Assessing the Economic Impact of competition: Findings from Bangladesh

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July 2010

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Acknowledgements

This research was financed by the UK Department for International Development (DFID). However, the views presented in this paper are those of the authors and do not necessarily represent the views of DFID or the UK Government.

The authors wish to thank all those who provided information and data, comments and other inputs into this report, but take full responsibility for any errors or omissions the report may contain.
# Contents

Tables and Charts ........................................................................................................ iv  
Executive Summary ....................................................................................................... v  
1. Introduction............................................................................................................. 1  
2. Overview of competition policy framework ......................................................... 2  
3. The sugar market .................................................................................................... 4  
4. The cement market ................................................................................................ 9  
5. The mobile telephony market ................................................................................ 12  
6. Conclusion ............................................................................................................. 21  
Bibliography ................................................................................................................ 23
Tables and Charts

Table 1: Sugar market share of different participants ................................................. 4
Table 2: Sugar market structure across the 5 case study countries ............................. 6
Table 3: Cement market structure across the 5 case study countries .......................... 9
Table 4: Market structure and regulatory information about the 5 markets ............... 13
Table 5: GDP (PPP) per capita of case study countries .............................................. 15

Chart 1: Average sugar production (tonnes/hectare) in case study countries 2007 ....... 5
Chart 2: Retail cement price per 50kg bag 2007/08 (USD) ........................................ 10
Chart 3: Telecom subscribers in Bangladesh ............................................................... 12
Chart 4: Average mobile tariff in Bangladesh ............................................................. 13
Chart 5: Average per minute mobile tariff (USD) ....................................................... 14
Chart 6: Mobile subscribers per 100 inhabitants ....................................................... 15
Chart 7: Telecoms investment per inhabitant in 2006 (USD) .................................... 16
Executive Summary

The Overseas Development Institute has been conducting research examining:

- how the policy framework (such as the existence of a competition authority, degree of state ownership, openness to trade etc.) affects the degree of competition present in a given product market; and

- how the degree of competition affects market outcomes such as prices, competitiveness, innovation and access to services.

The policy framework and economic performance has been compared in four product markets (sugar, cement, beer and mobile phone services) across five countries (Bangladesh, Vietnam, Zambia, Kenya and Ghana). This paper summarises the findings from Bangladesh. A synthesis of the broader findings based on the results from all five countries has been published in an ODI Research Report1.

Key findings from Bangladesh are as follows:

- Bangladesh does not have a competition law or authority, although there is now a Competition Bill in train. However, the progress of the Bill has been somewhat delayed, and as also observed in Ghana, the political will to implement a competition law is limited, and there is some opposition from business groups. One way to tackle vested interests, who oppose reform, is to establish and facilitate coordination amongst other interest groups who stand to gain from reform. This includes consumers, both household (who can be mobilised through consumer groups) and industrial, who may gain considerably from lower priced inputs. It also includes potential new entrants to the market, who can make their voices heard through business associations.

- Bangladesh appears more competitive – with more players and lower prices - than most of the other countries we studied for this research, in the sectors of focus. However, a number of potential competition problems have been identified in this study, and also by the media and civil society in Bangladesh, that would warrant investigation by a competition authority if one existed, including allegations of a possible cartel amongst the private sugar refiners, and suggestions of possible coordination of pricing and output amongst cement producers.

- There are also wider government policies that are undermining competition in the markets we studied, including government involvement in sugar production, which is inefficient and represents a distortion of the market, and regulatory concerns in the mobile telephony market, which may be undermining competition and wider rollout and thus constraining wider penetration of mobile services within Bangladesh.

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The cement industry in Bangladesh appears to be relatively competitive compared with the other countries we studied, with many market players, and healthy price and non-price competition. (This is making it internationally competitive, and there is considerable expansion expected, to take advantage of growing domestic and international demand.) But in contrast with the African countries studied, there seem to be too many players, with many operating below the minimum efficient scale. Thus despite the predicted expansion of capacity, considerable exit of smaller firms, and consolidation into larger firms, is also expected going forward. Although we were told that some kind of coordination is being attempted by the industry to prevent these failures – with such coordination likely being anti-competitive in nature – it is not clear how feasible this would be given the number of players. Nonetheless, this represents a risk to competition going forward, as does consolidation, so should ideally be monitored by the competition authority, if and when that is established.

The state led sugar industry in Bangladesh is, in common with the state led sugar industries in Kenya and Vietnam, inefficient, uncompetitive, highly subsidised, and in urgent need of reform. It may also distort the market facing the private sugar refiners, though only at the margin as the private sugar importers and refiners serve the majority of the market. Nonetheless, the Government objective of stabilising sugar prices could be met in more efficient and less distortionary ways than through subsidised domestic sugar production. Some concerns were expressed about a possible cartel amongst the sugar importers or wholesalers, which may warrant investigation by the competition authority in future.

Bangladesh’s mobiles market appears fairly competitive, and enjoys relatively low prices. However, low investment and penetration in the market are a concern. It appears that some regulatory issues may be inhibiting fair competition and growth in the sector. For example, there is a regulated price floor, around which prices were hovering at the time of the mission, and which prevents prices falling to market determined levels. In addition, the level at which termination charges have been set is relatively high, which makes it very difficult for smaller and newer operators to get a foothold in the market, and gives a significant advantage to the firms with the most subscribers. However, recent changes in regulation in the mobiles sector allowing infrastructure sharing, and entry by a new player which specialises in providing mobile services in rural areas, bodes well for competition and the future development of the market.

