Privatisation & project financing for better performance

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Abstract

This paper considers the effects of privatisation and project financing hydropower producers in the Philippines. It provides a brief background to electricity industry reforms and explores the effects of privatisation. The paper also examines the influence of project finance on hydropower plant operations and rehabilitation programs. Discussion explores the challenges of attracting investment, watershed management and governance of tax windfalls. The legacy risks and cumulative impacts of other development projects are also considered.

The paper shows that privatisation and project financing of power assets can improve performance. It also identifies opportunities to achieve more through wider engagement of stakeholders, holding Government accountable for revenues and developing partnerships with other development actors to improve public welfare and broader economic growth.

Introduction

The Philippines Government passed Republic Act 9136 in 2001 to reform the electricity industry (Government of the Philippines, 2001). It provided a blueprint to restructure the industry from a vertically integrated nationalised structure into an unbundled industry. The restructuring aimed to attract private capital, increase competition, innovation and end-user choice. In turn, these market characteristics are expected to improve reliability, lower electricity prices and contribute to greater prosperity.

A key industry sub-sector is electricity generation. Assets held by the National Power Corporation (NPC) are progressively being privatised. Initially many purchasers of generation assets secured loans from the Republic of the Philippines Power Sector Assets and Liabilities Management Corporation (PSALM). The financial crisis has made loans with financiers that follow Equator Principle guidelines relatively cheaper. As a result, many hydropower producers are refinancing their loans.

This paper centres on the impacts of privatisation and project financing on the performance of generating assets. While beyond the scope of this paper, the sequencing of reforms in establishing an independent regulator and introducing competition also plays a critical role in promoting improved performance (Zhang et al 2004).

The case for reform

The Philippines power industry was characterised by frequent brownouts in the early 1990s. The sovereign guaranteed NPC consistently incurred financial losses and was heavily indebted. The NPC was also the subject of widespread allegations of corruption and had a poor record in providing access to electricity at the household level, particularly to the rural poor (Villamejor-Mendoza 2008). The power crisis is estimated to have contributed to unemployment and economic losses of up to 1.5% of GDP per annum (World Bank 1993).

It became clear that public financing of the electricity industry failed to adequately support economic and social development. In response to the power crisis, the Government developed an

implementation plan to reform the electricity industry. As a result, social welfare has increased through gains in avoided costs and efficiency gains in generation (Toba 2007).

Benefits of project finance 'with strings'

The current financial crisis has created incentives to refinance with banks that follow Equator Principles guidelines. Borrowers are required to demonstrate that loan proceeds will meet International Finance Corporation (IFC) social and environmental performance standards. These standards underpin the Equator Principles. The standards typically exceed host country statutory requirements in developing countries. In the Philippines, the standards obligate hydropower producers to:

- implement management systems for plant, environmental and occupational health and safety to ensure approvals, compliance with licenses and permits and continual improvement on performance
- expand employee health and safety programs, including risk identification and controls, site inductions for staff and visitors, personal protective equipment and signage
- acquire any land for rehabilitation in line with IFC guidelines so that physically and economically displaced people are adequately compensated
- engage with a greater diversity of stakeholder based on a plant's area of influence rather than the Department of Energy (DoE) definition of affected communities to improve distributional equity of costs and benefits and more effectively manage conflict
- mitigate community health, safety and security impacts of rehabilitation programs and changed operations such as lowering or raising reservoir levels to optimise power production
- develop mechanisms to ensure that the National Irrigation Administration (NIA), which is responsible for dam structures, commissions regular independent dam safety audits and undertake necessary repairs and maintenance
- establish emergency preparedness and response procedures and coordinate with relevant Government agencies to strengthen linkages between plant, dam and community emergency preparedness and response
- improve pollution prevention and abatement measures for solid waste, hazardous wastes, sewerage and combustion gas emissions from standby diesel generators
- assess the biodiversity of watershed areas to determine the environmental impacts including cumulative impacts from other structures and changes in the watershed area
- identify and develop culturally appropriate engagement techniques with indigenous people to understand traditional and customary practices and investigate alternative livelihood opportunities
- support cultural heritage by undertaking surveys where there is a likelihood that changed operations or rehabilitation may impact upon areas where cultural heritage is expected to

be found. This includes field-based surveys, chance find procedures and cultural heritage management plans

Some hydropower producers have additional obligations tied to their financing. They include the International Hydropower Association (IHA) Sustainability Guidelines and World Commission on Dams (WCD) Criteria and Guidelines. These financing conditions go beyond the Philippines statutory requirements and tie loan tranches to higher standards of social and environmental performance.

