Review Paper

Using covenants in loan agreements to promote tariff reform

Michael Fortin

ABSTRACT

This paper evaluates efforts made by development banks to promote tariff reform using covenants in infrastructure loan agreements. These covenants are evaluated within the broader context of tariff regulation in the water supply and sanitation sector. The paper outlines prerequisites for effective tariff regulation and reviews the experience with tariff regulation in developing countries and the current thinking regarding regulatory reform. Efforts by development banks to promote tariff regulation using loan covenants are often misdirected in light of the complexity of tariff regulation and the regulatory reform process.

Key words | infrastructure, loan covenant, regulation, sanitation, tariff, water supply

Michael Fortin
M. Fortin Associates,
207 Speedvale Avenue East,
Guelph Ontario,
Canada N1E 1M6
E-mail: *mfortin@sentex.net*

INTRODUCTION

Infrastructure loans from international financial institutions, such as the Asian Development Bank (ADB) and the World Bank, for water supply and sanitation (WSS) often involve covenants requiring that user tariffs are adjusted to levels assuring economic efficiency and financial sustainability. An independent evaluation in 1992 of 120 World Bank water supply and sanitation projects found that borrowers frequently failed to comply with such covenants (Operations Evaluation Department 1992). Almost 20 years later an evaluation of water sector projects funded by the ADB arrived at the same conclusion; proponents failed to fulfill agreed tariff reforms in 50% of technical assistance and loan projects undertaken in the period 1997–2003, and 40% failed to achieve cost recovery commitments (Independent Evaluation Department 2010).

The ADB evaluation identified project elements that increased the likelihood of tariff reform. These included stakeholder consultation and equitable tariffs that are adjusted gradually, accompanied by tangible service improvements. It was also noted that tariff reform is easier when the service provider is trusted by consumers.

Neither of these evaluations considered the broader institutional context. This paper provides an overview of the institutional framework regulating WSS tariffs and argues that institutional constraints are the principal factors leading to non-compliance with agreed tariff reform covenants.

TARIFF REGULATION

Economic regulation addresses the level and structure of prices, profitability, standards of service and investment (Marks *et al.* 1998). It involves the application of legal instruments by agencies to impose constraints and obligations on the activities of utilities. Agencies are normally understood to be independent and authoritative regulators. The transitional option of an 'advisory' regulator is discussed below.

Utility services are regulated by governments in order to prevent monopolistic pricing and market failure and pursue social welfare objectives. The economic factors that justify utility regulation include imperfect competition and incomplete information and contracts. While public ownership

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was previously endorsed by many to overcome these shortcomings, government operation of utility services has often led to uneconomic pricing and reduced efficiency. Corporatisation, privatisation and private sector participation have been promoted since the 1980s in response to this failure. To be effective these approaches require a credible regulatory framework addressing price setting, quality and delivery of services and guidelines for private investments (Aryeetey & Ahene 2005).

The main objectives of regulation are to manage risk arising from market failure and to achieve social objectives such as service reliability, health and safety and poverty alleviation. The impact of regulation goes beyond these immediate objectives. Good regulation provides assurance to investors and creates incentives to improve efficiency. Well-regulated utilities can provide the services required to support economic development and to help lift households out of poverty.

The attributes of effective regulation include (Marks *et al*. 1998):

- Clear roles of the regulator and other agencies;
- Clear comprehensive laws and regulations establishing objectives, responsibilities, procedures;
- Predictability of principles and rules of regulation;
- Independence from government and political influence;
- Accountability of the regulator for decisions;
- Transparency of objectives, procedures, information and decisions;
- Participation of all stakeholders;
- Regulatory intervention that is proportionate to the need – minimum required and cost effective;
- Regulator authorised to set tariffs, establish service standards, respond to complaints (Note: the advisory regulator has more limited authority);
- Regulatory framework with appropriate characteristics (independent funding, adequate compensation, secure commissioner tenure);
- Rules guaranteeing the integrity of the regulator (anti-corruption, conflict of interest, financial disclosure, impartiality).