Overall, the results of the study showed that markets characterised by more competition, with more players, more dynamic entry and exit, and more intense rivalry for customers (e.g. through price promotions, special offers, and marketing campaigns etc.) tend to deliver better market outcomes. These outcomes include lower prices and better service for consumers, as well as more internationally competitive production, which can generate increased exports, foreign exchange, jobs and industrial growth. It also showed that the introduction of competition – or indeed even the prospect of increased competition - can have a significant and immediate impact on prices.

However, the research has also shown that competition is often constrained, for various reasons. Problems such as market dominance and anti-competitive practices are very common in some markets, including the cement and beer industries. Thus competition
authorities have an important role to play in monitoring, publicising and tackling such behaviour.

However, it is also clear that government policy and state involvement is very important in determining competition and market outcomes, whether it be through regulation and privatisation, state ownership, price controls, subsidisation, import protection, industrial policy or simply self-serving business deals. Although some of these wider policies may reflect other important policy objectives, it also suggests that the potential competition impact of these wider economic policies should be given consideration wherever possible, in order to ensure a good understanding of the overall costs and benefits.

Through comparison with the other countries studied, (which either do not have competition authorities, or have only recently introduced one), it seems the competition authorities in Zambia and Kenya have contributed to the development of a culture of competition, by raising the profile and understanding of competition issues, and by building awareness of the costs of competition problems. This is helping to arm the consumer movement with the evidence it needs to demand improved market outcomes.

Competition authorities have also played an important role in monitoring market behaviour. Simply the existence of a competition authority, and the knowledge that it can monitor and publish details of any problems, can serve to constrain anti-competitive practices or abuse of dominance by firms, who fear the consequences (which may be bad publicity at the very least), if they infringe the law.

Although competition authorities may sometimes suffer from political interference when trying to tackle competition problems involving vested interests opposed to reform, they can still provide an important counterweight in government against vested interests wishing to pursue corrupt or self-serving business policies at the expense of consumers and the wider economy.

Ultimately, competition is fundamental to a well-functioning market economy, and appropriate competition policies and the establishment a competition authority can help to ensure markets work more efficiently and effectively. Competition can help undermine corruption, and facilitates international competitiveness, private sector development, and employment creation, which are in turn crucial for achieving the wider economic growth that is needed to lift developing countries out of poverty.
1. Introduction

The Overseas Development Institute has been conducting a research project investigating the impact of competition in four product markets (sugar, cement, beer and mobile phone services) in five countries (Bangladesh, Vietnam, Ghana, Kenya, and Zambia). However, the beer market was not studied in Bangladesh since the country does not have a formal beer industry.

This paper summarises the findings from Bangladesh. The findings from all the countries have been synthesised and published in an ODI Research Report². The paper first provides a brief overview of the competition policy framework, then discusses the key competition issues that were identified in relation to each of the 3 product markets studied in Bangladesh, and draws some comparisons with the findings from other countries – it does not provide comprehensive analysis of each of the markets.

Where limited published or independent information is available, the findings are based largely on interviews which were undertaken during a field mission that took place in March 2009. The paper has subsequently been updated to discuss any major developments that have taken place in the markets since then.

² Ellis & Singh (2010)
2. Overview of competition policy framework

Bangladesh does not currently have a competition law and policy framework that is being applied, though the Monopolies and Restrictive Trade Practices Ordinance (MRTPO) enacted in 1970 by the Government of Pakistan when Bangladesh was a constituent part as East Pakistan, remains on the legislative books. However, neither the government nor the private sector has ever attempted to invoke this law.

Despite this, the prevalence of competition-related problems in Bangladesh has been widely discussed in the media. Press stories in the daily newspapers over the past few years have written about the existence of alleged cartels in the purchase, distribution and sale of several staple products such as rice, sugar, potatoes and various other food products including fresh vegetables. It has been claimed that these cartels may exist in part due to the monopsonistic market power of wholesalers who also provide finance to farmers, control truck transportation and provide refrigerated storage facilities. These kinds of press stories may have helped to strengthen support for reform, and as such highlight the importance of analysing and publicising the costs of anti-competitive practices.

A draft Competition Act 2008 has been prepared by the Ministry of Commerce and is currently being considered by Government. During the stakeholder consultations facilitated by the Ministry of Commerce in 2008/9, several business representatives indicated their concerns regarding the adoption of the proposed draft competition bill. There were concerns that the draft bill “had been drawn up by foreign experts”, that the bill was a copy of the Indian competition bill, and that the consultants sought to introduce a one size fits all plan, without regard to the level of development, legal structure or business practices within Bangladesh. The other concern raised by stakeholders was that the previous bill (MRTPO of 1970) itself had never been implemented because of a lack of capacity and skilled technical staff to implement it, so what guarantee was there that the new law would be implemented effectively? Furthermore, what would prevent any new competition authority from using its powers as an avenue for further rent seeking by government? Some even saw the bill as a ploy by the government to intimidate and coerce businessmen. These concerns are important but to a large extent misplaced.

The Bill is indeed based on international best practice. This means that it benefits from lessons learned from experience with competition law from across the world. The level of development does not reduce the need for a sound competition framework and law. Indeed, competition problems are potentially more serious in a country with a weaker private sector, where one or a few dominant firms can take control. Indeed, the media coverage mentioned previously suggests Bangladesh may suffer from significant competition problems, with substantial costs to consumers and to Bangladesh’s economic performance more widely.

