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Abstract

Poverty reduction is a primary goal of development policy. In large parts of the World people have to live on meagre incomes and have limited access to infrastructure services, such as mains water, safe sanitation, mains power supplies, maintained roads and telephones. In response, more and more infrastructure provision has been opened up to private investment over the last two decades and regulatory institutions have been introduced to protect the public interest in the absence of state ownership. In this paper the role of infrastructure regulation in poverty reduction is investigated drawing on the published evidence. The conclusion is that the evidence is both patchy and sometimes contradictory. There is mixed knowledge regarding the extent to which regulators address poverty issues and about the results of regulatory decisions. The paper concludes by proposing a future research agenda aimed at improving our understanding of the ways in which infrastructure regulation impacts on poverty, with the objective of improving actual regulatory policy in developing economies.

Key words: infrastructure, regulation, poverty, developing countries.

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1. Introduction

International development policy since the 1980s has emphasised privatisation, market liberalisation and regulatory reform. Although much has now been written on the effects of privatisation and market liberalisation (for a recent review of the literature see Parker and Kirkpatrick, 2005), relatively less is known about the impact of state regulation especially in terms of poverty reduction. The UN Millennium Goals require that global poverty be reduced by 50% by 2015 and that health and education and the environment be improved (UN, 2000). But the challenge is huge. The number of chronically poor may range from 450 million to 900 million. In Sub-Saharan Africa, the World's poorest region, more than a half of the population lives on less than US$1 a day and globally one billion lack access to safe, piped water supplies and 2.2 billion to proper sanitation. Around two billion people are estimated to lack access to electricity supplies and inadequate communications limit economic development. A recent report on the demand for infrastructure services in developing countries between 2005 and 2010 suggested that annual investment and maintenance costs could total, at a minimum, US$465 bn per annum, if services are to grow sufficiently to meet the demand (Fay and Yepes, 2003). Another report, concentrating on water services, has put the annual investment needs in developing countries as rising from US$75 bn in 2001 to US$180 bn, if the UN's Millennium Development Goals are to be met (Camdessus, 2003).

Improved basic infrastructure services are recognised to be a crucial part of economic development (Kessides, 2004). Where power supplies, water and sanitation, telecommunications, ports and airports and road and rail links are poor and unreliable the scope for economic development is severely curtailed. The promotion of economic growth needs more investment in and improved management of infrastructure, hence the arguments for privatisation. However, a prerequisite of successful privatisation of monopoly activities is effective and efficient regulation. At the same time, there is growing recognition that if the economic reforms are to have their intended effects of raising economic growth and reducing poverty, there needs to be a commensurate improvement in regulatory governance. Inefficiencies in state regulation have been identified as a major cause of poor economic performance (World Bank, 2004).

This paper focuses on economic regulation and particularly the regulation of prices, outputs and service quality. In the first section of the paper we consider how regulation could be used to advance the reduction of poverty. We then turn to the existing evidence on regulation and poverty reduction. We find that the existing knowledge is patchy, at best. While much has now been written about regulation in developing countries, especially in relation to the privatisation of infrastructure, little of this has focused specifically on the poverty agenda. We conclude by providing an agenda for future research into regulation and poverty reduction in developing countries with the aim of

improving our knowledge of the extent to which regulators address poverty issues and about the results of their regulatory decisions on poverty levels.

2. How Regulation can help the Poor

The causes of poverty are complex and are subject to vigorous and sometimes acrimonious debate about the origins and types of poverty (Sen, 1981, chapter 2; Hulme and Cooke, 2002). A distinction is often made between absolute and relative poverty, the former being concerned with average real GDP per capita and the latter with the distribution of income and wealth in a country (the variance in real GDP per capita). That the relationship between economic growth and poverty reduction is complex and not highly predictable is now recognised (UNDP, 2002, p.23; Mbabazi *et al.*, 2003). Economic growth may be important in terms of reducing absolute poverty but may not, in itself, address relative poverty. For example, Kuznets (1955) suggested that there was an inverted U-shaped relationship between per capita income and income inequality. At relatively low levels of per capita income there was a positive relationship between economic growth and inequality, but once a higher level of income was achieved then inequality began to decline. However, empirical studies have been inconsistent in finding such a U-shaped relationship (see Cook and Uchida, 2005, p.2 for a review). Some literature suggests that growth creates inequalities, but these can be offset by the effect of higher national income on reducing absolute poverty (see the survey of the literature on growth and inequality by Berg and Krueger, 2003; also Srinivasan and Wallack, 2004; Dollar and Kraay, 2002, 2004).

