes by the TRC.

91 According to industry sources, in 1999, SLTL’s international sector penetration was a mere 2.28 IDD lines per 1000 persons and the WLLs’ subscriber base showed that only around 30% of their clientele had IDD facilities.
close ties between the TRC and the government are disturbing, and understandably raise questions about its ability to be even-handed in dispute resolution and its commitment to fostering competition in the industry.

We believe that the changes in government attitudes to telecommunications sector issues over this period can be discussed in a framework that incorporates rent seeking behaviour in a political economy context. In our earlier analysis of the telecommunications industry (Jayasuriya and Knight-John, 1998), we linked the early pro-competitive phase in the 1980s to the political inability of the government to make fundamental changes to the existing state (monopoly) entity. These constraints were partly based on the strength of the trade unions in the telecommunications sector, but also reflected the prevailing paradigm that services such as telecommunications should be provided by the public sector. Opening up of new sectors (mobile, paging services) etc. to new entrants was both easier, in line with the pro-private sector bias in policy, and a potential source of rent extraction from licence seekers. But the situation changed when privatisation emerged as a realistic option. The huge potential for rent extraction from privatisation of state assets had been well demonstrated during the last years of the previous United National Party (UNP) administration; it was a demonstration that was not lost on all politicians (and their favoured friends and supporters). Naturally, when the size of the rents that could be extracted was higher, the higher the potential future profits that could be expected from the privatised operation. This, together with the understandable, and perhaps to some extent even justifiable, objective of maximising revenues from the sale of state assets, provided a motive for regulatory restrictions hindering post-privatisation competition: investors will be prepared to pay more for an entity to be privatised if regulatory restrictions impeded future competitive threats. The pro-SLTL bias reflected, for example, in the ‘monopoly’ international access and over USO’s, is understandable if looked at in this manner.
But the matter does not end there. The argument is often made that privatisation of state assets is a one-off opportunity for rent extraction by those with control over the state; once privatised, that opportunity disappears. But this is not strictly valid, when what is being privatised is a public utility that was a state monopoly, where the incumbent can maintain a dominant position in the market place even after privatisation unless pro-competition regulatory interventions are put in place. In such a situation, the state has considerable power over the pace and pattern of competition in the market place, given its control over the regulatory process. In other words, the regulatory body can become a source of longer term rent extraction, as the profitability of the firms depends quite strongly on the regulatory structure in place.

This provides a motive for, and an explanation of, the reasons why governments, apparently committed to pursuing quite radical market-friendly policies (and a commitment to privatisation is often seen as an acid test of this stance), shift their position from pro to anti competition in industries that are, or are to be, privatised. A hold on the levers of regulatory processes ensures that rent extraction can be maintained. It is not our intention of course to suggest that this political economy explanation is what lies behind the shifts in telecommunications policies in the specific Sri Lankan case, or that policies and processes have been driven by anything other than perceived public interest. But the evolution of policy is certainly consistent with such an interpretation, and provides a possible illustration of the more general point we seek to make regarding the link between rent seeking behaviour, privatisation and anti-competitive regulatory policies.

**Conclusion**

International experience has shown that effective and, at times aggressively assertive, regulatory interventions are necessary to foster competition, if privatisation of telecommunications is to result in an efficient, dynamic, technologically innovative industry that delivers cheaper, better quality services
to consumers. This was the rationale for the setting up of the TRC. As stipulated in the provisions of the 1996 Act, the Commission has to foster effective competition in the industry and accommodate the interests of a wide spectrum of stakeholders. Our analysis of the structure, conduct and performance of Sri Lanka’s telecommunications industry suggests that some very crucial regulatory policy challenges need to be urgently addressed if the TRC were to be a credible and effective entity. There is a widespread perception, not entirely unjustified, that the regulatory balance has tilted in favour of the dominant operator, SLTL.

Whilst the regulatory task of balancing conflicting stakeholder interests is difficult, even under the best of circumstances, the politicisation of the regulatory process makes the regulatory authority more vulnerable to capture by particular players in the industry, and casts doubts on its impartiality. This makes it more difficult to attract investment into the sector, sends negative signals to the entire investor community, and undermines its capacity to play its full role in the economic development process. It is time to move from managing the industry to insulate the dominant, politically favoured operator from competitive pressures, and focus on enhancing market competition, improving consumer welfare and stimulating dynamic growth.

\[92\] In addition to the problem of the Secretary to the Ministry serving as the Chairman of the TRC, former employees of the privatised incumbent operator have also been absorbed into the regulatory body.
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