Challenges

There are many challenges in managing risks, impacts and opportunities of electricity industry reforms. There was a significant worldwide decrease in private sector investment in the power industry following the Asian Financial crisis in 1997 (Besant-Jones, 2006). In the Philippines, PSALM experienced difficulty in selling NPC generating assets. Stumbling blocks included plant specific concerns including operation and maintenance agreements, fuel supply agreements and land-related issues among others (Villamejor-Mendoza 2008).

Management arrangements of multiple purpose dams that serve hydropower plants presents some practical difficulties. Regulatory authorities are responsible for maintaining ancillary infrastructure such as the dam wall. Financing maintenance tasks should come from water licenses paid by hydropower producers. The central office of the authority collects these fees. It also controls and often limits budgets for regional offices to spend on dam structures repairs, maintenance and safety audits. Some hydropower producers have negotiated trust funds to overcome this shortcoming. When required dam repairs and maintenance are not undertaken, trust funds are used.

Different public authorities share responsibility for watershed management. Weak institutional capacity to manage watershed areas results in higher rates of erosion and sedimentation. This reduces the active storage capacity and useful life of dams for power generation which presents a significant risk to hydropower producers. Memoranda of agreement are in place for sharing or dividing responsibility for watershed management with key Government agencies. These arrangements produce mixed results depending on the capacity and resourcing of each party.

Municipal governments that have jurisdiction of privatised hydropower plants have become financial winners of privatisation. Property tax revenues from hydropower producers have generated significant revenue gains. Local governments have moved from low to high income class municipalities. However the role, interests and incentives for hydropower producers to make government more responsive, capable and accountable in improving public welfare is missing. This gap is a key impediment to developing a broader willingness to pay taxes to improve public well-being and sustain economic growth (Everest-Phillips, 2008).

The change of ownership of hydropower plants also presents some legacy risks. For example, the involuntary resettlement of displaced people, particularly Indigenous Peoples (IPs), when dams were originally constructed has had an enduring impact on their livelihoods. Several resettlement sites are in hilly terrain and are very different from the submerged settlements. Consequently physical displacement to levelled upland areas stripped of topsoil have not allowed lowland farmers to continue their traditional modes of livelihood (Tamandong-Helin 1996). Compensation payments have been made to some claimants but many grievances are unresolved. It is complicated further

by complex family lineages that have not been traced. While the transfer of plant assets to private ownership has provided hydropower producers with a land lease agreement for the plant site, the operation of the plant is dependent upon the dam storage. Consequently there is an expectation among some stakeholder groups that hydropower producers use their sphere of influence to encourage the relevant authorities to resolve outstanding claims.

Similarly, there are some IPs who have been cumulatively impacted by hydropower developments along a river basin or region. These IPs have been displaced by various hydropower projects and are considered illegal settlers in many watersheds. The impact on IPs is greater given their greater dependency on natural resources for their livelihoods. Some livelihood practices, such as *kaingin* (slash and burn farming), clash with responsible watershed management practices. This can give rise to further conflict.

There are other challenges arising from cumulative impacts of hydropower projects in close proximity to one another. Key risks include trans-basin diversion effects on environmental flows, ecosystems and communities. The cumulative impacts of these projects can interact or aggregate and have a far greater impact on the environment and communities. The nature and scale of such impacts can vary significantly depending on a range of factors. These include the type of the activity, the proximity of activities being carried out to each other and the characteristics of the surrounding natural, social and economic environments.

Opportunities

A shift in practices from minimal damage to demonstrating how hydropower producers maximise long-term net gains for multiple stakeholders provides the greatest potential for performance improvement. Questions which typically arise in formulating a performance framework are: Which one to use? And, what standards apply? There are many different policy frameworks, standards and guidelines which may apply. Similarly, diverse social environments and perceptions make a prescriptive approach inappropriate. Therefore a multi-stakeholder framework that balances logical, technical and scientific approaches with human experience and subjective perceptions of local stakeholder groups is needed (Lockie and Jennings 2004).

An early investment in stakeholder analysis is key to assessing impacts and potential sources of conflict. All functions of a hydropower producer and the supply chain should adopt standard social categories. The distributional equity of impacts from operations can then be assessed. Primary data can also supplement official data if national geographical and social classifications are used. These elements provide the framework that to assess impacts and risks and how they are distributed among stakeholders.

The windfalls in government revenues can result in adverse social and economic impacts if not managed properly. Resource rents can weaken the need for governments to engage with taxpayers and reduce their interest in fostering the improved welfare of their citizens (Unsworth 2006). Strong, direct connections are needed between revenues collected by governments and improved service delivery. The 'social fiscal contract[1]' negotiated between the private sector and government plays 'a critical intermediary step in the path towards full taxpayer liberal democracy' (Everest-

[1] A social fiscal contract is the process by which a responsive and accountable government delivers services to its population while building quasi-voluntary compliance from its population to pay the taxes needed to fund those services (Hoffman and Gibson 2005)

Phillips, p.123). If citizens perceive that taxes are fair and legitimate in the delivery of public services, they become more willing to pay tax. This broadens the tax base and increases the number of taxpayers negotiating action over taxes and expenditure.

