

Assessing the Economic Impact of Competition

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Executive Summary

This report discusses the findings of an ODI research project 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 observed in a given product market; and
- how the degree of competition affects market outcomes such as prices, competitiveness, innovation and access to services.

This has been achieved by comparing the policy framework and economic performance of four product markets (sugar, cement, beer and mobile phone services) across five countries (Zambia, Kenya, Ghana, Vietnam and Bangladesh) through primary research conducted in each country. The methodology used for assessing competition in each market was in line with the approach set out in the Competition Assessment Framework published by DFID (2008).

The countries exhibited widely different policy frameworks and market structures, which facilitated some interesting comparisons. The research has generated a set of findings and policy recommendations for each country (which have been published in five separate country summary notes), as well as broader conclusions on the impact of competition on economic performance in the markets studied and more generally.

The conclusions identified in relation to each of the product markets examined in this study, are summarised below, followed by a discussion of broader conclusions from the research:

The sugar market

Sugar is an agricultural market and staple product which is an important part of the diet in most countries, and which is used by the poor. It is also an important source of rural livelihoods. Because of this, the state is heavily involved in the sugar industry in many countries, including three of our case study countries, Kenya, Vietnam and Bangladesh. However, in all three cases the state led sugar industries exhibit low productivity and poor performance. The use of obsolete technology and inefficient farming methods results in poor cane yields and sugar outputs. Thus all three are struggling to compete and survive in the face of competition from either privately produced sugar and / or imported sugar, and require substantial levels of costly government subsidisation, which is unlikely to be sustainable in the long run, thus jeopardising many livelihoods.

In stark contrast, Zambia, which has 3 privately owned sugar producing companies, produces the highest amounts of sugar per hectare of the five case study countries, (three times higher than Vietnam which is the next most efficient country) and is a very profitable, internationally competitive industry. The industry is expanding to take advantage of new market opportunities, and has the potential to create new jobs and growth. This suggests that private sector incentives and management expertise are important for creating a successful, efficient and internationally competitive sugar industry.

Significant reform is needed to achieve a healthier sugar sector in Kenya, Zambia and Bangladesh but some of the existing sugar mills will likely go out of business, so this is deeply unpopular politically, and thus difficult to achieve, even though it is in the best interests of the country as a whole. This demonstrates the importance of mobilising interest groups in favour of reform, from within consumer groups and the business community who stand to gain, in order to offset vested interests who are opposed to reform.

Despite Zambia's success in creating a growing, private sector-led industry, it still has very high domestic sugar prices when compared to other countries – well above the price that Zambian sugar sells for on international markets. It seems likely that this is due at least in part to the monopolistic market structure of the sugar industry in Zambia, where one firm yields significant market power and is protected from external competition by barriers to imports. The Zambian Competition Commission has investigated this, but has not been able to tackle the problem effectively so far, perhaps because the government may have vested interests in its profitability.

Ghana also used to have a state led sugar industry, but it collapsed in the early 1980s due to low productivity and poor performance. Ghana now imports all its sugar, and there are allegations of a cartel amongst sugar importers. These allegations are unsubstantiated however, and cannot be properly investigated as no competition authority currently exists within Ghana.

The Ghanaian Government currently faces a dilemma as there are two potential new entrants into the sugar industry, which could generate jobs and revenue. However, they are requesting protection from sugar imports, which would be likely to increase prices facing Ghanaian consumers, and could undermine the competitiveness of Ghanaian produced sugar. This demonstrates the trade-off that may sometimes be faced between attracting new investment by promising protection, and promoting a market environment which will create the right incentives to ensure a good economic performance.

The cement market

Cement is an important input for construction and infrastructure development, which underpin growth and industrialisation, are important for private sector development, and also represent a significant proportion of government spending. Thus the price and availability of cement is important.

The cement sector is one that is often highly concentrated because of the cost structure and high minimum efficient scale of production. Thus it is a market which often suffers from limited competition and has been a source of concern for competition authorities across the world. In addition, the cement sector is often dominated by multinational firms, who operate on a regional basis – for example where multinational companies agree not to compete with each other in the same countries and thereby ensure monopoly profits. Thus cross border competition issues come into play, which can either be tackled through regional competition authorities, or through wider policy coordination.

A range of potential competition problems were identified in the three African countries, including:

- issues of joint ownership amongst the three Kenyan cement firms, which the Kenyan competition authority has been monitoring, and has been active in preventing further consolidation;
- allegations about supply constraints by the monopolist cement firm in Zambia during a cement shortage, which the Zambian Competition Commission investigated;
- price hikes in Ghana, with allegations that this was due to the market dominance and price leadership of one of the two players in the market, though the absence of a competition authority in Ghana means this has not been investigated;

In comparison with the African countries which all had highly concentrated cement industries with only a small number of players, there appeared to be a much greater degree of both price and non-price competition in Bangladesh and Vietnam, which had very unconcentrated cement industries, with many different market players. The two Asian nations enjoy the lowest prices of all the

countries, and we also observed significant non-price competition, with cement firms trying to attract customers by offering credit, technical support and various promotions. This suggests that, even though there is a high minimum efficient scale of production in cement which suggests having fewer firms is more efficient, the competitive stimulus of having many players in the market generates stronger incentives for reduced prices and efficient production.

The price of cement in Zambia has fallen by almost ten percent since 2008, coinciding with the entry of a new market player in 2009 to compete with the incumbent cement monopoly. This happened during a period when cement prices rose in all the other countries studied. This demonstrates that the introduction of competition can have a significant and immediate impact on prices.

The beer market

Beer is consumed throughout the developing world and can constitute an important part of the budget of poor people. The beer market is usually highly concentrated, due to the cost structure and the importance of marketing and brand loyalty, which represent barriers to entry. Thus it is another industry that is plagued by anti-competitive practices in many countries, and ideally needs monitoring by a competition authority.

Like the cement industry, beer prices were highest in the most concentrated market (Zambia, with a monopoly beer producer) and lowest in the least concentrated market (Vietnam, with 7 beer producers), and non-price competition also seemed strongest in the least concentrated markets. Potential competition problems were identified in all three markets:

- many anti-competitive practices were identified in Kenya, including territorial allocation, exclusive dealership and price fixing. In addition, there was a case of a price war followed by a regional carve-up whereby two beer producers signed an agreement so as to avoid directly competing in either Kenya and Tanzania, and instead share in each other's monopoly profits by buying shares in each other.
- In Zambia the competition authority has imposed undertakings on the monopoly beer producer, to prevent abuse of its dominant position. They also identified various barriers to entry, and have investigated issues relating to resale price maintenance and exclusive dealership.
- Allegations of price leadership have been made in Ghana, although beer prices are considerably lower in Ghana - which has two beer firms who appear to compete quite fiercely - than in Kenya and Zambia which both have monopolies and thus no effective competition within the market.
- Allegations of exclusive dealing and abuse of dominance by beer players in Vietnam, including a specific case where a new entrant was driven out allegedly due to exclusive dealing arrangements which prevented them from distributing their product effectively.

The mobiles market

Substantial evidence now exists of the development benefits of mobile telephony, in terms of improved connectivity (especially where it has enabled countries to leapfrog the need to develop fixed line infrastructure, and thus provided connectivity to many people for the first time); reducing transactions costs for both households and enterprises; facilitating private sector development and job creation; and enhancing access to financial services.

The mobiles market is relatively young, and is still evolving fast globally. Regulation is an important determinant of competition in this market, and regulators across the world are grappling with this fast changing market.

It is clear from examining the introduction of competition in the mobiles market in each of the case study countries that competition drives rollout of services, increased market penetration, and falling prices. A more competitive environment also strengthens incentives to design services to meet the needs of customers, including price and product promotions targeted at poor customers, and value added services with additional development benefits, such as money transfer services.

Kenya has until recently had a relatively concentrated market compared with the other case study countries, and prices were relatively high. However, competition in the market increased through the entry of two new players in 2008/9, and since then tariffs have fallen by as much 50%.

Zambia has the lowest mobile penetration rate and the highest tariffs of the five countries. The market is performing relatively poorly at least in part because of a lack of competitive neutrality between the government monopoly which controls the international gateway. They charge high tariffs to private operators to access the gateway, which means that private operators have to subsidise their international calls in order to be price competitive with the state firm.

In Ghana there appears to be intense competition between the operators. The country has good mobile penetration and relatively low prices. Ghana has an effective regulator which has facilitated a competitive market. There has been good regulation of interconnection and the liberalisation of the international gateway as well as an effective form of universal access fund – issues which have slowed down market development in other countries.

The Vietnamese mobiles market is heavily dominated by state owned enterprises; however, the operators do appear to compete fiercely with each other, and the sector is performing fairly well.