Prerequisites for the establishment of an effective regulator include (Brown *et al*. 2006):

- Legislative bodies that can enact adequate laws;
- A functioning court or equivalent dispute-resolution system to process appeals;
- Institutions with the administrative capacity to make and implement policy decisions;
- Utility service providers that are commercialised or moving to commercialisation;
- Reasonable quality of country governance.

Non-compliance with tariff covenants is not surprising in light of the complexity of these requirements. The context for drafting such covenants in loan agreements is the preparation of a WSS infrastructure project for a loan. This context is typically local or at most regional in its geographic scope. During project preparation there is limited opportunity to address the regulatory regime for tariffs or to adequately account for constraints to tariff reform. In the author's experience these constraints often reflect concern with public opposition to tariff increases. It is incongruous to promote tariff reform when the desired reform fails to account for such constraints.

In order to understand the potential for tariff reform within the context of infrastructure loan agreements, it is useful to have some appreciation of the process of regulatory reform in developing countries. The next two sections review the experience with and options for regulatory reform.

EXPERIENCE WITH REGULATION

Utility regulation is one of the many institutions that have emerged in developed countries to reduce transaction costs, overcome market failures and support the creation of economic and social wealth. Deprived of effective institutions, underdeveloped countries are characterised by 'high transaction costs, corrupt and inefficient bureaucracies, weak enforcement of laws, lax protection of property rights, and the absence of mechanisms to hold bureaucrats and politicians accountable for their actions' (Shirley 2008). The economic opportunities, rule of law and protection of property and persons that are expected in developed countries are privileges available only to elites in underdeveloped countries.

Can foreign aid help establish the institutions that promote development? After a review of available evidence and research, Shirley (2008) concludes that aid has been

ineffective in promoting institutional reform. Researchers cite problems with rent seeking and corruption, large bureaucracies incurring high costs to service the aid industry, ineffective capacity building efforts, growing country dependence on foreign experts and diminished government accountability to their citizens.

It would appear that regulatory reform efforts are no exception:

> Over the past two decades, Asia's developing countries have undertaken varying levels of regulatory reform. The first wave of reforms has produced mixed results, for which various reasons have been attributed. These reasons include that (i) models of pricing and 'best regulation' from developed countries and the Organisation for Economic Co-operation and Development (OECD) were often transplanted in developing countries without full consideration of the different contexts; (ii) many policy and governance reform processes were incomplete and measures designed to be transitional became endpoints; (iii) regulators were not independent and even 'credible' regulation was difficult to achieve; (iv) implementation of reforms was hindered by poor governance; (v) the institutional context was not conducive to reform and regulatory issues were often more complex than in OECD countries; (vi) capacity was very weak and resources were limited. (ADB 2007)

A recent study of ADB's Independent Evaluation Department (2009) concluded that '[c]reating effective regulatory arrangements and developing capacity are perhaps the biggest challenge that developing countries face in their efforts to improve the performance of public utilities and take advantage of PPP arrangements'. The study observes that regulatory frameworks in developing countries are often 'ill-defined and poorly structured'; regulatory agencies lack the professional capacity to do their work and are often not independent of political influence. Country case study analyses for this study were revealing: India, Indonesia and the Philippines suffer from ineffective sector governance, incomplete policies and low technical capacity; Nepal and Viet Nam failed to commit to needed tariff increases; and China successfully implemented public–private partnership (PPP) policies but failed to address key constraints to effective regulation, including tariff approval processes. Obstacles to effective regulatory reform are well documented (Kirkpatrick & Parker 2004; Kessides 2005; Brown *et al*. 2006):