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3 Based on stakeholder consultation workshop facilitated by Ministry of Commerce and attended by ODI study team in May 2009, Dhaka
It is true that a competition authority will be most effective if it is independent and staffed with competent technical personnel – and that there has to be adequate political will to implement it effectively. It is hoped that this will be achievable in the Bangladesh context. It would ideally require a bill which sets up an authority with sufficient independence, and which permits the selection of its senior staff and Director through a meritocratic, non-political and transparent process. There will also be a requirement for capacity building of local staff, perhaps through schemes which send staff to undertake training and qualifications and work on secondments in competition authorities in the developed world.

The opposition from some private sector players serves to illustrate how vested interests and lack of understanding can potentially stymie the introduction of a competition bill and authority, even in a country where there are many anecdotal reports of anticompetitive business practices. A competition bill would in fact be to the advantage of many businesses, who could potentially benefit from new market opportunities and lower input prices which would make them more competitive on world markets. The benefits would accrue more to new businesses than incumbent businesses who have the vested interest of preventing change. Thus reform should promote entrepreneurship, innovation and risk-taking, and will reduce the incentives facing young entrepreneurial Bangladeshis to emigrate and seek opportunities abroad.

The Ministry of Commerce is championing the introduction of the Competition Bill and working to align stakeholders behind the pro-reform agenda. The Ministry has also sought the assistance of the IFC in Bangladesh and a pool of experts to help build the evidence for the needs for pro-competitive reform and to develop a Competition Bill based on best practice experience from around the world. The IFC and DFID have also commissioned a number of studies which are looking at the degree of competition in various product markets in Bangladesh. It is hoped that these studies will build the evidence base and help to convince policy makers and Government Ministers that the proposed Bill is not about stifling domestic industry but rather that it is about fostering competition, entry, efficiency, consumer welfare and growth in the domestic economy. It is our understanding that the draft law is now at an advanced stage and it is hoped that the Bill will be passed by Parliament this year. The government enacted a Consumer Protection Law which has some relevant competition provisions dealing with fraud and output and price manipulation, although there is no institutional machinery to enforce the law as yet.

Some possible competition problems are identified below in relation to the markets studied, as well as analysis of how government policies affect competition in those markets.
3. The sugar market

This study focuses on refined (white) sugar consumed by households – it does not consider raw sugar, or the more highly processed white sugar used for example in the pharmaceutical industry, as these are considered to constitute separate markets.

Sugar consumed by individuals comes from three main sources in Bangladesh:
- private sector sugar refiners, who import raw sugar and process it;
- sugar produced by the Bangladesh Sugar and Food Industries Corporation (BSFIC) which is run by the Government; and
- imports.

The estimated share of sugar coming from each of these sources is shown in Table 1 below.

Table 1: Sugar market share of different participants

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSFIC</td>
<td>10-15%</td>
</tr>
<tr>
<td>Direct Import</td>
<td>5-10%</td>
</tr>
<tr>
<td>Private sector refiners</td>
<td>80%</td>
</tr>
</tbody>
</table>

Source: ODI research, interviews with stakeholders

The private refiners

At the time of the mission, there were four private companies in the market involved in the refining of imported raw sugar. All are conglomerates (i.e. sugar is only one of their products), and are companies with a long heritage in the edible items market. According to interview evidence, they are also profitable. The largest has an estimated 46% market share.

Because these four refiners are large conglomerates, they have access to well-established distribution channels which they also use to distribute other edible products that they manufacture. It is possible that a new entrant in the sugar refining sector would face difficulties accessing distribution channels and this may represent a barrier to entry. However, according to a newspaper report another conglomerate did enter the sugar market in 2009\(^4\). As a conglomerate, this company is likely to have already had a developed distribution network.

There have also been newspaper reports suggesting coordination within the sugar market, with allegations that the private refiners and / or the wholesalers were restricting supply in order to increase prices\(^5\). It has been suggested that this has been facilitated by the industry association, to which all four refineries belong. However, the study team has been unable to verify the validity of this report. This would be an issue that a Competition Authority could investigate, if one is established in Bangladesh.

\(^4\) The Financial Express, April 5, 2009
Relatively little price variation was observed between the private refineries at the time of the mission, though interview evidence suggests they may compete in other ways e.g. through marketing and distribution.

BSFIC sugar

The Bangladesh Sugar and Food Industries Corporation (BSFIC) is an apex body which manages and controls sixteen state owned sugar mills which buy sugarcane from farmers in Bangladesh and process it. As shown in table 1 above, only around 10% of sugar consumed in Bangladesh is being supplied by BSFIC production. BSFIC sugar cane production is very inefficient. Chart 1 below shows tonnes of sugar produced per hectare of sugar cane grown in each of the case study countries.

Chart 1: Average Sugar Production (Tonnes/Hectare) in Case Study Countries, 2007 (or closest year for which data available)

According to the chart, recovery of sugar from cane is relatively low in Bangladesh as it has the second lowest tonnes/hectare production. Bangladesh’s sugar growing regions are characterised by many smallholder farmers, which reduce scale economies and increase transaction costs associated with coordinating cane supply from many farmers.

Traditionally the government makes formal contracts with mill zone sugar producers to produce and sell all of their production to government sugar mills. However, the study team found that there is now a trend for farmers not to sell all of their sugar production to government mills (e.g. in order to produce more handycraft sugar products such as “jaggery” for local consumption). This is affecting production levels at the BSFIC mills. There is also evidence that some farmers are switching from growing sugar to growing seasonal vegetables and other cash crops. This suggests that the price paid for sugar cane under the BSFIC scheme is too low. The use of obsolete technology in the government mills was also cited as a problem, and the mills have been making a loss for some time.