Bangladesh has a relatively competitive mobiles market and the lowest tariffs of the countries. There are some regulatory concerns however, such as a regulated price floor, which is not in line with international best practice, and has been set at less than the regulated termination charge, which puts smaller mobile operators and new entrants at a disadvantage. This highlights the importance of considering potential competition impacts when taking regulatory decisions.

Overall conclusions

The research has shown 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 access to services for consumers, including other businesses who rely on these products as inputs for their own enterprises. It is also important to ensure that domestic production is internationally competitive, and thus can generate increased exports, foreign exchange, jobs and industrial growth. 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, and competition authorities have an important role to play in monitoring, publicising and tackling such behaviour.

However, it is also clear that the role of the state is very important in determining competition and market outcomes – perhaps more important than the behaviour of business. The influence of the

state can take various forms: regulation; state ownership and privatisation; price controls or subsidisation; other policy mechanisms such as import protection or industrial policy; or corrupt business deals and ownership by individual politicians or their families.

Sometimes the involvement of government is self-serving, while other times it is essentially benevolent in nature. In some countries and markets, a close relationship is observed between business and government, as government actors seek to share in some way in the profits of businesses, (e.g. through ownership or taxation etc.). This gives government an incentive to protect those businesses from competition. In these situations the relationship between business and government seems in practice to determine commercial success more than market competition, and competition authorities may face political barriers to addressing competition problems.

The kind of relationship between government and big business described above creates a powerful economic elite of business and government, with vested interests in opposing pro-competition, pro-growth reforms. 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, such as household and industrial consumers, and potential new entrants to the market. This has happened in Zambia, for example, where confectionary companies got together to make a complaint about the price of sugar to the Zambian Competition Commission.

Competition authorities can potentially play an important role in building the evidence base, and helping to arm and perhaps mobilise these kinds of interest groups to lobby for reform. Thus, where political difficulties and resourcing and capacity constraints make legal enforcement problematic for competition authorities in developing countries, they can still play a valuable role in promoting competition through advocacy and evidence building, and engagement with other government agencies to ensure that policy is pro-competitive.

In sum, competition improves the performance of markets, generating better outcomes including lower prices, greater productivity and competitiveness leading to industrial growth and jobs, and better access to services. It can undermine the dominance of a few powerful players, allowing new enterprises to gain a foothold in the market, and underpinning private sector development and employment creation.

Appropriate policies are crucial to create the conditions within which competition can thrive, and competition authorities can help to build a culture of competition, and increase awareness of competition issues amongst policy-makers and the public.

Policy recommendations

- Government policies should create competitive market conditions. This means assessing and factoring in the competition impacts of a wide set of policies, including trade policy, industrial policy, privatisation, regulation, state ownership, subsidisation and investment promotion. Competition authorities can help by raising concerns when government policy may have negative competition impacts.
- Regulatory bodies should take into account the competition impacts of regulation to avoid undermining the market and weakening economic performance. One way to achieve this is to implement a process for regulatory impact assessment to examine the competition implications of such issues as regulation of tariffs and interconnection, infrastructure sharing, and the implementation of a universal access fund.
- Governments should consider establishing competition laws and competition authorities, which can investigate anticompetitive practices, build a stronger competition culture, and advocate for pro-competition reforms.

- Competition authorities can help to build the evidence base on competition problems and associated costs, and publicise the findings that will inform and mobilise interest groups to lobby in favour of reform, in order to offset vested interests opposed to change. These interest groups may include household and industrial consumers and potential new entrants to the market.
- Tools such as DFID's Competition Assessment Framework can be used to guide competition analysis and help build capacity and understanding of competition issues in developing countries.
- The poor performance of the state-led sugar industries in Bangladesh, Kenya and Viet Nam, as compared with the successful, internationally competitive, private sector-led sugar industry in Zambia, demonstrates the superior performance that can be achieved through private management incentives. Steps to a healthier sugar sector in these countries would include the establishment of efficient new entrants, a reduction of state intervention in the sector, an end to bail-outs, a reduction in trade protection, and an acceptance that some of the existing sugar mills will go out of business. Social safety nets and retraining programmes might help to make such reform more politically acceptable.
- Competitive neutrality between state and private sector players can help to ensure a competitive market outcome. This is likely to become an increasingly important issue in Viet Nam, which is still heavily dominated by state players, as reform continues, but is also an issue elsewhere e.g. in relation to the Zambian mobile telephony market.
- A reduction of import tariffs can help to stimulate competition where there is limited domestic competition.
- Regional competition authorities and regional cooperation are needed to tackle competition problems caused by multinational companies, who sometimes seek to minimise competition by taking a strategic approach to cross-border production decisions.

1. Introduction

1.1 Rationale

The potential benefits of a competitive market environment for stimulating economic efficiency, innovation, greater productivity and economic growth are now widely recognised. This is because greater competition sharpens incentives to cut costs, to innovate, and to improve productivity¹.

There has been more controversy regarding the impact of competition in developing countries, given their underdeveloped market conditions. However, it is argued (e.g. Evenett, 2005) that the available empirical evidence largely supports the view that competition enhances the economic performance of developing countries².

However, there is still fairly limited evidence demonstrating the economic benefits of a competitive market environment in developing countries. While studies of the impact of liberalisation sometimes provide evidence of the benefits of introducing competition in a particular market, such studies usually focus on one country, and look at the change in market outcomes (i.e. price, profitability etc.) over time, comparing that arising from state ownership and monopoly, to that generated by the newly liberalised market.

This is different to the approach that is used in this report, which utilises an innovative methodology to compare *across countries* the impact of competition and competition policy on performance in a particular market, and also focuses on more 'normal' product markets, i.e. without strong natural monopoly characteristics.

By undertaking cross-country comparisons, this study thus addresses the following two research questions:

- How do different aspects of the policy framework (such as the existence of a competition authority, degree of state ownership, openness to trade etc.) affect the degree of competition present in a given product market?
- How does the degree of competition present in a given product market affect market outcomes such as prices, choice, innovation and exports?

Thus we have undertaken primary research, involving in-country data collection, consultation and analysis, with a view to providing stronger evidence on the impact that competition and related policies can have on economic outcomes.

1.2 Methodology

The study focuses on four specific product markets (sugar, cement, beer, mobile telephony), and compares them across five countries (Kenya, Zambia, Ghana, Vietnam and Bangladesh), in each case focusing on:

1. How the policy context affects the degree of competition observed in the product market in question (taking into account differences in the market environment).

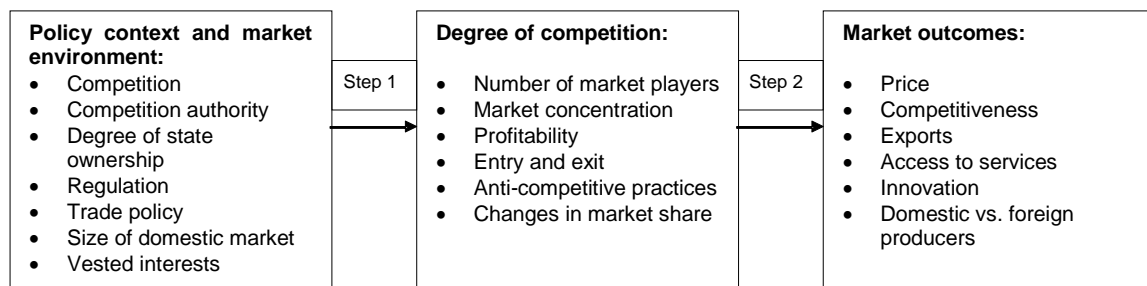
¹ See for example "Study on Issues Relating to a Possible Multilateral Framework on Competition Policy", WT/WGTCP/W/228, WTO, May 2003, authored by Simon Evenett, for a review of the literature on this issue.

² "Links Between Development and Competition Law in Developing Countries", Simon J Evenett, Commissioned by DFID as part of a series of case studies for the World Development Report 2005.

2. The impact of competition on market outcomes (such as prices, access to services, degree of international competitiveness etc.)

The approach is set out in Figure 1 below.

Figure 1: Conceptual framework for the analysis



A detailed checklist of data required and factors to consider was drawn up to guide the research, and ensure that a common approach was used in all cases. Information on these factors was obtained from:

- existing in-country data and information sources incl. national statistics, trade data, media reports, market research sources etc.
- interviews / meetings with the relevant government ministries, regulators, competition authorities (where they exist), market players, commentators, academics, consumer groups, chambers of commerce, marketing boards, retailers etc.
- other available indicators such as Investment Climate Assessments, Doing Business Indicators etc.

As much relevant data as possible was obtained to inform the analysis, although data availability was extremely patchy. Much of the information underpinning the analysis was thus obtained through interviews with stakeholders in each country.