A study involving 121 countries for the years 1960 to 2000 has suggested that economic growth is positively related to the stock of infrastructure assets and that income inequality falls with higher infrastructure quantity and quality. Hence, despite the uncertainty about the precise relationship between economic growth and privatisation, developing basic infrastructure services seems to be a highly effective means of combating poverty. As the authors of the study state: “the conclusion that infrastructure both raises growth and lowers income inequality implies that infrastructure development may be a key win-win ingredient for poverty reduction”(Calderón and Servén, 2004, p.26). For regulation to address poverty reduction, it needs to tackle both absolute poverty – by stimulating economic growth – and relative poverty by addressing affordability and access to public services. As affordability and access are usually directly under the control of regulators, we can refer to a direct effect on relative poverty. However, only indirectly does regulation impact on economic growth, for example, though the impact of regulation on private investment decisions (Kirkpatrick, Parker and Zhang, 2006a).

Regulatory reform in developing countries needs to address the design of pricing and access policies which balance economic efficiency and social equity (World Bank, 1994). In developing countries there are a number of potential regulatory challenges. These are, firstly, *to achieve adequate access by the poor to vital services*. The poor often do not have access to safe water and sanitation, telecommunications or mains power, especially in rural areas. Secondly, *the related issue of affordability of public services* is of concern. Where the marginal cost of expanding supply exceeds the marginal revenue that the poor can afford to pay, services will be deficient; but regulators do not have access to funds to pay direct subsidies and may be restricted in the extent to which they can enforce cross-subsidies between richer and poorer consumer groups, especially where markets are being opened to competition. New entrants will tend to target the higher priced, more profitable markets. This can lead to a disconnect between economic efficiency and social goals. Thirdly, regulatory offices in developing countries may be very understaffed and staff may lack proper training, leading to *inadequate regulatory capacity*. Finally, regulation can create what is known as *regulatory risk*, which can have a sharply adverse effect on private investment. This links to the adequacy of the protection of private property rights in countries, the continuing commitment to regulatory contracts by governments, and the issue of regulatory capture.

Economists tend to view government policy in terms of achieving allocative and technical efficiency, leaving questions of income and wealth distribution to others. Regulators may ignore issues of poverty and affordability if their agenda is purely concerned with economic efficiency, perhaps because regulation is based on regulatory models from the US and Europe introduced by donor agencies. However, in lower income countries the welfare state tends to be little developed. Hence, it cannot be safely assumed that higher prices, say, for water services, so as to relate charges more closely to marginal costs, will be compensated for by larger welfare payments to the poor. Affordability will be affected if services are priced higher while incomes remain depressed.

Important issues relating to infrastructure regulation and poverty reduction in developing countries therefore include: the extent to which regulators in developing countries prioritise access by the poor to vital services, and if and how the affordability issue is addressed; what deficiencies in administrative and regulatory capacity exist and how they impact on the ability of regulatory offices to deliver a poverty reduction strategy; and what influences regulators when coming to regulatory decisions, including issues of information about the needs of the poor and regulatory capture by elite interests.

We now attempt to shed light on these issues by reviewing the existing evidence on infrastructure regulation and poverty reduction.

3. Infrastructure and Poverty

Research into the characteristics and determinants of household poverty in developing countries shows that the poor usually suffer from both a high degree of exclusion from public infrastructure services and from the poor quality of those limited services to which they do have access (Kirkpatrick and Parker, 2003). Moreover, although in one sense the urban and rural poor share a common poverty, there may be many regional and local differences, in particular, typically rural areas are much less well served by infrastructure services (Komivese *et al.*, 2003). For example, in Sir Lanka it is claimed that the reduction in poverty since the early 1990s has been slow and regionally uneven and poverty alleviation programmes have become vehicles for political patronage at the grassroots (Kelegama, 2003).