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6 Jaggery (also known as Gur) is a traditional unrefined sugar consumed in Asia, that is brown in appearance
Table 2 shows the structure of the sugar markets in each of the case study countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of firms 2008</th>
<th>State ownership</th>
<th>Market shares of leading firm</th>
<th>Imports as % domestic consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>7</td>
<td>Yes, the State owns nearly all mills</td>
<td>54% (firm with most private sector participation)</td>
<td>15%</td>
</tr>
<tr>
<td>Zambia</td>
<td>3</td>
<td>No</td>
<td>93%</td>
<td>0%</td>
</tr>
<tr>
<td>Ghana</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>40</td>
<td>Yes, high degree of state ownership</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>16 SOE mills &amp; 4 private refiners</td>
<td>Yes, State owns nearly all mills</td>
<td>47%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: ODI, various sources

The problems affecting the government run sugar industry in Bangladesh are very similar to those experienced in both Vietnam and Kenya, where there is also a high degree of government ownership and intervention. In all three countries, the use of obsolete technology and inefficient farming methods results in poor cane yields and sugar outputs, and the government regularly bails out loss making state owned sugar mills.

In stark contrast, Zambia, which has 3 privately owned sugar producers, produces the highest amounts of sugar per hectare (see chart 1) and is a very profitable, internationally competitive industry. Cane production in Zambia occurs mainly in estates owned by the sugar mills, which means that the mills benefit from scale economies, reduced transactions costs, a reliable supply of cane, and best practice farming methods. In contrast, in Vietnam, Bangladesh and Kenya, cane is grown mainly by smallholder farmers who have grown cane for many generations on small plots of land. Under these arrangements, production is less efficient, cane supplies to the mills are more erratic and the mills face higher transactions costs.

The Government heavily subsidises the price of BSFIC sugar. At the time of the mission we were told that the cost of production of local sugar was around tk.62/kg\(^7\), but that it was sold in the market at around tk.35/kg. Such subsidisation is likely to be necessary if BSFIC sugar is to compete with sugar from private refineries, (except at Ramadan, when

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\(^7\) Based on interview with BSFIC
prices charged by the private refineries are likely to increase in response to increases in demand). However, given the fairly small market share of BSFIC sugar, and the fact that much of it appears to be sold at Ramadan, it is unlikely to generate much of a distortion or crowd out much private sector activity during normal periods.

BSFIC data shows that the mills in Bangladesh have been making losses consistently since at least the beginning of the 1990s. Future production by BSFIC mills is under threat because of these continuous losses and also reduced sugarcane production.

It appears that the Government has maintained the mills (through subsidisation) for two reasons. Firstly, to support agricultural livelihoods - because 2 million people are directly involved in sugar production and another 3 million people are involved indirectly. This is a matter of concern given that so many jobs depend on a sector which is fundamentally unsustainable and has an uncertain future. The second reason for maintaining these mills is because during Ramadan BSFIC floods the market with much of its stock, in order to prevent over-heating of prices of an essential commodity at a time when sugar consumption increases greatly. This is probably not the most efficient way for the Government to prevent overheating of prices. The Government could achieve the same outcome with price controls, or by importing white sugar and releasing it onto the market at Ramadan time, thereby saving on the subsidies required to keep the sector alive, and freeing up the government budget for other purposes.

The ongoing subsidisation of BSFIC sugar is increasingly recognised as being unsustainable, and the government is now in the process of privatising several of the mills. The question as to whether Bangladesh could produce sugar competitively if the industry was run efficiently, or whether it would be more efficient to simply import sugar, continues to be debated within Bangladesh. The domestic industry has been maintained artificially in order to create rural livelihoods, but it is not clear whether the removal of state involvement would actually result in an end to the industry, and the loss of associated livelihoods. It could be that a privately run industry would generate more sustainable livelihoods. Even if it did not, it may be that there are other crops that could be grown instead, in which Bangladesh could be internationally competitive, which would be an alternative source of livelihoods in rural areas, resulting in a net benefit to the country if resources that are currently being used inefficiently to produce sugar, were diverted to more efficient production of other crops.

This is a question faced by the other case study countries too e.g. Kenya, which is facing the same pressure on its state led, internationally uncompetitive sugar sector. The lesson from looking across all 5 countries seems to be that protected, state led sugar industries are rarely successful, are internationally uncompetitive, and hence become a significant drain on the public purse, with a high opportunity cost (in terms of other budgetary needs) which means that they and associated livelihoods are ultimately unlikely to be sustainable.

This suggests that the state should disengage from sugar production, allowing the private sector to take over if internationally competitive domestic production is viable, and if not then allowing resources to be diverted to sectors that have better growth prospects.
**Imported sugar**

Imports make up 10% of domestic sugar consumption. Up to June 2002, sugar was imported by BSFIC & Trading Corporation of Bangladesh (TCB) only. However, sugar importation has now been liberalised and sugar can now be imported without any restriction.