While it was difficult to obtain *quantitative* evidence of impacts, it was possible to develop a clear *qualitative* picture of each market from interviews, media reports, and by working in conjunction with local partners in each country who were able to bring an understanding of the local context.

Each of the product markets were examined and compared across the five countries in order to assess how differences between countries in relation to the competition policy environment are affecting competition and market outcomes. The nature of competition in a particular product market should be largely determined by the characteristics of the product (e.g. cost structure, switching costs, brand loyalty etc.), so should be similar across countries, all else being equal. Thus significant differences in market outcomes across countries are likely to be due either to a different market environment, or to a different competition policy context. Differences in market environment across countries were taken into account, through an initial profiling of the economic fundamentals of each country (e.g. examining data on GDP, population distribution, and geographical characteristics etc.)

Of course many factors are at play in determining overall market outcomes, so directly attributing market outcomes to specific policies was not always possible. But given the significant differences in both market structure and outcomes observed across the five countries, and the clear, albeit largely qualitative, picture obtained from in-country sources, the important role of the policy framework in determining market outcomes in broad terms was very clear to see.

The methodology used for assessing competition in each market was in line with the approach set out in the Competition Assessment Framework published by DFID (2008). Thus it involved

defining the market, examining market structure, identifying barriers to entry, assessing the impact of government policies and vested interests on competition, and looking for signs or evidence of anti-competitive conduct.

It should be noted that although this systematic approach was used for the analysis, this report does not provide a systematic, comprehensive, technical analysis of each market in the same way. Rather, we have drawn out only the main findings from the analysis of each market, with a view to highlighting instances where the economic impacts of competition and of competition problems are clearest.

1.3 Choice of case study countries and markets

The countries and sectors were chosen carefully, during the scoping phase of the study, in order to provide a range of contrasting experiences, so as to yield interesting comparisons and policy lessons.

In terms of country selection we sought a wide geographical spread, and a range of levels of engagement in relation to competition policy and law.

Countries chosen:

- **Kenya** : East Africa, has a competition law and authority
- **Zambia** : Southern Africa, has a competition law and authority
- **Ghana**: Western Africa, no competition law and authority
- **Vietnam**: South-East Asia, transition economy, has fledgling competition law and authority
- **Bangladesh**: South Asia, no competition law and authority

We selected a range of different kinds of product markets, which were either of direct relevance to the poor as consumers or employees, or which were important for growth. We also selected product markets which demonstrated different kinds of competition issues.

Markets chosen:

- **Sugar**: An agricultural market and staple product which is an important part of the diet in most countries, and which is used by the poor. It is also an important source of rural livelihoods in some countries. Because of this, the state is heavily involved in the sugar industry in many countries, including three of our case study countries. The study thus examines the impact of state ownership and intervention on competition and compares this with market outcomes in a private sector led industry.
- **Cement**: Cement is crucial for construction and infrastructure development, which underpins growth and industrial development. It is an interesting industry to examine because it is plagued by anti-competitive practices throughout the world, because it is often highly concentrated.
- **Beer**: Beer is consumed throughout the developing world and can constitute an important part of the budget of poor people. It is also an industry that is plagued by anti-competitive practices.
- **Mobile telephony services**: There is lots of evidence of the development benefits of mobile telephony, in terms of improved connectivity (especially where it has enabled countries to leapfrog the need to develop fixed line infrastructure,

and thus provided connectivity to many people for the first time), job creation, and its role in reducing transactions costs and facilitating private sector development. The mobiles market is relatively young, and is still evolving fast globally. Regulation is an important determinant of competition in this market, and regulators across the world are grappling with this fast changing market, so it provides a good opportunity to provide policy lessons.

This generated an enormous variety of experiences across countries, and many interesting stories to explore.

1.4 Structure of the report

Section 2 of the report discusses the competition law and policy framework in each of the five countries. The report then looks at each of the product markets in turn, discussing the structure of the market and highlighting the main competition issues identified in each country, before discussing comparisons and possible policy lessons to draw from the countries' contrasting experiences in that market. Section 3 discusses the sugar market, Section 4 looks at the cement market, Section 5 examines the beer market, and Section 6 focuses on mobile telephony.

Section 7 concludes by discussing the research findings on the role of competition and related policies in determining market outcomes, broad observations on the relationship between business and government in the countries studied and how that affects policymaking, conclusions on the competition policy framework in each country, and policy lessons.

Although a systematic approach was taken in the analysis undertaken for the study, this report does not contain a systematic discussion of each potential competition issue in each country and market, and whether or not it raised any concerns. Rather, it focuses on the ones which were highlighted as potential concerns during the fieldwork, or where there are particularly interesting comparisons with policies or outcomes in other countries. Thus the length of discussion may vary between countries and markets accordingly.

This report may also be considered to be a reference document by some readers, who may be interested in the results in particular markets or countries, and thus may choose to dip in to the report rather than read it from cover to cover. Thus some points may be repeated, where that is deemed necessary to put a specific finding into context.

2. Competition law and policy framework in the five countries

The existence of a competition law and authority is only part of the overall policy and institutional environment which determines competition in a country, and other policies, such as state ownership, trade barriers, or regulation, can have a much bigger impact on market outcomes. However, it seems that competition authorities provide a valuable focus of attention on competition issues, and play an important role in building awareness and understanding of competition issues and problems; in other words, in building a ‘culture of competition’, by analysing and publicising competition issues, and highlighting the costs of competition problems.

Developing a culture of competition is an important first step in raising government awareness of the impact of policies on competition, of raising business awareness of what is and isn’t acceptable competitive behaviour, and in helping to underpin the mobilisation of consumer groups who can take action and apply pressure to government in favour of pro-competition reforms.

Table 1 below summarises the current status of competition law in each of the five countries. This is followed by a discussion of the competition policy framework in each country.

Table 1: Overview of competition frameworks in the five countries

	Kenya	Zambia	Ghana	Vietnam	Bangladesh
Presence of competition law & authority	Yes	Yes	No, Competition Bill has been stalled for many years but renewed momentum more recently	Yes Law and authority established relatively recently, early stages of implementation.	No, but being developed. Bill has been presented to Cabinet, but has stalled.
Independent from government?	No	No	N/A	No	N/A
Activity level of Competition Authority (comparatively)	Moderate	High	N/A	Low	N/A

2.1 Kenya competition law and policy framework

Currently, the national competition law is mainly embodied in the Restrictive Trade Practices, Monopolies and Price Control Act (MPCA), Cap.504 of the Laws of Kenya, which established the Monopolies and Prices Commission (MPC), within the Finance Ministry. It seems that the current Kenyan competition law was meant to be a transitional measure to move the country from a price control regime to one based on free market principles. The Government of Kenya established a Task Force to review the law in May 2005. The Team submitted a report to the Minister, and in March 2009, a draft Competition Bill was published and presented for discussion in the National Assembly. The Bill has gone through two readings in Parliament and is currently being discussed by the Finance, Planning and Trade Committee.³

Administrative deficiencies in the law have been highlighted in the voluntary peer review on competition policy conducted by UNCTAD in Kenya⁴. These deficiencies have also been reiterated in a recent speech made by Peter Kanyi of the MPC⁵.

³ Based on interview with MPC

⁴ United Nations Conference on Trade and Development (2005)

Interviewees for this project cited such concerns as ambiguities in the application of the law, and the lack of provision for the MPC to clear mergers by default or otherwise fast-track mergers that are essentially unobjectionable, which meant that monitoring mergers was very time consuming and crowded out other activities.

The Kenyan competition authority has limited formal independence in that it is an integral part of the Ministry of Finance, its budget is within the Ministry's budget and the Minister appoints its Commissioner. The MPC has limited powers of its own, and to some extent appears to operate as an advisory body to the Minister. The Minister is not bound to accept its advice, but it seems that Ministers have generally been reluctant to reject advice publicly, though we understand that there have sometimes been discussions around the need for the MPC to alter its advice. In addition, investigations into unwarranted market concentration cannot be independently initiated by the MPC – only on the instructions of the Minister.

For prosecution of breaches of the law, the MPC has no powers but relies upon the criminal justice system. A prosecution would have to be initiated by the Attorney General's office. The Act established a restricted practices appeal tribunal, appointed by the Minister of Finance and headed by a judge. In practice, it seems this tribunal has seen little activity. The MPC itself rarely reaches formal decisions, generally relying on consent for agreements to, for example, terminate restrictive practices.

In short, the current Act (Cap.504) departs from what is increasingly considered desirable in terms of international best practice. Best practice would be to include measures in the act which ensure the autonomy of the competition agency, separate the responsibilities for investigation and adjudication, and enable the competition agency to impose sanctions at a level which act as an effective deterrent. A new Competition Bill, (2009) has been presented to parliament and may be passed in the near future. This Bill does seem to address a number of the current deficiencies in the law.

