Experience with liberalisation and privatisation of electricity

by

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1. Introduction

Research carried out by PSIRU and others shows that liberalisation and privatisation of the electricity sector has in general failed to deliver the expected benefits of greater investment, lower prices, and extension of systems to the poor.

2. U.K. Experience

The UK unbundled generation, transmission and distribution, privatised the companies, and created markets for wholesale electricity and for retail sales.

Electricity prices in the UK have performed no better than in other countries, such as France, which did not adopt the same reforms. The only significant price benefits have been for the largest industrial consumers (O'Mahoney and Vecci 2001, Perebois and Wright 2001, Thomas 2004).

Although there was a reduction in costs after privatisation (about 5%) this was more than offset by the increase in profits. The distribution of benefits has been unequal, with shareholders gaining most: companies have been able to make excessive returns, despite regulation (de Oliveira and Tolmasquin 2004, Buckland and Fraser 2002). Studies estimating what would have happened without privatisation concluded that electricity prices in the UK are between 10% and 20% higher than they would have been without privatisation (Branston 2000; Newbery and Pollitt 1997).

Concentration and vertical integration have been the key strategies for the private companies. The vertical unbundling has been reversed by private companies, with generators and distributors merging to provide long-term security for both sides. At the same time there has been horizontal concentration through mergers, to increase market power. (Ghobadian and Viney 2002, Woo et al 2003, Thomas 2004).

The wholesale markets have had little impact because the great majority of electricity is traded through long-term contracts between generators and distributors, or within vertically integrated companies. The retail markets fail to work because the majority of domestic consumers do not switch, and it would be very expensive if they did so. Investment in new generation has taken place, but not very successfully: the owners of about 1/3 of the generating capacity of the UK are effectively bankrupt (Thomas 2004).

3. Other OECD countries

A review of experience in Norway, Canada (Alberta) and the USA (California), as well as the UK, concluded that markets did not deliver lower prices and higher efficiency because small groups of producers abuse market power. (Woo et al 2003). The California electricity crisis of 2000, leading to large price rises and blackouts, was caused by the dominance of a small group of generators (Woo 2001); a number of states in the USA have suspended their plans for de-regulation as a result.

In the EU, where liberalised electricity markets are required, concentration of ownership has been a striking feature across Europe as a whole and especially in Germany. One result is that state-owned companies such as Electricite de France (EdF) have also expanded and are now significant owners of power systems in other countries, including the UK (Thomas 2004).

The major blackouts experienced in the north-east USA, Italy and elsewhere in 2003 were attributable to large amounts of commercial trading of electricity over transmission lines: an official responde to the Italian blackout stated that: "The underlying causes of the incident that occurred on 28 September 2003 are the unresolved conflict between the trading interests of the involved countries and operators and the technical and legal requirements for safe and reliable operation of the networks." , and a similar diagnosis has been made of the USA blackouts (UCTE 2003, Rigby 2003, Thomas and Hall 2003).

Empirical evidence does not support the assumption that private companies are more efficient. A global study found no significant differences (Pollitt 1995).

4. Developing countries

The World Bank acknowledges that private sector investment in energy infrastructure has declined worldwide, and many multinational companies have withdrawn, due to losses and uncertainty. There is a decreasing faith in markets as providing solutions to infrastructure problems, and few politicians now support it. Investment finance comes from country and region, not from international capital: foreign investments are usually supported by state guarantees and so may not be additional but simply a relatively expensive replacement for public borrowing. (Saghir 2003, World Bank 2003, Buresch 2003, Buresch 2004, Gabriele 2004).

Ownership has become more concentrated, jobs are lost or made less secure, prices often rise and people are cut off for non-payment. Privatization becomes unpopular, is seen as benefiting elite and corrupt interests at home and abroad, and as *"fundamentally unfair, both in conception and execution."* (Nellis, 2003; Birdsall and Nellis 2002; Buresch 2003; Hall 1999). Many private power stations (IPPs) have become expensive debt-like burdens because they are underpinned by government guarantees, which mean that the state has to pay for expensive electricity it does not need. Privatised distributors have created unsustainable price increases. (Bayliss and Hall 2000, 2001).

Studies of specific countries indicate that liberalisation or privatisation has failed to deliver expected improvements for a number of reasons. In the Philippines, misconceived assumptions about what would happen in a privatised system prevented the consideration of better alternative policies (Sharma et al 2004) ; in the Cameroon, IMF and World Bank conditions imposed a privatisation which resulted in the creation of a private, poorly regulated, vertically integrated monopoly, ignoring historical experience that development of electricity systems has always been state-led (Pineau 2002); in Pakistan, policies are successful in attracting private investors in IPPs but at the cost of negative impacts on the economy and the environment (Qudrat-Ullah 2001); a review of African countries experience found that electricifcation to the poor, especially in ciites, was not adequately addressed by reforms (Karekezi 2002).

A wide-ranging review by an UNCTAD official concluded that effective competition is rarely achieved, and the state is usually too weak to effectively regulate the private sector. It concludes that *"in a long-run development perspective, full-scale privatization of gas and power sectors in developing countries entails significant risks, and therefore a flexible policy approach is preferable to a rigid commitment to extensive liberalization"* (Gabriele 2004). Other critiques of the process have found that reforms focus on short-term financial issues, ignore social and environmental public interests, and may become locked in to an undesirable path that cannot be corrected. (Dubash 2002). Public sector models have serious problems but these can be addressed through greater public participation and transparency (Wagle 2000, Prayas 2001)

A number of developing countries have suspended plans for liberalisation and privatisation as a result of opposition and review of experience: these include South Korea, Thailand, Mexico, and Brazil. In Mexico, this was partly because the constitution specifies that electricity must be within the public sector (Gabriele 2004).

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