The study team heard reports that there was some dumping of Indian sugar in the Bangladeshi market. At the time of the mission, we were told that India subsidizes sugar at a $60/MT rate, which enables their producers to sell at tk.24/kg to Bangladeshi market (whereas the local market price is around tk 0.35/kg), which is a further market distortion. This raises the policy dilemma regarding the fairness of competition from other countries, who may subsidise their own production, directly or indirectly. Dumping does not strictly come under the purview of competition law, but it is dealt with under the WTO, which provides a mechanism for countries to challenge trading partners on dumping allegations, and take action if necessary. Typically anti-dumping action means charging extra import duty on products from the particular exporting country in order to bring its price closer to the “normal value” or to remove the injury to domestic industry in the importing country.
4. The cement market

At the time of the mission there were 34 cement factories operating in Bangladesh, with a total national production capacity of 21.4m metric tonnes according to the Bangladesh Cement Manufacturer’s Association. Many of these cement factories were fairly small. Of the largest players, there were two large local conglomerates (which produce cement along with many other products) and three of the very large multinational cement firms. There was one state owned enterprise, with a very small production capacity. The sector has been consolidating since then, with small players exiting the market, although there has also been new entry, and investment in new capacity by existing players.

According to interview evidence, the best performers are either the leading multinational companies with financial power and technological acumen backed up by global reputation, or local companies who have adopted good marketing strategies and have country wide distribution channels.

The structure of the cement industry in Bangladesh contrasts with the structure in the African countries we have studied, as shown in Table 3 below. The cement sector is often highly concentrated in countries across the world, due to the cost structure (as it has high fixed costs compared with variable costs) and large minimum efficient scale of production this implies. A highly concentrated market structure often leads to limited competition, however, and the cement industry has been a source of concern for competition authorities in many countries across the world. However, the five countries in our study have very different market structures, as shown in table 3 below, which facilitates some interesting comparisons.

Table 3: Cement market structure across the 5 case study countries

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of firms 2008</th>
<th>State Ownership</th>
<th>Estimated market shares of leading firm</th>
<th>Head of population (millions) per cement company8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>3, but with joint ownership</td>
<td>1 SOE</td>
<td>65%</td>
<td>13.6</td>
</tr>
<tr>
<td>Zambia</td>
<td>2</td>
<td>No</td>
<td>85%</td>
<td>4.42</td>
</tr>
<tr>
<td>Ghana</td>
<td>2</td>
<td>No</td>
<td>64%</td>
<td>12.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>90</td>
<td>33 SOEs</td>
<td>40%</td>
<td>0.99</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>34</td>
<td>1 SOE</td>
<td>12%</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: ODI, United Nations Population Division

The retail cement price across the 5 countries is shown in chart 2 below. While other country-specific factors will also of course affect prices, such as input costs, and the costs of doing business, it is interesting that prices are highest in the most concentrated markets, and lowest in the least concentrated market. Zambia (which has a near monopoly with 85% market share held by the leading firm as shown in table 3 above), has the highest price, while Vietnam and Bangladesh have the lowest prices.

Chart 2: Retail Cement Price Per 50kg Bag 2007/08 (USD)

Source: ODI research

More market players tend to generate more competition. Indeed, there is evidence of a high degree of price & non-price competition in the Bangladeshi cement market. Firms attract customers by offering credit, technical support and offering various promotions.

However, as previously noted, the minimum efficient scale in cement production is quite high. According to one source the minimum efficient size for a cement plant is around 1 million tons of production a year⁹. Of the 34 firms in the industry in Bangladesh, only seven are operating at or above this size. This suggests that market consolidation is likely, with smaller cement producers being taken over, or exiting the market. Indeed, this has already been happening. In 2002 there were 70 companies in operation, whereas in 2008 there were 34. This consolidation is likely to continue.

While there are short term costs associated with such failed entry, the fact that there was entry on a reasonable scale – albeit only on a temporary basis – bodes well for the degree of competition and hence health of the market going forward, as it suggests there are few barriers to entry and exit, and that this is a relatively open market. The fact that

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⁹ www.philippelasserre.net/contenu/.../Global_Cement_industry.pdf
the market is contestable in this way may help to discipline the remaining players, as they know that if the prices they charge become too high, they may attract new entry again.

We were told that the Bangladesh Cement Manufacturer’s Association (BCMA) was set up in response to these widespread failures, with the aim of facilitating agreements between the firms on pricing and output levels. If that is the case, and if they succeeded, this would probably be illegal if there was a competition law in place, as it would represent collusion. It is not clear whether such agreements would be sustainable and credible however, given the high number of players in the market. Collusion is usually only sustainable when there are a small number of players in the market and when the market is fairly stable in size.

It is interesting that despite the fact that there is a situation of excess supply in the market and industry consolidation is already happening, the four largest cement firms plan to expand capacity going forwards. This could be because of projected future growth in domestic and export demand. However, it could also be that they are signalling their commitment to the market, so as to discourage further entry or expansion by other firms, reduce competition, and secure themselves a larger share of the market in future.

Some of the cement firms we spoke to revealed they have some distributors who do not stock the products of other companies. Exclusive agreements may be used to create a barrier to entry by denying rival firms access to the best distributors or retail outlets, thus forcing new entrants to set up their own distribution networks. In Bangladesh, however, the market appears to be quite competitive, so this does not appear to be a problem.

Overall then, the cement industry in Bangladesh appears to be relatively competitive compared with the other countries we studied, and generates little cause for concern from a competition angle, though further consolidation is likely going forward and coordination through the trade body represents a risk. During the ODI Dissemination Workshop held in Dhaka in March 2010, cement company representatives indicated that they would support the introduction of a Competition Law and Authority in Bangladesh. The current high degree of competition and low prices are good news for the economy as a whole, as they allow for cost efficient construction and infrastructure development, which underpin economic growth.
5. The mobile telephony market

The mobiles market is one where liberalisation and the introduction of competition have had clear benefits in terms of falling prices and increasing coverage over time across the world. Bangladesh is no exception; mobile services started in 1989, and the subsequent introduction of new entrants has coincided with falling prices and rising mobile penetration (see charts 3 and 4 below). There was a monopoly mobile operator until 1996 when two further licenses were awarded. A fourth license was awarded in 2004 and the entry of this foreign player coincided with a big increase in subscribers and drop in prices (see charts below). In 2005, an SOE mobile operator was introduced, and a sixth licence was awarded in 2007. There are therefore now 6 mobile operators in Bangladesh.