2.2 Zambia competition law and policy framework

In 1994, Zambia adopted the Competition and Fair Trading Act, and Zambia's Competition Commission (ZCC) was created in 1997. ZCC has the power to investigate anticompetitive behaviour, request information and carry out market studies. It can start an investigation following a complaint or on its own initiative. Many interviewed stakeholders, both business and non-business, stated that ZCC had an important role to play and were generally supportive of it.

However, most stakeholders perceived ZCC as weak. Under the Act, ZCC can impose fines up to 10 million Kwacha or seek imprisonment of up to five years for those breaking the law, but it would appear that in practice ZCC rarely uses these statutory powers, which may contribute to this perception. We also heard that ZCC suffers from chronic under-resourcing, unfilled positions and a very high turnover of staff. Low salaries were often mentioned as the main reason for the high staff turnover. At the time of the mission, ZCC did not have an in-house lawyer, all legal tasks being subcontracted. Specialist training for staff would also increase the capacity of the ZCC.

The Competition and Fair Trading Act also needs to be revised to bring it more into line with the international best practice that has emerged since it was introduced. We understand that ZCC and the Ministry of Commerce are currently working on a new competition bill that may be brought into law by around 2010.

It would also help if the ZCC's objectives were clarified; currently the 'public interest' stands alongside promoting competition as ZCC's objective. However, this can complicate matters, as the

⁵ Peter Kanyi (3rd September 2009)

public interest can encompass a whole range of other, potentially conflicting objectives. Experts generally argue that a competition authority should focus single-mindedly on achieving competition, leaving it to policymakers to consider and weigh up the other aspects of public interest. If public interest is an objective alongside competition for a competition authority, it is best if it is confined to specific and well defined cases and it has clearly established criteria.

Despite the resource constraints discussed above, the ZCC is involved in monitoring and investigating an impressive number of competition cases. Its interventions in the sectors we studied are discussed in the later sections of this report.

2.3 Ghana competition law and policy framework

In Ghana, a draft Competition Bill has been considered by Government for many years (since 1992) but it has not been enacted. No legislation on anticompetitive practices exists except for the National Communications Authority (NCA) and the Banking Supervision Department (BSD) of the Central Bank, which have sector specific legislation to monitor the telecommunications and banking markets. A Competition Bill was drafted with the help of UNCTAD consultants in 1992/3, which sought to establish a commission which would ensure fair competition in trade practices as well as a trade practices court.

There are a few possible reasons for the delays in the adoption of competition law in Ghana. Firstly, some fieldwork respondents said that the delays have been caused by powerful business lobby groups going above the bureaucracy and briefing cabinet members directly of their reservations towards the introduction of a competition policy. This is a situation where an influential lobby group that has vested interests in maintaining the status quo could be preventing the adoption of a policy which would be of benefit to the wider Ghanaian population.

Secondly, some respondents felt that a Competition Law could hinder FDI, as protection from competition and the potentially high profits this allows, may represent one way to encourage new inward investment – although for growth in the longer term a more competitive environment is beneficial.

Thirdly, some Government officials had expressed the view that Ghana is a very open economy and that imports were providing a natural market discipline so there was no need for a competition policy. While it is true that trade openness can increase competition in many markets, it does not preclude the need for domestic competition law, as not all goods and services are traded, and because anti-competitive practices can persist even in a situation of trade openness.

In more recent developments, the establishment of a Competition Law and Authority have now become part of the Trade Sector Support Program (TSSP) policy of Government (adopted in 2005). As part of the implementation process of the TSSP, CUTS⁶ were contracted to revise and modernise the old Competition Bill of 1992. This has involved stakeholder consultations, and most stakeholders, including companies, have been supportive of the new Bill. The notable exceptions were the Bank of Ghana and the National Communications Authority, who felt that some of their powers to regulate their respective sectors may be subordinated by the proposed Competition Authority. It has been speculated that a compromise position may have been reached such that the final Bill will not affect regulatory institutional arrangements that have already been established, and thus not affect the powers of the sectoral regulators. This revised Bill had been drafted and presented to the sponsoring ministry but had not been passed when the study team visited the country (November 2008). This is still believed to be the case.

⁶ Consumer Unity Trust Society, an NGO based in Jaipur, India

It is understood that the process has stagnated for one further reason - lack of financing to establish and sustain the commission once set up. The Ministry is seeking approval of the bill as well as approval for some statutory financing for the commission. They want to avoid a situation where a bill is passed and then the establishment of the institutions never happens because of lack of finance. International donors have been providing funding for the drafting and analytical work relating to drafting the law as part of their support to the TSSP but cannot provide core funding for the establishment and operations of the commission. Thus a source of funds from the Government budget will need to be found if the Competition Authority is to be successfully established.

2.4 Vietnam competition law and policy framework

Vietnam's economy and market structures are quite different to the other countries studied, and to a traditional market economy. Vietnam has boomed since the government started moving away from communist economic policies and central planning in the late 1980s under its 'doi moi' (renovation) policy. Vietnam is now among the fastest-growing economies in Asia.

However, the economy is still dominated by state owned enterprises (SOEs) and large private players are limited. In fact, many large SOEs are conglomerates which dominate multiple sectors of the economy. The usual mode of private participation in the Vietnamese economy is via joint ventures. Although the number of industries where local equity stakes are mandatory is declining (particularly for export oriented industries), SOEs may still control essential resources, property rights and distribution networks, making joint ventures necessary.

SOEs enjoy significant advantages compared with private enterprises. For example, the Centre for International Economics (2001) notes that SOEs are able to obtain access to finance more easily. The Government's control of the banking system means it can favour designated SOEs and therefore influence the allocation of investment funds across the economy. In addition, the fact that any losses made by SOEs are effectively underwritten by the State, makes SOEs a much better credit risk than private enterprises.

The privatization programme in Vietnam, officially called the 'Equitization Programme' started in 1992 as part of the SOE Reform Programme, in the context of general economic reform. Equitization is defined as the transformation of SOEs into joint-stock companies and selling part of the shares in the company to private investors in order to improve the performance of the firms in question. Equitization differs from privatization in the usual Western sense in that it does not necessarily mean that the government loses its ultimate control over the firm. On the contrary, in the case of Vietnam, the government still holds decisive voting rights in many cases. There is some evidence of lack of competitive neutrality between large SOEs and firms with greater degrees of private ownership, and it is hoped that the introduction of a new competition law will address this matter.

Foreign investors also face difficulty with Vietnam's Foreign Investment Regulations which are very restrictive compared with other countries. Joint ventures have been the most common form of foreign investment as discussed above, but also due in part to Vietnam's restrictive land policies. Foreign investors may not own land use rights, but may lease land from the government or form a joint venture with a Vietnamese partner that holds land use rights. Because of difficulties in obtaining and preparing sites, foreign investors have largely opted to form joint ventures, most of which are with state-owned enterprises. The investment contributions of foreign investors in a joint venture are limited within a range from 30 per cent to 70 per cent and the Vietnamese partner's contributions almost always consist of land use rights. The Vietnamese partner, therefore, does not actually contribute any capital, and the high property cost often places a significant financial burden on the newly-formed joint venture.⁷

⁷ <http://ia.ita.gov>

Vietnam's membership in the ASEAN Free Trade Area (AFTA) and entry into force of the US-Vietnam Bilateral Trade Agreement in December 2001 have led to even more rapid changes in Vietnam's trade and economic regime. Vietnam's exports to the US increased 900% from 2001 to 2007. Vietnam joined the WTO in January 2007, following more than a decade of negotiations. WTO membership has provided Vietnam an anchor to the global market and reinforced the domestic economic reform process⁸.

As part of the structural economic policy reforms being undertaken to foster a market driven economy, the Government of Vietnam (GoV) enacted a Competition Law which came into effect in July 2005. To administer the law, the government has established the Vietnam Competition Administrative Department (VCAD), which is a government agency housed in the Ministry of Trade, and a separate independent adjudicative body, the Vietnam Competition Council (VCC), comprising of eleven to fifteen members appointed by the Prime Minister, at the recommendation of the Minister of Trade.

Cases alleging infractions of the competition law are initially investigated and resolved by the VCAD. There are, however, two different rights of appeal depending on whether the case pertains to 'unfair competition' or to 'restriction of competition'. 'Unfair competition' refers to practices such as misleading advertising, misrepresentation of products, discriminatory practices, discrediting competitors and their products, illicit multilevel (pyramid) sale schemes among others. 'Restriction of competition' refers to issues such as horizontal agreements, abuse of dominance and mergers which will increase economic concentration.