- Unclear or ill-defined regulatory powers;
- Failure to cede decision making powers to an independent agency;
- Uncertainty about regulatory commitments or a failure to remove inconsistency and unpredictability in regulation, especially where political instability causes frequent changes of government;
- Lack of a legal code for regulatory appeals or weak, slow courts interfering with or preventing appeals of regulatory decisions;
- Lack of supporting market institutions including a competition policy and effective policies to commercialise service providers and establish cost-based prices for small consumers;
- Limited capacity and resources (inadequate budgets, inability to attract qualified staff or train staff);
- Popular opposition from consumers due, for instance, to a belief that regulation will lead to unaffordable tariffs and large profits to private investors;
- Government failure, when facing external pressures and loan conditions, to observe the spirit of laws calling for proper, consistent regulatory procedures;
- Macroeconomic crises such as rapid inflation or currency devaluation (e.g. regulatory reform in Argentina was overtaken by the macroeconomic collapse in 2002).

In the limit, '[r]egulation cannot accomplish very much if basic "law and order" are absent' (Brown *et al*. 2006).

Even when inroads are made to regulatory reform, resistance by vested interests that benefit from initial but incomplete regulatory reforms can scuttle further reform. According to McCawley (2010), these vested interests are often incumbent utilities structured as state-owned enterprises that:

- Have excessive political and social influence;
- Are sheltered from market discipline and are thus inefficient and fail to respond to consumers;
- Are overly reliant on government subsidies;
- Are managed by political appointees with inadequate professional managerial skills;

- Operate in a manner that is neither transparent nor accountable;
- Protect their dominant market position and resist proposals for competition.

The political economy of water does not favour reform. Major reforms that have occurred are often provoked by public health or economic crises. Fiscal crisis contributed to reforms in countries as diverse as Argentina, the Republic of West Guinea, Peru and Mexico in the late 1980s and early 1990s (Kessides 2005). Tariff reforms in China in the mid 1990s were implemented after a long period during which the share of government revenue in GDP fell from 31.2% in 1978 to 10.8% in 1996 (Fan 2010).

The momentum created by crisis may improve compliance with tariff covenants in loan projects, but the loan agreement on its own provides inadequate incentive for tariff reform, as evidenced by reported levels of non-compliance with such covenants. The ability to provide project financing does not give a development bank sufficient leverage to impose tariff reforms on the borrower.

OPTIONS FOR REFORM

The experience in developing countries with utility regulation suggests that regulation is a greater determinant of performance than ownership or management and that institutional and governance issues merit greater attention in the debate over provision of services to poor households in developing countries (Bakker *et al.* 2008; Estache & Wren-Lewis 2008).

Even though regulatory reform efforts in developing countries have met with little success, this is not cause for abandoning reform. Kessides (2004, 2005) points out that reform in developed countries took many years, citing the example of the decades required for the evolution of independent US regulatory agencies. He argues that in developing countries: 'Regulatory structures have been created from scratch and are still in early stages of development, and although progress towards regulatory effectiveness has been slow, at least the trend is in the right direction – greater independence, accountability, and transparency than under state ownership'.

Regulators in developing countries face four challenges not generally encountered in developed countries (Kessides 2005):

- Expanding access – regulatory success must be judged by its ability to expand access to basic services to populations in urban slums and low-density rural areas.
- Affordability – regulation must assure affordability by encouraging lower service costs and providing manageable, effective subsidies where needed. (Subsidies provided through consumption charges such as increasing block tariffs are often regressive and ineffective at reaching poor people. Ideally subsidies should focus on access rather than consumption since connection costs typically pose a greater barrier to affordability than tariffs)
- Strengthening capacity – regulators in developing countries are handicapped by poor communications, limited information, personnel shortages and norms that tolerate corruption.
- Political and regulatory risk – political and institutional instability means investors face greater insecurity and risk. Regulatory strategies must safeguard against the misuse of regulation.

Expanded access is typically an objective of loan project investments in WSS infrastructure, while reforms agreed in loan covenants often address affordability and capacity building. The tariff covenant relates to regulatory risk in that it seeks to overcome financial instability to the benefit of investors. The high rate of non-compliance with such covenants attests to the difficulty of overcoming these challenges.