From the 1980s the deficit in developing countries in terms of infrastructure provision has been tackled by donor bodies in part by promoting privatisation and market liberalisation policies. The expectation is that privatisation will introduce superior private sector management skills and scarce capital and thereby improve services and raise economic growth. The hope is that privatisation will raise economic efficiency in sleepy and sometimes corruption-ridden state enterprises. Undoubtedly there have been successes. Where success has resulted, not only has the profitability of the firm risen, benefiting shareholders, but prices have fallen and the quantity and quality of output has increased. Governments have benefited from higher tax revenues and reduced subsidies to loss making firms, leaving more government funds available to tackle poverty (Estache *et al.*, 2000; Bortolotti *et al.*, 2002; Chong and Lopez-de-Silanes, 2004). Plane (1999) contends that the privatisation of the Ivory Coast electricity company led to the introduction of more efficient technologies. This in turn led to productivity gains and lower electricity prices. In some cases there has been more direct evidence of benefits to the poor. One study has suggested that the poorest groups seem to benefit the most from increased productivity and access brought about by privatisation and related reforms (Benitez *et al.*, 2003). Galiani *et al.* (2005) suggest that in Argentina private sector involvement in the provision of water has led to an increase in the number of households connected to supplies by 11.6% and a resulting fall in child mortality of between 5% and 7%, and by 24% in the poorest municipalities. Similarly, Leipziger *et al.* (2003) report that economic reforms have led to better access to infrastructure services and this had been important in improving child health.

Claims have been made that any adverse effects on the poor in developing countries resulting from privatisation and market liberalisation programmes have been greatly exaggerated. Typical is the following conclusion: ‘There is no evidence that such reforms hurt poor or rural consumers – at least in terms of access to services. Even when service prices increase, the share of poor and rural households with connections does not

decrease. And in many cases coverage increases, possibly because connection fees fall once service is no longer rationed. Indeed, case studies show that allowing entry and competition in infrastructure services can dramatically increase services for poor people." (Kessides, 2005, p.27). However, while it does seem that privatisation and the arrival of competition has often brought about widespread benefits to all consumer groups in telecommunications, the evidence relating to other infrastructure industries is less compelling. These industries are less conducive to cost-reducing technological change. Notable in this respect is the water sector where competition in the market is ruled out by the economics of water supply and sewerage services, particularly the high costs of building supply facilities and the costs of pumping water and treating sewerage (Kirkpatrick, Parker and Zhang, 2006b) Also, there has been a tendency to extrapolate from the experiences of one country and region (much of the published research relates to Latin America) to developing economies generally. A conclusion that all income groups in Argentina benefited from efficiency, quality of service and access improvements following the privatisation of utilities (Chisari *et al.*, 1999) and that the poorest groups may have benefited most (Benitez *et al.*, 2003), for example, does not necessarily mean that this result must apply in other countries.

It is to be expected that the results of reforms depend upon the nature and form that they take and the local political, economic and regulatory environment. This turns attention from simply looking at privatisation and market liberalisation as sufficient reforms in themselves to concern with the quality of state regulatory regimes. Moreover, because the poor are consumers and suppliers of labour, the effects of reforms need to consider not just prices and outputs but employment levels, working conditions and wages. A recent study of four Latin American economies suggested that privatisation had had no clear effect on prices, but that there had been adverse distributive effects on the poor because of redundancies in the privatised utilities. Suggestion that the poor still gained because of increased access to better quality services seems to require a judgement about welfare transfers between gainers and losers within the poor (McKenzie and Mookherjee, 2003; Kessides, 2005, p.28). Birdsall and Nellis (2003), after reviewing especially the results of reforms in the transition economies, have concluded that most privatisation programmes seem to have worsened the distribution of assets and income, at least in the short term. However, they suggest that this result is less clear for utilities such as electricity and telecommunications because of increased access by the poor to their services.

A number of other studies have also highlighted weaknesses in privatisations and the subsequent state regulation of the new private operators in terms of addressing the needs of the poor. In Manila the Metropolitan Water and Sewerage services was replaced by two concessionaires in 1997. One, Maynilad Water Services, pulled out of the concession in 2002. In the case of both concessions, strides were made to expand services to the poor although at higher prices (Cariño, 2005, p.12). In Sri Lanka privatisation has often preceded the establishment of regulation "reflecting the prominence accorded to fiscal

imperatives and leading to unfavourable distributional consequences" (Knight-John, 2005, p.3). A recent study of the welfare effects of utility privatisation in Argentina, Bolivia, Mexico and Nicaragua suggests that prices both rose and fell, but that there were adverse distributional effects on the bottom half of the income distribution because of job losses in the privatised utilities. Offsetting this was an improved quality of services, increased access for the poor and the changed structure of the public finances, which benefited the poor more than others (McKenzie and Mookherjee, 2003).