The VCAD has the authority to investigate and settle the former types of cases. But the decision can be appealed to the Minister of Trade, who may refer the matter back to the VCAD or re-confirm or modify its decision. In restriction of competition cases, the VCAD serves as the investigating authority and its findings are then submitted to the VCC for its consideration and settlement through the holding of hearings. In both types of cases, the parties have further rights of appeal to the courts.

Between establishment in 2006, and the time of our mission in 2009, the VCAD has investigated and concluded approximately 16 cases under the unfair competition provisions of the law. The fines imposed ranged between VND 15 million to VND 240 million (between US\$770 and \$12,400).

Under the restriction of competition provisions, the VCAD has preferred promoting compliance by encouraging businesses to cease and desist in certain pricing practices that would otherwise constitute violations of the law. Some examples include attempts by insurance companies to cooperate and collectively set premiums for vehicles, by steel companies to enter into price fixing agreements, and by commercial banks to impose interest rate ceilings on deposits. A first case was referred to the VCC for adjudication in April 2009. This related to a complaint that was made by Jetstar Pacific Airlines and lodged with the Prime Minister and the Minister of Trade's offices (rather than directly with VCAD) that the Vietnam Aviation Petroleum Company (Vinapco) had stopped supply of aviation fuel because it refused to pay an increase in the fuel charge fee. The case was scheduled to be heard by the VCC in mid 2009.

While the competition law applies equally to pricing, output and other business practices of state owned enterprises, the private sector firms allege that these enterprises still enjoy preferential treatment in access to capital, land and other resources which creates an unlevel playing field for competing private sector firms.

Interviews with various business enterprises and industry associations suggest that the role and importance of the VCAD and VCC as institutions for addressing competition matters has yet to be established. If business confronts competition problems that would normally fall under the purview

⁸ <http://worldfacts.us/Vietnam.htm>

of the competition law, there is still a tendency to first go to the Prime Minister or the relevant Minister to resolve matters. However, this may change over time as liberalisation continues, and as a stronger culture of competition develops.

2.5 Bangladesh competition law and 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 monopsonistic⁹ 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 Bangladesh¹⁰. 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.

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

⁹ A market form in which only one buyer faces many sellers. It is an example of imperfect competition, similar to a monopoly, in which only one seller faces many buyers. As the only purchaser of a good or service, the “monopsonist” may dictate terms to its suppliers in the same manner that a monopolist controls the market for its buyers.

¹⁰ Based on stakeholder consultation workshop facilitated by Ministry of Commerce and attended by ODI study team in May 2009, Dhaka

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.

3. Sugar market study

3.1 Introduction and overview

The first step in an analysis of competition is to define the specific market being assessed, as it is only within the context of a specific market that the competitive constraints acting on a supplier of a given product or service – and hence the degree of market power held by any individual firm - can be determined¹¹. A ‘market’ is a group of products (goods or services) most buyers regard as being reasonably substitutable for each other.

The sugar market focused on in this study was the production of milled sugar consumed by households. Thus it does not explicitly consider the market for either raw sugar, or the more highly processed white sugar used for example in the pharmaceutical industry, as these are considered to constitute a separate market, although these sugar products are often produced by the same firms. Household sugar was not considered to have any close substitutes e.g. artificial sweeteners are not consumed widely enough to warrant inclusion in the relevant market definition.

Sugar is an agricultural market and staple product which is an important part of the diet in most countries, and which is used by the poor. It is also an important source of rural livelihoods in some countries. Because of this, the state is heavily involved in the sugar industry in many countries, including three of our case study countries.

Table 2 below shows how the sugar market is structured in each of the countries. The very different market structures and patterns of ownership enabled us to study the impact of state ownership and intervention on competition, and compare it with market outcomes in a private sector led sugar industry. Each of the countries is considered in turn, before discussing comparisons and cross-cutting issues.

Table 2: Sugar market structure across the 5 case study countries, 2008

Country	No. of firms	State ownership	Market shares of leading firm	Imports as % domestic consumption
Kenya	7	Yes, the state owns nearly all mills	54% (firm with most private sector participation)	15%
Zambia	3	No	93%	0%
Ghana	0	N/A	N/A	100%
Vietnam	40	Yes, high degree of state ownership	9%	4%
Bangladesh	16 SOE ¹² mills & 4 private refiners	Yes, state owns nearly all mills	47%	10%

To summarise:

- Kenya, Vietnam and Bangladesh all have state led sugar industries which are struggling to compete and survive in the face of competition from either privately produced sugar and / or imported sugar, and require substantial levels of costly government subsidisation.

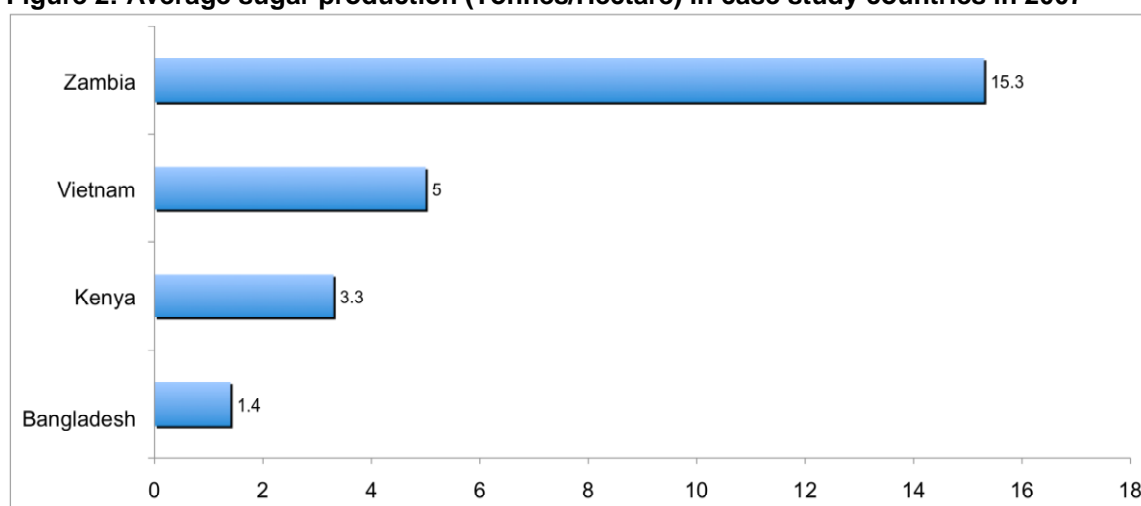
¹¹ For further information see DFID's 'Competition Assessment Framework' 2008, and 'Market Definition: Understanding Competition Law' Office of Fair Trading, 2004.

¹² State Owned Enterprises

- Ghana had a state led sugar industry which collapsed in the early 1980s for broadly similar reasons as the other three countries' state led sugar industries are struggling i.e. low productivity and poor performance.
- Ghana now imports all its sugar, and there are allegations of a cartel in the import of sugar. These allegations are unsubstantiated however, and cannot be properly investigated as no competition authority currently exists within Ghana.
- The Ghanaian Government currently faces a dilemma as there are two potential new entrants into the sugar industry, which could generate jobs and revenue. However, they are requesting protection from sugar imports, which would be likely to increase prices facing Ghanaian consumers, and could undermine the competitiveness of Ghanaian produced sugar.
- Zambia has a private sector sugar industry which is very efficient and able to export significant volumes at competitive prices. The industry is growing in response to new export opportunities.
- However, there is little competition in the domestic market within Zambia, with one firm dominating, and this contributes to very high domestic prices facing Zambian consumers. This has been challenged by industrial sugar users (confectionary companies) within Zambia, and examined by the Zambian Competition Commission.

Figure 2 below shows the amount of refined sugar produced by each country in 2007 (in thousands of tonnes), divided by the number of hectares of sugar cane under cultivation in each country. It shows that Zambia's private sector led sugar industry is the most efficient, with Vietnam, Bangladesh and Kenya, which all have state led sugar industries, lagging behind by some margin. Zambia produces on average 15.3 tonnes per hectare of sugar cane grown, which is three times greater than the second most efficient country (Vietnam). In fact, Zambia has one of the lowest sugar production costs in Africa and the world (\$169/ton) compared to the world average for sugar producing nations (\$263/ton)¹³.