Chart 3: Telecom Subscribers in Bangladesh

![Chart 3: Telecom Subscribers in Bangladesh](Source: BTRC Annual Report 2007-08)
Bangladesh has a relatively competitive mobiles market, with 6 market players as of 2008 (see Table 4 below).

Table 4: Market structure and regulatory information about the 5 markets

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of operators 2008</th>
<th>Est. Market share of leading operator (%)</th>
<th>When mobile service provision started</th>
<th>Telco regulator operationally independent?</th>
<th>Telco regulator financially independent?</th>
<th>USO fund exists?</th>
<th>USO fund active?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>2</td>
<td>77</td>
<td>1992</td>
<td>Yes</td>
<td>Yes</td>
<td>No, maybe coming up</td>
<td>No</td>
</tr>
<tr>
<td>Zambia</td>
<td>3</td>
<td>80</td>
<td>1995</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ghana</td>
<td>4</td>
<td>50</td>
<td>1993</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Vietnam</td>
<td>6</td>
<td>30</td>
<td>1996</td>
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<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>6</td>
<td>46</td>
<td>1992</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: ODI, various sources
Chart 5: Average per minute mobile tariff (USD)

Source: ITU data, ODI Analysis

Chart 5 shows that Bangladesh has the lowest tariffs of the countries studied. Five out of six of the operators are partially or fully foreign owned and this has helped in terms of using the best technologies to improve efficiency and decrease operational costs. One operator enjoys 46% market share. It has dominated the market for some years because it was one of the first GSM licensees and because it has the widest network coverage throughout the country. The company has an advantage in that it has successfully bought the lease of all optical fibres available with the railway tracks of Bangladesh. Thus where railway tracks exist, this company has used these optical fibres for transmission, allowing it to have the greatest geographic coverage in Bangladesh.

Despite low prices, Chart 6 shows that Bangladesh has relatively low mobile penetration rate compared with most of the other countries. This is surprising given that the country has a very high population density, but is likely to be at least in part due to the fact that Bangladesh is relatively poor: it has the lowest GDP (PPP) per capita of the five countries (see Table 5).
Chart 6: Mobile subscribers per 100 inhabitants

Source: ITU data, ODI Analysis

Table 5: GDP (PPP) per capita of case study countries

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP (PPP) per capita (international $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>2933</td>
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<tr>
<td>Kenya</td>
<td>1751</td>
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<tr>
<td>Ghana</td>
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<tr>
<td>Zambia</td>
<td>1544</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1470</td>
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</tbody>
</table>

Source: IMF data

Bangladesh also has the lowest levels of telecommunication investment per inhabitant of the five countries (see chart 7 below) by some margin. The fact that infrastructure roll out in the rural parts of the country is low is a matter of concern as it means that many people are excluded from the development benefits that mobile phone services can bring. However, the fact that Bangladesh has a low level of telecom investment per inhabitant may also be because Bangladesh has a very high population density in urban areas, suggesting that less investment may perhaps be required to cover a given number of people, as compared with countries which are less densely populated.

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10 World Economic Outlook Database-October 2009, International Monetary Fund.
In the mobile telephony market, the policy and regulatory framework is an important determinant of competition. A telecommunications regulator must oversee issues such as interconnection between the operators, spectrum allocation, and access to the international gateway, in order to ensure a level playing field.

Bangladesh established an independent Commission called the Bangladesh Telecommunication Regulatory Commission (BTRC) in January 2002. The Commission is financed mainly through the fees and charges that it receives from the various players in the telecommunications sector and users of BTRC resources. However, any income that exceeds expenditure goes to the central Government\textsuperscript{11}. Thus the Commission has some degree of financial independence from government (it is not reliant on a government budget) as well as having an operational mandate to regulate the sector without political interference.

A number of regulatory issues have been identified which may be affecting competition within the mobiles market.

**Exchange operators**

While the mobile operators have control of their own network infrastructure within the country, they do not have control over interconnection exchanges (ICX) and international gateway exchanges (IGW). An ICX operator is a company that controls the infrastructure which allows the connection of calls from the network of one operator to the network of another operator. An IGW is a telephone switch that forms the gateway between a national telephone network and one or more other international gateway exchanges.

\textsuperscript{11} http://www.ittefaq.com/issues/2009/07/30/all0940.htm
thus providing cross-border connectivity. This switch can be owned by a particular company. There are four IGW providers and three ICX service providers in Bangladesh. All operators must route their calls via one of these providers for international and off-net domestic calls respectively.

The other countries we studied tended not to have separate ICX and IGW operators. The mobile operators usually owned their own ICX (i.e. to route calls from other networks onto their own networks) and usually one of the mobile operators in each country owned the main IGW of the country (though in some cases each mobile operator had its own IGW). In some countries this caused competition problems, e.g. in Zambia, where all mobile service providers are reliant on one company which enjoys a monopoly over the international gateway, and which charges a high price for its use, which it is then able to use to cross-subsidise other mobile services. However, in Bangladesh the liberalisation of the market and existence of a number of players reduces these kinds of risks.