Similarly, studies by Harris (2003) and Clarke and Wallsten (2002) suggest that privatisation has had a marginal effect in terms of widening the access of the poor to infrastructure. The collection of studies by Latin American scholars in Saha and Parker (2002) provides numerous examples of worsened conditions for the poor and regulatory failings following privatisation and market liberalisation policies in Latin America. The study, by Foster *et al.* (2001) suggests that reforms in the electricity sector may not have benefited poorer households in rural areas. Clarke *et al.* (2004) find that connection rates to water and sewerage improved after the introduction of private capital in Latin America no faster than in cities that retained public ownership of their water systems. Other research into the performance of privatised water and electricity utilities in developing countries has found a mixed picture with some improvements, but with competition and regulation proving to be more important than ownership in explaining the performance differences, especially so in electricity generation (Zhang *et al.*, 2002, 2005) and telecommunications (Wallsten, 2001). Consistent with these findings, Gutierrez and Berg (2000) looking at privatised telecommunications in Latin America and the Caribbean, concluded that the quality of regulation is an important determinant of telecommunications density growing quickly.

4. Regulation and Poverty Reduction

Calderón and Servén (2004) argue that inequality decreases with an increase in the quantity and quality of infrastructure and that therefore infrastructure development can be a highly effective means of combating poverty. But certain other studies have raised doubts about whether the investment in infrastructure schemes resulting from privatisation has reduced poverty through faster economic growth. Comparing 19 major Latin American and Caribbean countries and two sets of comparator countries (fast expanding East Asian economies and middle income developing countries and 21 industrial economies of the OECD), Calderón and Servén (2005) found that, across the region, leaving aside telecommunications, private investment has failed to make good the loss of public sector investment during this period. The overall decline in investment in infrastructure in Latin America can hardly have been positive for economic growth and by implication longer-term poverty reduction. In addition, privatisation of infrastructure

has frequently been associated with reduced employment reflecting over-manning under state ownership (Mitlin, 2004, p.324, provides a number of examples; see also Bortolotti *et al.*, 2002). It is to be expected that many of those made redundant were lower paid workers. Such evidence is also consistent with the evidence from the transition economies of Central and Eastern Europe where privatisation appears to have increased economic efficiency but at the cost of higher unemployment and greater poverty (Obser, 2005, p.260). Overall, the evidence suggests that regulation may have been ineffective in ensuring that privatisation benefited the poorest groups.

This conclusion is supported by evidence from Latin America, often cited as a region where privatisation of infrastructure has benefited the poor, but where serious regulatory deficiencies have been identified: "a persistent complaint is echoed across the region: the weakness of regulation hinders tariff negotiations, prevents erosion of monopoly rents and hinders the sharing of productivity gains with consumers" (Ugaz and Waddams Price, 2003, p.12). The privatisation of telephones in Argentina was accompanied by very weak regulation with overlapping functions between the government department and the new regulatory agency. The outcome of reform seems to have been that most residential consumers gained from telecoms and electricity price changes, but that the poorest received the lowest absolute gains and gained a lower than average proportion of their incomes. In gas, water and sewerage there have been losses across the board with the largest relative losses in income falling on the low-income groups. "In sum, in the case of Argentina the effects of rebalancing in all the utilities seems to be regressive, with the main negative effects on the poorest segment of the population" (Ugaz and Waddams Price, 2003, p.15).

Elsewhere failures to benefit the poorest have also been recorded. For example, in Ghana since 2003 the Public Utilities Regulatory Commission has tried to focus on social policy, including issues of affordability and ensuring consumers access to safe, adequate, efficient and non-discriminatory services especially for water services (Aryeetey and Ahene, 2005, pp.17-18). However, the World Bank and the IMF imposed an automatic water rate adjustment mechanism on PURC as part of a package of loan conditionalities. This ensured that water rates adjusted automatically as the local currency appreciated or depreciated against the dollar (ibid., pp.18-19). In the Philippines the international financial institutions made electricity reform, including privatisation, a condition for loans and other assistance. The result, it has been suggested, has been reform that has failed to take into account the state of un-readiness of the economy and its needs and has permitted only the Filipino elite and foreign investors to participate in the process (Cariño, 2005, p.5). A recent research report on infrastructure by Kessides (2004) for the World Bank recognised regulatory failures and called for new regulatory safeguards, including safety nets and tariff rebalancing schemes, with pricing policy striking a balance between economic efficiency and social equity.