Figure 2: Average sugar production (Tonnes/Hectare) in case study countries in 2007¹⁴



Source: ODI calculations based on various country specific sources

¹³ LMC Worldwide Survey of Sugar and HFCS Production Costs 2005

¹⁴ Kenya sources for this table: Kenya Sugar Authority (2008) and Kenya National Bureau of Statistics (2009)

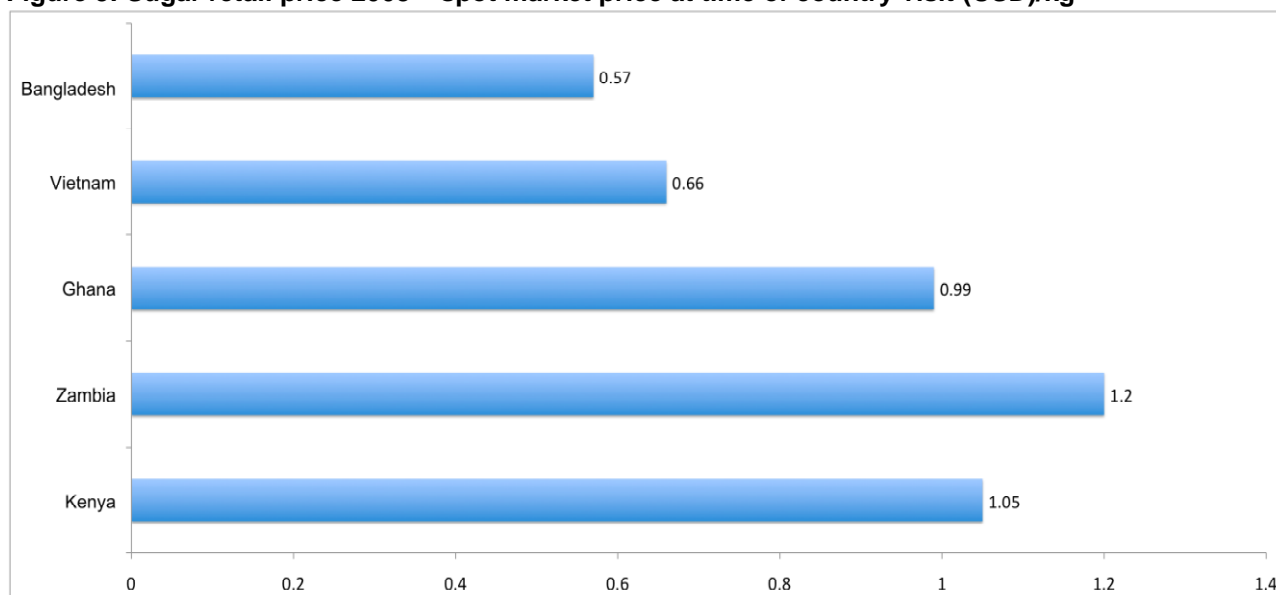
The sugar industries in Kenya, Bangladesh and Vietnam, which all have a high degree of government ownership and intervention, have broadly similar problems relating to productivity and performance. In all three countries, the use of obsolete technology and inefficient farming methods results in poor 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 and is a very profitable, internationally competitive industry.

There seem to be two broad issues here. First is the superior management expertise and incentives for efficient production that exist in the private sector. The dominant Zambian sugar producer is owned by a large multinational, which is competing successfully on world markets, and is likely to be using the best technology in milling and the best techniques in agricultural production. The sugar industries in the other countries have all been poorly managed, are loss making, and use obsolete machinery.

Second, and related, is the efficient management of sugar cane growing itself. In Zambia, the dominant firm plants and harvests 60% of its sugar cane requirements itself on large, efficiently managed estates. The rest is divided between three similarly sized outgrower schemes of which two have long term contracts with the dominant player. This gives the dominant player considerable control of costs, quality and reliability of raw materials, and the incentives to invest in superior production methods. In the other countries studied, however, sugar production tends to be through many smallholder farmers, with very small cane plots, which reduces economies of scale (e.g. machinery cannot be used on small and irregularly shaped plots of land), reduces incentives and ability to invest in new and better seed varieties, or irrigation etc., and substantially increases transaction and coordination costs, thereby decreasing the efficiency of the sector, and the quality and reliability of the raw material coming into the sugar mills.

Figure 3 shows the domestic sugar price in each of the countries. The price was highest in Zambia despite it being the most efficient and lowest cost producer of the five countries. Although many other factors will influence retail prices (e.g. domestic transportation costs, import barriers etc.), it is hard to imagine that this cannot be attributed at least in part to the monopoly power exercised by the dominant player, which is underpinned by ongoing protection from imports.

Figure 3: Sugar retail price 2008 – spot market price at time of country visit (USD)/kg



Source: ODI Research

Prices in Kenya, Vietnam and Bangladesh are all influenced to some degree by state intervention on prices, or ownership and subsidisation of the market. Whether this will result in a market price that is higher than the price that would exist if the country relied on imports depends on numerous factors, including whether the inefficiently high costs of production are fully offset by any form of government subsidisation, and may any case change over time depending on fluctuations in world prices. Ghana imports all its sugar and import tariffs are relatively low, so is the country most dependent on world market prices.

3.2 Kenya sugar market

In Kenya, the sugar industry is dominated by the state, and thus the competitiveness of the sugar sector is affected as much if not more by state involvement and intervention than by the practices of private firms. There were 7 operating sugar mills at the time of the research mission, all except one of which have some degree of state ownership. The company with the biggest market share, and most efficient production (in terms of tonnes of sugar produced per hectare of sugar cane grown¹⁵), was the one with the least degree of state ownership (20% ownership) compared with the others (with the exception of one fairly new, small, fully private mill). Another new private mill has entered the market since then.

Our research has highlighted that Kenya has very inefficient sugar production (in terms of tonnes of sugar produced per hectare of sugar cane grown) when compared with the other countries in this study (see section 3.1). This is in stark contrast to Zambia, which has 3 privately owned sugar producers and the most efficient production of the five countries. It appears that the relatively poor production and efficiency levels in Kenya can largely be explained by the high degree of state ownership and intervention in the market. Although pricing has been liberalised to some degree, and there does seem to be some degree of price competition between the seven mills, the government still intervenes in price setting intermittently (e.g. to hold prices down when there are sugar shortages due to a poor harvest during which the price would otherwise rise). This creates financial difficulties for state owned mills who are forced to price below cost. As a result many face high levels of debt, and have been unable to invest in upgrading plant and machinery, which over time has made them increasingly uncompetitive. Thus at least some of the state owned sugar mills appear to be struggling to survive.

There is a continuing decline in productivity of the industry because the production technology used by many of the mills is becoming obsolete. At the mill level, crushing of cane into sugar is inefficient due to out of date technology and frequent breakdowns. At the farm level, cane yields are low because smallholder farmers have little incentive to increase their output (e.g. by using faster ripening seed varieties) as it would require investment and higher maintenance, which would be unlikely to be rewarded through higher profits, given the limited milling capacity and current indebtedness of most mills. Mills often owe money to farmers, who cannot be sure if or when they will receive payment. As a result, farmers often fail to repay loans made to them by their out-grower associations. This apparent sector-wide tolerance of non-payment may be exacerbated by the bailouts that are sometimes given to sugar mills by the government. Furthermore, farmers are generally paid for the amount of sugarcane they deliver to the mills in terms of weight, rather than sucrose content. This does not incentivise farmers to improve the quality of the cane they produce, which in turn reduces the efficiency of the mills.

The Government has been resisting changes to import tariffs and quotas that are due to be phased out under agreed COMESA trading arrangements. Given the uncompetitiveness of the sector, many bankruptcies and job losses could result from such liberalisation. However, come 2012, Kenya is required to remove all protection from sugar imports of COMESA origin. It seems likely that some of the existing sugar mills will struggle to survive when that happens, unless the

¹⁵ Based on information received from Kenya Sugar Board (KSB)

Government succeeds in obtaining further extensions to the date when the market must be liberalised. Even if further extensions are obtained, the ongoing subsidisation of losses and price setting by the Government is neither desirable nor likely to be sustainable in the long run. This is of considerable concern given that 6 million livelihoods currently rely on the sugar sector in Kenya.

There are several potential new entrants to the market who are hoping to obtain the necessary approvals to start up, and would potentially operate on a very large scale. However, their entry into the market may again jeopardise the survival of the existing, inefficient, operators, so they may face political barriers to entry.

Significant privatisation and restructuring are needed to secure the industry's future. Although privatisation is currently an aim of the government, many sugar mills are not commercially attractive, given their high levels of debt, and the extensive investment in plant and equipment that is needed to bring it up to modern day productivity levels. Thus it seems likely that at least some of the mills in Kenya will need to close if the sugar industry is restructured. To increase competition would also require changes to subsidies, regulatory controls, ownership structures, mill governance, trade restrictions and research (e.g. into higher yielding varieties of cane), development and extension. However, given:

- the number of livelihoods that are currently dependent on the existing sugar mills, (and the fact that the new entrants in the sugar market are unlikely to establish in the same areas as the existing mills);
- that many electoral constituencies in Kenya are dominated by sugar growers who would strongly oppose such restructuring;
- and that, historically, the sugar sector was established by the government to promote employment and growth in rural areas, not as a commercial venture;

Undertaking the required reform is likely to be very challenging politically. The problem is that those who are likely to lose from the reform are much more easily identifiable, and often have a lot more to lose as individuals, are likely to be more concentrated and well organised, and hence lobby more effectively and vociferously than those who stand to gain from reform, who in this case would be both household and industrial consumers who would obtain sugar more cheaply, and those people who would gain from the new jobs created in a more healthy, dynamic sector and economy. However, at the current time, the high degree of state intervention in the sector, unhealthy market dynamics, lack of competitiveness, and vested interests against reform that this generates, is clearly undermining investment and growth in the sector.

