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Setting the Reform Agenda: What Next, After Privatisation?

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INTRODUCTION

In most countries, the post-privatisation telecom agenda is now centred on policy implementation and not any more on policy development for institutional reforms, as presciently set out in Melody (1999e). In Latin America the progress of reform has been very impressive. Some critical problems of the old telecom regime have been successfully addressed: the negative political influence on state-owned operators' business decisions; the government budget constraint on telecom investments; and the bundling of operations, regulation and monitoring in a single entity. As a result, remarkable changes have been introduced. The new private operators are free to make their investment decisions. These same operators have tackled the pent-up demand, generating rapid growth in the sector. New regulatory frameworks have emerged, giving birth to independent and flexible regulatory agencies.

SECTOR REFORM IN THE SCHUMPETERIAN CONTEXT

Some significant events have taken place, however, since Melody's paper was published: the telecom industry recession and the bursting of the dot.com bubble. Both events are linked to a deeper phenomenon, associated with what may be called the maturity phase of a Schumpeterian wave of innovation. This fifth Schumpeterian wave of industrial innovation started during the 1980s when vast arrays of semiconductors, fibre optic networks and software began to be diffused in the market. Successful firms such as Cisco Systems, Intel and Microsoft enjoyed healthy margins, set standards, and killed off weaker rivals in order to become the leaders of this fifth Schumpeterian wave of innovation (*Economist* 2001).

Broadly speaking, each wave of innovation has three main periods: energetic eruption, maturity and decline. The third period takes place when a new block of innovation is just beginning. We do not see a collapse of the current wave of innovation. It is experiencing a period of maturity, more precisely an initial phase of maturity. The innovation wave unleashed by abundant bandwidth and Internet based-solutions appears to have a long way to go. Nonetheless, the maturity of this wave of innovation has had significant implications for telecom reform in developing countries. Most telecom reforms in Latin America, for instance, were

implemented in the 1990s, when the international economy was growing fast and Foreign Direct Investment (FDI) was abundant. At the start of the new century, however, there has been a reversal of the previous trend: a telecom recession, the shrinking of the main operators and vendors, high levels of debt among the main players and an investment slump are very much in evidence.

THE POST-PRIVATISATION REFORM AGENDA

This new environment makes policy implementation a harder task. This second phase of policy implementation encompasses tougher competition enforcement, regulatory adjustments related to other fundamental social and economic policies, and the challenge of creating incentives for the spread of telecom innovations throughout all sectors of the economy (the digitalisation of the economy itself). This phase requires high investments in broadband and information and communication infrastructure. The recession will generate important constraints for reforms to enable the attraction of new investments.

Especially in Brazil during this second phase, three critical issues have emerged on the telecom agenda: how to create a *level playing field* in fixed-line telephony; how to address the trade deficit in electronics and telecom equipment by increasing domestic production; and how to address the issue of digital exclusion effectively, develop e-commerce as part of the market economy and bring more efficiency and transparency to government with e-government approaches.

The first critical issue is how to create a level playing field in basic telecom. This issue goes back to the privatisation phase in Brazil (1995-1998), when the government gave priority to selling state-owned assets in its effort to create a competitive environment. Privatisation in most countries did not address the issue of the fixed-line monopoly. In Spanish-speaking Latin American countries, monopolies of four to ten years were awarded to the new private owners, while in Brazil the regulator established a fictitious duopoly or quasi-monopoly.

The reason for the survival of monopolies or quasi-monopolies lies in the assumption that such market structures create incentives for network expansion. Under conditions of pent-up demand, monopolistic or quasi-monopolistic market structures can indeed attract significant private investment. This gives operators a solid cash flow and return on investment. In exchange for quasi-monopoly market conditions, regulators can impose tough universal service and quality goals.

Cellular telephony, however, experienced more competition – with a real duopoly taking root in Brazil. The new entrant in cellular telephony also could benefit

from pent-up demand and quasi-monopoly conditions in a market segment in which network deployment can take place quickly. In many countries, there was also competition in the supply of corporate services. In Brazil, there was some intra-regional competition in domestic long-distance services and a duopoly at the national level.

The problems with monopolistic concessions become manifest when their term ends. One problem is the *timing* of the sunset of monopoly rights. In Brazil, the timing was clear since 1998, as part of the rules of privatisation: either the end of 2001 or the end of 2003, depending upon the success of fixed-line operators in achieving the universal service goals imposed on them. The other problem is the *conditions* through which the new competitive environment will emerge. The Brazilian regulator, ANATEL, delayed the announcement of the new rules of competition as long as possible.

The requirements for new players to obtain new operating licences – international long-distance, national long-distance and local services – were announced by the Brazilian regulator only at the end of 2001. The requirements are of two types: some licences are tied to each other, that is, the acquisition of a long-distance licence is tied to acquisition of a local services licence; the local licence is required to cover 1% of all major cities in four years.