In light of difficulties encountered by regulators in developing countries and the often nascent character of national economic institutions, selecting the appropriate institutional framework for regulation presents a major challenge. Some lessons have emerged from past experience with regulatory reform (Kim & Horn 1999; Jacobs 2004; Brown *et al.* 2006):

(a) ***Multi-sector vs. single-sector regulatory agencies*** – the multi-sector agency is in a better position to use scarce resources efficiently, resist regulatory capture and political interference and be more consistent across sectors.

(b) ***Independence and funding*** – independent regulators can provide a more stable environment for investors. They need secure funding and a clear separation from government, especially if the government is the owner of public utility operations. If political independence of the regulator is unlikely, then the formation of a new regulatory agency may only serve to increase transaction costs and regulatory uncertainty.

(c) ***The advisory regulator*** – it is unrealistic in some countries to expect government to accept an independent regulator with final decision making authority. An alternative in this situation is an advisory regulator who provides independent advice to government on regulatory matters. The merit of this arrangement is the opportunity for the advisory regulator to evolve into an independent regulator.

It is critically important to recognise that regulatory institutions can evolve over time. The ideal regulatory apparatus cannot be established from scratch, but the initial implementation of a regulatory mechanism will impact on the eventual form of regulation in a country. Brown *et al*. (2006) explicitly address the dynamics of regulatory reform. The starting point, they assert, is critical. Attention must be paid to the capacity and willingness of government to implement independent regulation. If the implementation of authorised sanctions is unlikely, early regulatory efforts should perhaps focus on positive incentives to promote compliance. The initial fiscal health of utilities is also important. Utilities facing large deficits caused by political foot dragging on tariff adjustments pose a hazard to the new regulator. It is unrealistic to expect the new regulator to effectively deal with such deficits.

Brown *et al.* (2006) identify a number of measures that can be used to increase the likelihood that a transitional regulatory system will evolve into a fully authorised and independent regulator:

(a) Undertake periodic public evaluations of the transitional regulatory system;

(b) Assure transparency of regulatory operations to facilitate open discussion and foster public pressure for improvement;

(c) Maximise the authority and impact of an advisory regulator by:

- Establishing separate, earmarked funding for the office;
- Assuring full public disclosure of the regulator's advice and the responsible minister's policy directives and other communications to the regulator;
- Assuring that the regulator's consultations with affected parties are public;
- Establishing fixed deadlines for the minister's response to recommendations, with non-response leading to recommendations that are deemed to have been adopted;
- Requiring written, public explanations for decisions that go against the regulator's advice;
- Establishing conflict-of-interest guidelines for the regulator.

The project preparation team for the typical WSS infrastructure loan project is not in a position to contemplate, let alone be engaged in, a meaningful discussion of tariff reform if that reform depends on the actions of regulatory institutions that are incomplete, transitional or ineffective.

CONCLUSIONS – REGULATORY REFORM AND THE TARIFF COVENANT

Regulatory reform in developing countries is a complex process. Political, economic and social forces and constraints bear on the form and evolution of a regulatory apparatus. It is reasonable to expect that regulation will evolve incrementally at best, taking many years if not decades to mature. In light of this, it is necessary to reconsider the purpose of the 'impatient' tariff covenant often attached to infrastructure project loans.

Consider the following examples of tariff covenants: the first associated with an urban infrastructure project in a well-developed institutional setting and the second applied in a rural setting where formal institutions are limited or absent and project success relies heavily on the involvement of community-based organisations (CBOs).