3.3 Zambia sugar market

Sugar production in Zambia is highly efficient as can be seen in section 3.1. Independent statistics show that Zambia has one of the lowest sugar production costs in the world, at \$169 per ton, compared to the world average for sugar producing nations, which is \$263 per ton¹⁶. Of the five countries, Zambia performs the best by a long way in terms of sugar production per hectare of sugar cane grown. It is particularly interesting to note how well it compares with Kenya, its nearest geographical neighbour out of the five countries, which suffers from a high degree of state involvement in the market. Kenya's average sugar production cost is much higher, at \$415 / ton.

Because Zambian sugar production is internationally competitive, it is able to export a significant amount – over 60% of total sugar produced was exported in 2007. Most of Zambia's sugar exports go to the EU market. The EU is a particularly attractive market for many efficient ACP (African, Caribbean and Pacific) sugar producing countries such as Zambia, because the EU price they can

¹⁶ LMC International Ltd 2005

obtain is significantly higher than their production costs. Thus sugar represents an important source of income and foreign exchange in Zambia.

However, although production costs are low, and Zambian sugar exports are internationally competitive, Zambia still has very high **domestic** sugar prices when compared to many other sugar producing nations in Africa and the rest of the developing world (see section 3.1), including all the other countries studied, which impacts directly on Zambian sugar consumers, both domestic and industrial.

While many country-specific factors will of course affect prices, and while there are high costs to be borne within Zambia (e.g. high transport costs, and high costs associated with the fortification of sugar with Vitamin A – see below), the observation that a relatively low production costs translates into such a high retail price in Zambia is unusual, and may be because within the domestic market for sugar in Zambia, there is relatively little competition. Despite some market entry in the last decade, one firm dominates the production of sugar in Zambia, with an estimated 93% market share.

The market is also protected from external competition by non-tariff import barriers. The requirement for potential sugar importers to obtain import permits through a bureaucratic and non-transparent process was cited by some as one kind of barrier (with the Ministry of Agriculture, the Ministry of Health and the Ministry of Commerce all having to clear the import of sugar). Another barrier cited is the government requirement that all sugar being sold in Zambia must be fortified with vitamin A.

This is an unusual requirement, which few if any other countries have imposed. The government argues that a large part of the Zambian population suffers from vitamin A deficiency, and since sugar is a staple commodity, it is a good medium through which to provide vitamin A to people. However, many stakeholders outside the Government and the sugar industry consider fortification to be a mechanism for protecting the Zambian sugar market from foreign competition. They expressed the view that there were certain shared interests between Zambian sugar industry players and the Government, favouring continued protection from import competition, and allowing prices and profits to remain high.

The sugar industry contributes considerable tax revenue to government, contributing 30,306 million ZMK (approximately US\$7.9 million) in corporate tax on profits in 2007¹⁷. In addition, it has been reported that the dominant sugar company undertakes a number of social initiatives in the country, which may help meet Government objectives, and this may be part of the reason why sugar prices are so high in the country (i.e. the company transfers the costs incurred for these social initiatives to the consumer). The company's ongoing projects are diverse in nature and include, either in the form of cash funding or direct assistance, the uplifting of facilities at district hospitals, police stations, orphanages, government schools, sports and social clubs, the maintenance of municipal roads, donations to the disabled, and sponsorship of major sporting events and a local radio station¹⁸.

In 2006 the Zambian Competition Commission (ZCC) investigated the sugar industry, following a complaint made by the large industrial sugar users, and published a report¹⁹. The companies had complained about the high prices of sugar in Zambia and asked ZCC to bring prices down to world market levels plus a 10% surcharge to cover local conditions. If this were impossible, the companies asked ZCC to facilitate sugar imports. One of the complainants presented evidence that Zambian sugar prices were approximately three times higher than the prices in neighbouring countries.

¹⁷ Zambia Sugar, Annual Report 2009

¹⁸ Zambia Sugar Annual Report 2008

¹⁹ Intergovernmental Group of Experts on Competition Law and Policy (July 2007)

The ZCC found that the domestic sugar price was indeed very high and that this had a negative impact on downstream markets. It recommended that administrative barriers to imports should be dismantled, that a new “Sugar Desk” should be created to establish and run an import quota regime, and that this should be managed by representatives of the Government, sugar producers and sugar users. However, it stated that the import quota should be set in order to prevent “excesses arising from import competition”.

It is not clear that creating import quotas and empowering the industry itself to be part of the decision-making body that grants these quotas would solve the competition problems in the market, or benefit Zambian sugar consumers. In any case, it does not seem that these recommendations have been implemented. The ZCC currently says that they are lobbying government to introduce a streamlined import licensing process to encourage competition.

The limited scope of the ZCC’s response to these problems raises questions as to the extent to which the ZCC is able to effectively tackle problems in sectors where there may be strong vested interests opposing reform. Nevertheless, it shows that competition authorities can still play an important role in investigating and publicising evidence about competition problems that may exist in a particular market, and their negative impacts for consumers.

The Zambia sugar case shows that it may be possible to mobilise existing businesses to agitate for pro-competition reform, (as confectionery and brewery companies lobbied against a lack of competition in sugar production). If these groups can be mobilised to lobby effectively for reform, this can help to offset the political pressure to maintain the status quo. Competition authorities can play an important role here, in coordinating such groups, publicising and investigating the issue and providing evidence of the benefits of reform.

At the time of the ODI mission to Zambia, the country was subject to an import quota in the EU market. However, as of 1 October 2009, all EBA signatories (EBA is the “Everything But Arms” agreement which includes Zambia) saw their quota removed, which will increase Zambia’s access to the EU market. The change in the EU import regime, together with strong demand and high prices on the world sugar market, has apparently spurred a significant capacity expansion by the incumbent sugar producer, and has also attracted potential new entrants (both domestic and foreign) towards the Zambian sugar industry. Thus in the future, the domestic sugar market in Zambia may become more competitive, and domestic sugar prices may fall.

It is understood that a large domestic firm from the Zambian meat industry acquired a large sugar cane plantation estate in Zambia in mid-2008 with a view to enter the sugar industry as a producer. The estate has historically been one of the largest growers of sugar cane supplying the incumbent sugar firm. However, after buying the farm land, the company decided to divest²⁰. There is speculation that the firm may have divested because it envisaged tough competition from the incumbent, and because it wanted to focus on other business ventures. However, it is interesting to note that the plantation estate was sold to the dominant sugar firm for almost twice the price that the new entrant had originally bought it for. It is understood that the Zambia Competition Commission (ZCC) had originally authorised the acquisition of the farm land by the firm from the meat industry in the hope that this would eventually create competition in the sugar industry.

The privately managed Zambian sugar sector appears to compete very successfully on world markets, and represents a source of considerable investment and growth, comparing very favourably with the Kenyan sugar sector, for example, which has a high degree of state involvement. However, the fact that domestic prices in Zambia remain very high points to the lack of competition in the domestic market, which is of considerable detriment to consumers.

²⁰ <http://www.times.co.zm/news/viewnews.cgi?category=12&id=1248328303>

3.4 Ghana sugar market

In Ghana there is no domestic sugar production and all of domestic consumption, for both industrial and household purposes, is imported. There was a sugar industry operating in Ghana between 1966 and 1981; two mills and sets of plantations which fed into the mills were established by the Government. However, poor productivity in both the farms and the mills meant that the industry finally collapsed. Various possible reasons were cited for this poor productivity, including a poor choice of location, inadequate machinery with poor maintenance, government delays in processing permits, adverse agronomic factors, and poor organisation of production. The Government has been trying to privatise the mills and their estate lands since 1990 with no success.

It is interesting to compare this experience with that of other countries studied. The Kenyan sugar industry is also struggling to survive as previously discussed, with high levels of state ownership and intervention, state owned mills in debt and using obsolete machinery resulting in very inefficient production, and the prospect of liberalisation through COMESA threatening the survival of the existing mills. Vietnam is having similar problems due to the high degree of state involvement in the sector, and non-commercial basis upon which the industry was established (see below). Zambia, on the other hand, has a privately owned and very efficient sugar industry, one of the most competitive in the world, and stands to gain considerably from future liberalisation of the sugar sector. This suggests that private ownership, with the sharper incentives and better management capacity that it often brings, may be an important factor in the success of the industry.