However, some operators expressed the concern that there were too many stakeholders in the market, and this was adversely affecting their profitability. With the revenue sharing structure in place at the time, 66.67% of the total revenue earned from an international call would go to the carrier outside the country. The remaining part of the revenue would be divided as follows: 15% to the ICX, 15% to the IGW, 30% to BTRC and the remaining 40% would stay with the operator. Thus the mobile operators argued that this was adversely impacting their profits – which if true, might explain why investment levels by the mobile operators has been so low, resulting in relatively limited market penetration.

**Tariff regulation**

In mid 2007 BTRC introduced a specific price ceiling and price floor in the market for the first time. According to that directive, the maximum airtime charge can never be fixed more than Tk. 2.00 per minute or less than Tk. 0.25 per minute. This constraint was applied to all voice services and packages offered by the operators.

This has produced mixed responses among the mobile operators. Before introducing the policy, the average tariff had been hovering around Tk. 2.00, but would have been expected to come down further going forward, as the trend is for prices to fall as penetration increases and technological improvements are made. Indeed, prices had fallen by the time of the mission, and were hovering at around the price floor. Thus most of the early entrants were unhappy about the price floor. As they had achieved a relatively high subscriber base, and thus were enjoying economies of scale, they felt that the price floor would distort competition and prevent them from capitalising on their commercial advantages. Some of the new entrants, on the other hand, seemed happy with the policy, as it would help to protect them from being undercut by the larger operators.

This regulation of tariffs seems quite unusual by international standards, and none of the other countries we studied had imposed constraints on tariffs. International best practice would suggest that retail tariffs should not be regulated, and that market forces should be allowed to determine the prevailing retail tariff, in order to allow the full benefits of
competition to be realised (in terms of low prices, greater choice of providers, and incentives to improve services and increase coverage). Imposing tariff regulation risks distorting the market and weakening the performance of the sector.

**Termination charges**

Another issue with important implications for competition relates to the regulation of the termination charge. The termination charge is the amount that a mobile network operator charges to other telephone companies for connecting calls to their mobile network. The BTRC had set a standard termination charge of Tk. 0.40 per minute. However, at the time of the mission the prevailing off-net tariff (i.e. tariff charged to the consumer for making a call to another network) was at the regulated floor price of around Tk. 0.25 per minute. This meant that off-net calls were loss making for the network originating the call. This is a problem for small operators, as more calls will be made from their networks to the larger networks. This gives a significant advantage to the firms with the most subscribers, and thus creates an uneven playing field, and may also deter entry. Thus a reduction in the regulated termination charge could help to generate a more competitive mobiles market in Bangladesh.

**Number portability**

According to the BTRC Annual Report 2007-2008\(^{12}\), BTRC is planning to implement number portability – a facility which enables consumers to change their service provider while retaining the same telephone number, thus reducing switching costs and hence promoting competition. The study team were told that many people in any case have two or more SIM cards with different operators, so switching costs may be less of a problem. However, number portability would be more convenient as it would mean people would not have to have more than one mobile telephone number.

**Relationship with fixed line operators**

Fixed line operators in Bangladesh claimed during interviews and in the media, that they have suffered from poor telecommunications policy and regulation which has prevented them from succeeding and growing, and that they are greatly disadvantaged compared with mobile operators\(^{13}\). The fixed line sector, also known as the PSTN (Public Switched Telephone Network) has a subscriber base of around 1.6 million and is still dominated by the SOE incumbent which accounts for around 1 million subscribers.

They argue that BTRC issued too many operator licences without dedicating a clearly defined market segment to the PSTN operators. No business analysis was conducted to determine the appropriate number of licenses that should be issued and as a result,

\(^{12}\) BTRC Annual Report 2007-2008
\(^{13}\) www.thedailystar.net/newDesign/news-details.php?nid=129699
there are now numerous struggling PSTN operators. The PSTN operators argue that the licence fees, spectrum charges and revenue sharing model applicable for their sector were set arbitrarily. They also say the interconnection regime was set in favour of the mobile operators.

In addition, the PSTN operators were barred from acquiring new licences such as International Gateway (IGW) or Interconnection Exchange (ICX), which they claim has prevented the sector from becoming financially viable. It may also prevent economies of scope from being realised. The BTRC has also issued WIMAX licences (a telecommunications technology that provides fixed and fully mobile internet access), but existing operators in any segment (mobile or PSTN) have not been permitted to bid for these licences, which may again prevent economies of scale and scope from being exploited.

However, it is understood that the recent International Long Distance Telecommunication Services Policy (2009) permits parties to obtain new IGW/ICX/IIG licences in more than one category.

**Taxation of the mobiles sector and revenue sharing**

A concern raised by all of the mobile operators that the study team met was that they were being over-burdened with taxes and charges which hindered the wider roll-out of infrastructure and the further reduction of prices. They argued that the sector is heavily taxed – operators have to contribute 5.5% of gross revenues to the government, which is quite a high revenue sharing requirement (e.g. compared with 0.5% and 1% in Kenya and Zambia respectively). Operators noted that they also paid corporate tax of 40%, VAT on calls, import duty on SIM cards and tax on infrastructure. Moreover, at the subscriber acquisition stage the mobile operators must pay Tk. 800 for every connection that is being sold (a SIM tax). This SIM tax has been the most controversial. Operators claim that the recent slowdown of the growth of this sector is mainly accounted for by this SIM tax, and that some operators may not survive if this tax is not revised or withdrawn.