Where concession agreements are used in which the state contracts out the management of infrastructure services to the private sector, contracts may or may not prioritise poverty reduction. For example, exclusivity clauses in concession agreements can make alternative supply sources, such as community standpipes and private wells, illegal, impacting adversely on the poor (Ugaz, 2003, p.84). Service obligations can be built into regulatory contracts to ensure that services are expanded into poorer areas. However, it is just as possible that regulation will exacerbate poverty if such concerns do not weigh highly within regulatory offices, particularly at a time when cross-subsidies are removed after the introduction of competition (for a useful discussion of the issues, see Chisari *et al.*, 2003). Also, the benefits from concessions may be dissipated by small numbers of firms bidding for contracts. This can lead to less beneficial concessions for developing countries and, ex post the inauguration of the contract, less effective regulation of services because of a lack of alternative suppliers for government to turn to in the case of contract default. In such circumstances, the terms and conditions imposed by bidding companies may run counter to a poverty reduction agenda because expanding services to the poor may not be profitable. Also, governments may not recognise the legality of dwellings in shanty towns within and around major cities and, as a consequence, those living in squalid conditions may continue to be deprived of services such as electricity, water and sewerage. However, it is the case that a number of concession agreements have included service expansion targets to benefit the poor, which again highlights the importance of effective regulation in the design and monitoring of concession agreements.

Where failures exist in tackling poverty issues, the cause may lie not in the objectives of the regulatory bodies but in a failure of regulatory capacity. For example, most regulatory agencies in Asian countries have been created since 2001 and are ill-equipped and employees are ill-trained to pursue effectively both economic efficiency and poverty objectives. A recent survey of 13 Asian countries found that 80% of regulators had no access to training and regulatory offices were usually understaffed. The report concludes: "Asia's governments rely too much on under-equipped and unsupported independent regulators to carry out tasks that are beyond their capabilities" (Jacobs, 2004, p.4). In Ghana, a number of new independent regulatory institutions have been created and authorised to carry out regulatory functions in order to protect the public interest and promote fair competition. However, these new institutions have faced major difficulties in attracting key professional staff as a result of the limited funding they have received (Aryeetey, 2004, p.318). In Latin America there is often a lack of political support for independent regulation and a lack of commitment to maintaining regulatory independence (Ugaz, 2003). In countries such as Chile privatisation has not been accompanied by sufficient effort to increase competition in the market (Paredes, 2003) and competition policy cannot be relied upon in developing economies to control privatised monopolies because competition law is either unformulated, inoperative or

subject to political intervention (Mehta *et al.*, 2003). Another area of deficiency seems to be economic and financial data. Without reliable data regulators find it difficult to regulate effectively. Statistics at the sub-national level appear to be especially inadequate, as was highlighted recently in a study which looked at the availability of statistical data in countries such as Bolivia, Cambodia and Malawi (Paris21, 2004). Where multinational companies are service providers, profits may be massaged through transfer pricing schemes and companies may not provide comprehensive accounts at the national level.

Also, regulatory policies may backfire or be "captured". For instance requiring suppliers to provide services to the poor at the same price as to other consumers can undermine any financial incentive to expand services. In Zimbabwe a failure to re-align prices with long-run marginal costs compromised the planned expansion of the electricity system (Mangwengwende, 2002). In Bangladesh further entry into some industries including electricity was stopped by government on the grounds that there was already adequate competition (Mehta *et al.*, 2003, p.15). It is difficult not to conclude that rent seeking groups with dominant positions in Bangladeshi markets were instrumental in shaping this decision, providing an example of "regulatory capture".

Counterbalanced against this, regulators in some countries have successfully adopted pro-poor policies. In particular, Chile has operated a subsidy policy so that subsistence-level water and sanitation services should account for no more than 5% of a household's income and eligibility for subsidies for a wide range of other services has been means tested. In Peru pay phones in rural areas have received subsidies and the poor are more likely to use pay phones. In India, village public telephones and public call offices have been promoted in both urban and rural areas to make telecommunications more accessible to the poor (Garg *et al.*, 2003). In an attempt to promote universal service the Brazilian Agency of Electrical Energy has decided that consumers should no longer pay for electricity connection charges (ANEEL, 2003). Other examples include a recent law passed in South Africa on water services, which states that every household has the right to a certain amount of free water per day, and the introduction in Buenos Aires of a bimonthly charge to spread the cost of new water connections over five years, interest free. This was specifically introduced to make water services more accessible to the poor (although it may have had the side-effect of curbing the expansion of the water network; Alcazar *et al.*, 2000). Further measures were introduced in 2002 including social tariffs which benefit most pensioners and the poor in specific areas.