The voluntary social investment programs of hydropower producers provide another area to improve performance. Social investments tend to focus on highly visible initiatives. Examples typically include scholarships and medical missions that are low impact, fail to address systemic problems of service delivery and foster dependency. Alignment and coordination with government enables the effective mobilisation of funds, people and equipment to deliver essential services. This broadens the potential impact of social investments and provides opportunities for dialogue between all development actors on the structure of the government system, including performance and policy, institutions and reforms (AusAID 2009).

Partnerships with other development actors, particularly large taxpayers, provide a similar opportunity to mobilise the resources to address common issues and concerns. These common interests may include biodiversity conservation, cultural heritage protection, watershed management, cumulative impacts and legacy issues. Partnerships should fall under the framework of local development plans so that efforts and resources are aligned and there is a common means to assess and account for performance.

Conclusion

The crises that precipitated the reform of the Philippines electricity industry has led to improved performance. Privatisation has resulted in hydropower plants becoming compliant with environmental laws. The more recent financial crisis has created incentives for hydropower producers to refinance with banks that follow Equator Principles guidelines. The covenants on loans require even higher levels of social and environmental performance.

The governance of tax revenues, legacy risks and cumulative impacts of privatised hydropower plants present vexing challenges. To assess, manage and account for these risks and impacts, robust multi-stakeholder performance frameworks need to be developed.

Limited coordination with other development actors and well intentioned social investment plans yield poor results. Partnerships with other development actors and aligning social investment programs increases returns and opens dialogue in policies, programs and reforms to service delivery.

The institutional arrangements for infrastructure and watershed management can be problematic. Trust funds can provide a mechanism to undertake critical audits, maintenance and repairs. However hydropower producers also have a role to play in making Government more responsive and accountable for revenues and expenditure to broaden demand for improved public welfare and sustainable growth.

References

Australian Agency for International Development [AusAID] 2009, Why should we work in and through Partner Government Systems?, AusAID, Operational Policy Note 1, Canberra.

Besant-Jones, J. 2006, Reforming Power Markets in Developing Countries: What Have We Learned?, *Energy and Mining Sector Board Discussion Paper No 19*, World Bank, Washington DC.

Everest-Phillips, M. 2008, Business tax as state building in developing countries: applying governance principles in private sector development, *International Journal of Regulation and Governance*, Vol 8, I 2, pp.123-154.

Government of the Philippines 2001, Republic Act No 9136, *An act ordaining reforms in the Electric Power Industry, amending for the purpose certain laws and for other purposes, Electric Power Reform Act of 2001*, the Philippines.

Hoffman, B. and Gibson, C. 2005. 'Fiscal governance and public services: evidence from Tanzania and Zambia', in Proceedings of the *Annual Meeting of the American Political Science Association*, 1-4 September 2005, Washington, DC.

Lockie, S. and Jennings, S. 2004, The Social Impacts of Natural Resource Use and Condition: The Invisible Dimension of Coastal Resource Management., in Pritchard, B. (ed) *Triple Bottom Line Reporting in Australia*, Bureau of Rural Studies, Agriculture, Forestry and Fisheries Australia, Canberra.

Tamandong-Helin, S. 1996 , State Power as a medium of impoverishment: the case of the Pantabangan Dam resettlement in the Philippines, in McDowell, C. (ed*), Understanding impoverishment: the consequences of development-induced displacement*, Providence & Oxford, Bergahn Books.

Toba, N. 2007, Welfare impacts of electricity generation sector reform in the Philippines, *Energy Policy,* Vol 35, pp. 6145-6162.

Unsworth, S. 2006, Getting better governance: insights from new research, *Trocaire Development Review*, Dublin, pp. 17-33.

Villamejor-Mendoza, M. 2008,' Bringing electricity reform to the Philippines', *The Electricity Journal,* Vol 21, I 10, pp.42-58.

World Bank, 1993. *Philippines Power Transmission and Rehabilitation Project Staff Appraisal Report*, World Bank, Washington, D.C.

Zhang, Y., Parker, D. and Kirkpatrick, C. 2004, 'Competition, Regulation and Privatisation of Electricity Generation in Developing Countries: Does the Sequencing of the Reforms Matter?', *Centre on Regulation and Competition,* Working Paper 62, University of Manchester, Manchester.