1. Tariff covenants for the Fuzhou Environmental Improvement Project (ADB loan 1636 PRC):

(a) FPG [Fujian Provincial Government] will cause FMG [Fuzhou Municipal Government] to submit, through FPG, proposals to SDPC [State Development Planning Commission] for tariff increases as required during the Project implementation period, to ensure that by 2003 the water tariffs charged by the water supply companies to all water consumers (i.e. residential, industrial, commercial, and institutional entities) are increased from the present levels to those necessary to ensure full recovery of operating, maintenance, depreciation, and financial costs (i.e. debt-service obligations) and a reasonable return on equity.

(b) FPG will cause FMG to increase, during Project implementation, wastewater tariffs charged to all water consumers (i.e. residential, industrial, commercial, and institutional entities) from the present levels to those necessary to ensure that by 2003 wastewater tariffs will be sufficient to ensure full recovery of operating, maintenance (excluding depreciation), and financial costs associated with treating wastewater.

(c) FPG and FMG will ensure that no entity, including Government agencies, institutions or state-owned enterprises, will be granted exemption from the tariffs established pursuant to (a) and (b) above, or granted a preferential rate for payment of such tariffs.

(d) FPG and FMG will ensure that after the commencement of commercial operations, water and wastewater tariffs are reviewed annually, and adjusted as required to reflect changes in operating costs and the effects, if any, of inflation and/or currency fluctuations to ensure adequate levels of cost recovery. Details with respect to changes in tariff structure will be reported to the Bank through the regularly scheduled progress reports. (ADB 1998)

2. Punjab Community Water Supply and Sanitation Sector Project (ADB loan 1950):

40. The Borrower shall cause Punjab to allow the CBOs to implement subproject-specific tariffs to recover operation and maintenance costs for the community water supply and drainage subprojects constructed under the Project.

41. The Borrower shall cause Punjab to ensure through HUD&PHED [Housing, Urban Development and Public Health Engineering Department] that adequate training is provided to the related CBO in tariff setting and revenue collection. (ADB 2008)

Key elements of these covenants are the identification of the agents involved in tariff setting, a requirement to implement or adjust tariffs and criteria for those tariff adjustments. In effect, these covenants attempt to reinforce an existing – or establish a new – institutional framework for tariff setting.

In the latter case involving rural CBOs, the tariff covenant is often an attempt at informal institutional reform. Where the proposed tariff meets with community understanding and acceptance, and the acceptance of responsible government authorities, the covenant is useful and justified.

The case of tariff covenants for urban infrastructure projects is more problematic. These covenants are formulated in a complex institutional setting with an established institutional framework for tariff approvals, whether by an existing regulatory agency, or by ministerial or local government fiat. In this setting, it is one thing to engage in a discussion of tariff reform in the context of a policy dialogue; it is quite another to attempt to impose a tariff decision by means of a tariff covenant. Any discussion of tariff reform and tariff regulation within a policy dialogue associated with loan processing can be useful, especially if conducted in an informed and exploratory manner rather than a dogmatic or a pro forma manner. Such dialogue serves to keep tariffs on the reform agenda.

The evidence suggests, however, that an explicit tariff covenant in the loan agreement is ineffective as a means of promoting tariff reform. Possible reasons for this, outlined in this paper, are: (1) There is insufficient opportunity during efforts to prepare WSS infrastructure loan projects to understand and evaluate the constraints to tariff reform; (2) The institutional complexity of tariff regulation and tariff reform is incongruous with the narrow scope of the typical infrastructure loan project; and (3) The ability to help with project financing does not give the lender sufficient leverage to impose tariff reforms on the borrower.

Unless tariff reform is an explicit and agreed objective of the loan project, non-compliance with a tariff covenant is to be expected. On the other hand, a tariff covenant may be

motivated simply by the need to assure cost recovery and financial sustainability. In this case the covenant should be explicitly couched in terms of financial sustainability with reference to tariff revenues and other sources of funding, including subsidies or transfers. Unless the project is a blatant opportunity for bureaucratic rent seeking, it is in the client's best interest to assure financial sustainability. It is also in the client's best interest to evaluate alternative sources of funding and to decide, based on local circumstances, how best to assure ongoing project funding.

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