What is little covered in the existing literature is a discussion of the legal requirements of regulatory offices in developing countries in relation to pro-poor issues. An exception is a recent study of regulation in Ghana, which reveals that the law requires that when negotiating prices the Public Utilities Regulatory Commission takes into account the consumer interest, investor interest, costs of production, the financial integrity of the public utility, the economic development of the country, the best use of natural resources,

uniformity of prices across the country, and competition amongst utility companies (Aryeetey, 2004, p.302). However, it is not clear from this long list where poverty reduction features and what weighting, if any, it receives in practice. In other cases it may be that regulators have no specific mandate to pursue the poverty agenda but in reality do so. For example, in utility sectors in India "poverty alleviation is not on the direct or indirect agenda of regulation… It is not a specified objective of regulation" (Garg *et al.*, 2003, p.7). However, many regulatory commissions in the electricity sector in India seem nevertheless to have introduced innovative approaches linking electricity access and tariffs to income (ibid., p.9). Government schemes such as the Kutir Jyoti Programme established in 1998/99 exist to encourage electrification of households below the poverty line.

5. Conclusions: a Future Research Agenda

From the above review of the existing evidence it is clear that knowledge about infrastructure regulation and its impact on poverty reduction is currently both patchy and sometimes contradictory. In particular, where privatisation has occurred and regulatory agencies introduced, much of the favourable evidence comes from Latin America in the 1990s. However, it is not self-evident that this experience will be replicated elsewhere, and even there regulatory failures have been identified. What seems clear is that a structured research agenda is needed to improve both understanding of the objectives and outcomes of regulation in developing countries in relation to poverty reduction and the effectiveness of regulatory policies. This research should centre on providing answers to the following questions.

1. *To what extent do regulators in developing countries actively prioritise access by the poor to vital services and what measures do they adopt to improve access and prevent disconnections for payment failure? Are tariff schedules authorised that prioritise income distribution goals over allocative efficiency?*

There is evidence that some regulators are prioritising services for the poor but the results are uneven. Some regulators are not mandated to pursue poverty reduction but nevertheless appear to do so, while others may be so mandated but fail to do so. Knowledge is limited on the legal requirements and actions of regulators in relation to poverty reduction.

2. *How is the affordability issue addressed and how do regulators interface with other government departments concerned with social welfare – is there joined up government on poverty reduction? Are subsidies or cross-subsidies used to pay for connection costs and to reduce volume charges for low-levels of consumption, for example through the use of "life line" tariffs?*

There is evidence that affordability concerns are real with the poor often finding it difficult to afford the improved infrastructure services offered after privatisation. However, as the above review has highlighted, information is contradictory on how well the interests of the poor are being met.

3. *What administrative and regulatory capacity exists and how does the resourcing of regulatory agencies impact on the ability to tackle poverty issues?*

There is evidence of significant administrative weaknesses in regulatory agencies in developing countries. In particular, regulatory offices tend to be undermanned and lack the necessary regulatory skills and the data bases needed to regulate effectively are absent. The extent to which resource deficiencies thwart the achievement of regulatory policies aimed at helping the poor is unclear, but they might be expected to be significant.

4. *To what extent are regulatory offices in developing countries subject to capture and to what extent does this bias regulatory policy against reducing poverty? To what extent do regulators attempt to obtain information from the poor or their representatives so as to ensure that regulatory policies do not ignore their needs?*

There is evidence from our review of the evidence that some regulatory offices do endeavour to consult the poor, but it is unclear how universal this policy is. It is particularly unclear whether the views of the poor are influential in the face of better resourced interest groups perhaps with high level contacts within Ministries.

Inequality of access to basic services, which is linked to infrastructure provision, is regarded by many as the basic challenge of development policy (World Bank, 2003). The theme of this paper is that effective and efficient regulation of infrastructure services has the potential to reduce both absolute and relative poverty in developing countries. However, as the paper has demonstrated, there remain large gaps in our knowledge of if and how regulators are actually approaching poverty as an issue.

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