ANATEL argued that the local users needed protection, given the fact that the intended duopoly never took root. The so-called mirror licensees, or new entrants in fixed-telephony, have not challenged incumbent operators. The incumbent fixed-line operators continue to be dominant; therefore, the regulator reasoned that new coverage requirements were necessary. Incumbents, new players and trade associations opposed the new rules. They especially criticised the 1% coverage requirement in all major cities. They argued that given the international crisis in telecom financing, the coverage requirements would discourage investment. ANATEL has agreed to modify, but not eliminate the rules.

Local competition cannot be equated only with more or less requirements for local penetration, however. Analysis by CELAET (Center of Latin American Studies of Economics of Telecommunications <www.celaet.com.br>) demonstrated that local competition is a global issue with roots in economies of scale and scope that originate in economies of density and first-comer advantages. In industrialised countries, there has been intensive research into local competition. In France and Italy, energy and railway utilities have formed consortia, leveraging their rights of way in alliance with equipment manufacturers who know the telecom business

well. These alliances have rights of way that connect the facilities to end-users. The Brazilian model of telecom reform fragmented the different segments of the industry excessively. As in Europe, the new utility/telecom alliances must be encouraged in Brazil. The United Kingdom example, where cable operators challenged British Telecom, does not apply well in Brazil, where cable television has not been able to widen its network reach or market share.

The second critical issue in Brazil is the manufacturing sector's links to industrial policy. Brazil's trade balance and current accounts have suffered from rapid increases in imports related to the telecom sector's energetic expansion. Incentives for telecom vendors to locate production in Brazil are key to the debate on telecom policies in Brazil.

The old telecom regime was relatively successful in terms of industrial policy. There were three poles: 1) the CPqD, the national institute of telecom technology, producing local technology; 2) local manufacturers, who licensed the CPqD technology and manufactured products; and 3) the state-owned Telebras operators, who bought the products. The Tropico digital switching centre is the greatest success among these groups. Promon, a Brazilian technology company, took control of Tropico's business and later allied with Cisco Systems to further develop products. Two other successes are the telephone card for pay phones and the local production of fibre optic cables. The old industrial policy model, however, is dead. The causes are multiple: the growing complexity of digital systems, the new openness linked to trade liberalisation and globalisation and the privatisation of operators.

How can Brazil create incentives for telecom vendors to locate production in Brazil and keep the country competitive within the new logic of global manufacturing? A truly new model to encourage local production is still in the making. In the first phase of policy reform, the government assigned the Brazilian National Development Bank the task of financing operators' purchases of equipment, as long as the products were produced in Brazil. That worked well for finished products, but not for high-technology parts, which affected the trade balance in any case.

The struggle to establish Brazil as a centre of technology creation continues. In addition, FUNTTEL is a new technology research fund that receives resources from taxes on telecom services as well as from the government. FUNTTEL nurtures research at the CPqD and universities. The CPqD – transformed into a Foundation – has also succeeded in maintaining its relationships with operators.

In addition, next-generation IP-based networks' intense use of several kinds of parts and software provides opportunities for local companies to occupy niches that their international competitors have not found. Government incentives seem necessary, but they must be well-conceived to have an impact in a new environment of open trade and globalisation.

Finally, the third issue is digital exclusion. Digital exclusion can have a great destructive impact in developing countries because it undermines efforts to improve income distribution. In Brazil, an interesting paradox emerges from the recent increase in fixed-telephony penetration. As the fixed-network reached the neighbourhoods of the poor, these citizens gained access to basic telephone services, but are defaulting on their bills for lack of income. How can these citizens be provided with information technology tools and Internet access? There is only so much that the democratisation of access to telephony can do to reduce income inequalities.

Digital exclusion has become a serious debate in Brazil. Organisations that support small enterprises are devising ways to assist them to become Internet-smart. Training in e-commerce is also taking place. All levels of government are creating computer-training programmes. In addition, the Telecom Universal Service Fund, which collects a tax from telecom operators, will soon begin to invest in Internet access for public schools, libraries and health centres. The government is pursuing a broad e-government initiative to facilitate access of citizens to the government.

Nonetheless, for a country with these complex social problems and a labyrinthine bureaucracy, policies to reduce digital exclusion cannot be isolated from broader social policies. Sub-utilisation and inefficiencies could plague well-intentioned digital access promotion policies. For instance, computers could stay locked in schools far from the hands of teachers and students, because of lack of security. Teachers with access to computers may not use them for lack of computer training. Communities receiving expensive equipment to connect to the Internet might actually have more pressing priorities such as food, clean water and sewage treatment. The key for success here is coordination of policies among different levels of government and the targeted communities.

CONCLUSION

The scope of the new policy agenda is broad and the new Schumpeterian wave generates policy uncertainties. The new agenda is not as powerful as privatisation in attracting mass media attention, but it is no less important. A powerful public

sphere that openly debates the issues, nurtures policy makers with a wide range of alternatives, and maintains pressure for solutions is as important as ever. We are in the midst of an information revolution – our region and our countries will be shaped by how we deal with the key issues of access to the new information-based economy. Most countries that privatised state-owned monopolies, especially in Latin America, have also become democracies. Nurturing a more inclusive policy discourse is without doubt a key part of the solution to these critical issues.