After the SIM tax was introduced, operators initially absorbed the tax. However, operators have started to pass the burden of the SIM tax on to customers by raising their tariffs. This it has been claimed, partly explains why the six mobile operators added only 0.94 million customers to their networks in the second half of 2008, compared with an additional 6.65 million customers in the second half of 2007\(^\text{14}\). However, such a fall in customer growth may also be explained by other factors including the economic difficulties arising from the global financial crisis during this period.

**Universal access**

Unlike most of other countries we studied, Bangladesh does not have a Universal Access Fund (UAF) or policy, which could be used to help address the limited penetration in the country. A UAF has been used by a number of Governments around the world to subsidise infrastructure roll-out in areas that would otherwise be uneconomic to serve. Typically the fund is administered by the regulator, using money

raised through the revenue sharing levy charged to operators. This money is then used to subsidise the roll out of infrastructure in underserved areas.

One example of this from our case study countries is the Ghana Investment Fund for Telecommunication development (GIFTEL), which has been running since 2005, and has the aim of improving access to ICT services in non-served and under-served parts of the country. One percent of net earnings of all mobile operators go towards the GIFTEL fund. Funds are used by GIFTEL to construct common telecommunication facilities in underserved areas. GIFTEL pays for full construction of the mast, including site acquisition and fencing. We were told that in the past four years GIFTEL has completed a total of thirty-nine Common Telecom Facilities and enabled telecom operators to extend their services to about 273 additional communities. The scheme is becoming increasingly popular with the operators, so this policy appears to be working well in Ghana, which has the best penetration of all the countries we studied.

Of course, conditions are different in Bangladesh, and any such policy would need to be implemented carefully to avoid distortions, such as the state inadvertently subsidising service roll-out in what could in fact be commercially profitable areas. It can be difficult to identify the threshold where service will be unprofitable without additional incentives or subsidy, and this kind of policy can itself reduce commercial incentives for roll-out. So Governments must be careful to avoid undermining the market solution, which has delivered significant benefits in many countries so far.

The regulator has recently allowed infrastructure sharing, and three operators have stated they will take advantage of this to roll out their services across a wider area. In addition, in early 2010, a large international operator from a neighbouring country has bought a controlling stake in the struggling sixth operator of Bangladesh. The company, has stated that it will have a strong focus on the rural market, which it has been very successful in serving in other countries. This is likely to increase competition in the market, and may strengthen incentives for swift rollout of services to new areas by existing operators, thus helping to expand the subscriber base significantly.

There is strong evidence from across the world of the various development benefits associated with mobile phone services, including significant reductions in the cost of doing business, and improvements in connectivity which make it easier for businesses to link up with suppliers, existing customers, and potential new customers. This improves the investment climate, catalyses private sector development, and stimulates growth. While Bangladesh’s mobile market appears fairly competitive, and enjoys relatively low prices, the low investment and penetration in the market remain a concern. It appears that some regulatory issues may be inhibiting fair competition and growth in the sector. Thus regulatory reform could potentially help to improve the performance of the sector, which would have significant knock-on benefits for the economy as a whole.
6. Conclusion

Bangladesh appears more competitive – with more players and lower prices - than most of the other countries we studied for this research, in the sectors we were focusing on. However, a number of potential competition problems have been identified in this study, and also by the media and civil society in Bangladesh, that would warrant investigation by a competition authority if one existed:

- Allegations of a possible cartel amongst the private sugar producers;
- Suggestions of possible coordination of pricing and output amongst cement producers. The risks of this may increase if the sector continues to consolidate, as seems likely;
- Alleged cartels in the purchase, distribution and sale of staple products such as rice, potatoes and other food products including fresh vegetables;

There are also wider government policies that are undermining competition in the markets we studied, including:

- Government involvement in sugar production, which is inefficient and represents a distortion of the market;
- Some regulatory concerns in the mobile telephony market, which may be undermining competition and wider rollout and thus constraining wider penetration of mobile services within Bangladesh.

Competition in Bangladesh could be enhanced further through policy reform, and through the establishment of a competition policy, law and authority.

There seems to have been some opposition to the introduction of competition law in Bangladesh from business lobby groups. One way to tackle vested interests, who oppose reform, is to establish and facilitate coordination amongst other interest groups who stand to gain from reform. This includes consumers, both household (who can be mobilised through consumer groups) and industrial, who may gain considerably from lower priced inputs. It also includes potential new entrants to the market, who can make their voices heard through business associations.

The competition authorities which exist in the other case study countries (e.g. Kenya and Zambia) have been very effective in raising the profile and understanding of competition issues, in providing evidence and building awareness of the costs of competition problems, in helping to build up and arm the consumer movement with the evidence it needs to demand improved market outcomes, and in monitoring market behaviour. The latter means that simply the presence of a competition authority by itself can serve to constrain anti-competitive practices or abuse of dominance by firms, who fear the consequences (which may be bad publicity at the very least), if they infringe the law. We obtained direct evidence of this from a large multinational cement firm operating in one of the case study countries.

Thus competition authorities can play an important role as a champion both for consumers, and for businesses seeking to enter markets, or who want competitively priced local inputs in order to underpin their own competitiveness on international markets. They also provide an important counterweight in Government against vested
interests wishing to pursue corrupt business policies at the expense of consumers and the wider economy.

Ultimately, competition is fundamental to a well-functioning market economy, and appropriate competition policies and the establishment a competition authority can help to ensure markets work more efficiently and effectively. Competition can help undermine corruption, and facilitates international competitiveness, private sector development, and employment creation, which are in turn crucial for achieving the wider economic growth that is needed to lift developing countries out of poverty.
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