There are some proposals for new private ventures in the sugar sector in Ghana. One firm proposes to set up plantations and a mill in the north of the country, and we are told could create around 60,000 jobs for unskilled labour in this economically deprived part of the country, as well as building agricultural and industrial capacity which would contribute to growth. The mills could also generate revenue from the by-products of sugar production: it may generate its own electricity by utilising bagasse, and excess power could be fed into the northern grid. Ethanol and animal feed may be other potential revenue sources. There is also a second proposal, to establish a sugar refinery in Tema, which would refine raw sugar imported from abroad.

We were told that both projects were seeking to obtain protection from imported sugar, which it has been argued is necessary to make the projects viable. This raises an interesting dilemma which governments commonly face. While most governments are keen to attract this kind of investment, with the potential growth benefits it can generate, the introduction of protection alongside it can serve to undermine the potential benefits of that investment.

It is not clear whether such protection is actually essential in order to create a viable business for these new entrants, although it may be if Ghana is inherently an unsuitable location for such production e.g. due to climatic conditions (though if that is the case the merits of establishing a sugar industry are questionable) or there is subsidisation or protection of sugar production in other countries, which there commonly is, and which implies unfair competition on world markets.

Even if protection is not essential, it may be the case that Ghana is competing for such foreign investment with other countries, and thus some kind of protection may be warranted – at least for a temporary period - in order to secure the contract, with the capital, jobs, and other beneficial economic spillovers this may bring.

However, in the longer term, such protection could result in increased prices for Ghanaian consumers, and may have other knock-on impacts e.g. deterring investment in confectionary or soft drinks companies that would have to pay uncompetitively high prices for sugar. Perhaps the conclusion to draw is that if such protection is given, it would be best if only provided on a

temporary basis, so as to avoid undermining Ghana's competitiveness in the longer term. However, credibly establishing such time limited protection can be difficult, and may require upfront legislation, though even that may be overridden if strong vested interests demand ongoing protection.

It is important to distinguish between the concepts of government support and protection. It is often argued that agricultural industries need government support in order to get established – for example, through the provision of government funded research into seed varieties and government subsidised/funded irrigation schemes. Without such support, these industries may not be viable. Protection on the other hand may lead to lack of competitiveness of a sector in the medium to long term.

At the present time, Ghana imports all its sugar and there are a few sugar importing companies. Some people we spoke to suggested that some of these companies may collude in an attempt to fix prices and prevent market entry using informal means.

One example of possible market power of the importers may have been manifested in mid-2008 during the world food price crisis. We were told that at that time the Government reduced import taxes on sugar, but market prices did not come down. Some accused the large sugar importers of not passing down the cost reduction to customers, and in a competitive market it would be expected that a significant cost reduction would be passed on to consumers to some degree, depending on the price elasticity of demand.

However, the sugar importers argued that they had stocks on which they had already paid duty and thus had to sell at the old rate, despite the recent reduction in import tariff. They also argued that the Ghanaian currency (Cedis), had devalued over the past few months and imports had become more expensive, and the cut in import duties did not have an offsetting effect.

Unfortunately it is impossible to establish the truth of allegations about anti-competitive practices in the sugar industry in Ghana, without obtaining detailed information that is probably only available from the companies themselves. If there was a competition law and authority operating in Ghana, with the mandate to demand such information, they would be able to investigate such cases. This could potentially be of considerable benefit to both domestic and industrial consumers of sugar in Ghana.

3.5 Vietnam sugar market

The Vietnamese sugar industry is by far the least concentrated of those studied, with the greatest number of mills by some margin (see Table 2 above). Vietnam's sugar industry is moderately efficient, compared with the other countries studied, as shown in Figure 2 at the beginning of this section. While we have concluded that the concentration of sugar production in some countries such as Zambia is too high, it seems likely that the concentration of sugar production in Vietnam is too low, and does not allow companies to exploit economies of scale. Many mills are inefficient and require subsidisation to survive, and significant reform of the sector is required to put it on a more sustainable growth path.

The state is heavily involved in the sugar industry in Vietnam. Between 1995 and 2000, the Vietnamese Government undertook substantial investment in the sugar sector under the "One Million Tonnes of Sugar Programme" (OMTSP), which aimed to more than double Vietnam's sugar growing area²¹. While the stated aim was to meet demands for sugar through domestic production, other implicit objectives of the program appeared to include employment creation, skills

²¹ Centre for International Economics (2001)

development in the regional labour force, a contribution to the reduction of hunger and poverty in rural areas, and industrialisation of the rural economy.

Over US\$750 million was spent on milling capacity and perhaps as much as US\$350 million was spent on infrastructure and capital in sugar growing regions. The investment took place under easy, government backed credit terms, infrastructure subsidies and behind high tariff and non-tariff trade barriers. Thirty-two new sugar mills were built, bringing the total number of mills to 44. The area sown to sugarcane expanded from around 150,000 hectares to 350,000. Sugarcane crushing capacity expanded from around 10,000 tonnes a day to 78,000 tonnes. Over most of the period of investment, domestic prices were between 50 and 70 per cent above the import parity price of sugar. However, the surge in production toward the end of the investment period made Vietnam close to self-sufficient in sugar production, and a combination of smuggling and market saturation caused prices to fall close to world prices in 1999–2000.

The most critical instruments of Vietnam sugar policy were:

- Its trade restrictions which protected the industry from world prices and on average raised domestic prices well above world prices;
- The role of government in raising, allocating, securing and distributing milling investment and working capital through Government's use of state owned enterprises as vehicles of investment;
- Controls and regulation of direct foreign investment and private investment;
- Ownership and control of banking;
- Investment licensing and approval procedures;
- Land allocation procedures;
- The role of Government in supporting financially troubled mills;
- Subsidies paid for infrastructure in cane growing regions including: payment for roads, bridges and irrigation works, land development, and research, development and extension.

When the OMTSP came to an end in 2000, there were 44 sugar mills in operation of various sizes, with 38 of these being state owned (23 owned by local government, and 15 by central government). The period between 2001-2003 was difficult for sugar mills, with many making large losses²². According to a government report the sugar industry had suffered a total loss of VND2,753 billion by the end of 2002, (VND 2,048 billion from locally owned mills and VND 704 billion from mills with foreign investment.) Domestic supply is estimated to have exceeded demand by 100,000-200,000 tonnes in the 2002/3 season. In addition, the amount of smuggled sugar continued rising, despite prevention efforts. Both these factors in combination substantially decreased prices: the domestic retail price of sugar dropped from VND 7,000 per kg to VND 5,000-6,000 per kg that year. Many small sugar processors stopped running during this time. In the Mekong River Delta, despite operating at full capacity, the millers were not able to purchase all the canes from farmers, resulting in the waste of unharvested crops.

In 2003, a Prime Ministerial decree sought to address the problems and restructure the Vietnamese sugar industry. This reform required the equitisation of many mills. Thus far, 21 sugar mills have been equitised. Thus the Government is no longer the major shareholder in most Vietnamese mills, with many shares being sold to foreign investors, local investors and also farmers. Four underperforming sugar mills have been closed down. One sugar mill has been relocated from central Vietnam to the south. The cost of implementing the reform was VND 2000 Billion²³. The Sugarcane Association reported that since the industry's days of poor performance in 2003, many sugar mills have now become profitable and are paying taxes again.

In February 2004, another Prime Ministerial Decree was issued setting out a strategy for the sugar

²² <http://xttmnew.agroviet.gov.vn/en/stories/TinTiengAnh/SugarReport.asp>

²³ Interview with Sugarcane Association

sector for 2007-2020. As part of this decree, the Government stipulated that it wanted 300,000 hectares of Sugarcane farming in Vietnam, with production volumes of 105,000 tonnes of sugar production per day. The decree also stated that no approvals would be granted for the construction of new sugar mills, but that existing mills could expand.

At the time of the ODI mission (December 2008), there were a total of 40 mills operating in Vietnam. There were 10 sugar mills which were either privately owned or were joint ventures with the Government. The mills with some private sector ownership tended to be better performing in terms of output and utilisation. Most of the top ten mills by sugar output were either joint ventures or 100% privately owned. It is a very unconcentrated market, with no mill having greater than 9% market share. Interviewees explained that private mills and mills which are joint ventures tend to perform better than SOE mills because they use better technology in milling, educate farmers in better farming methods and are able to set up longer term contracts with farmers for sugar cane supply.

The study team was informed by one private mill that they had given away farming inputs to farmers for free (e.g. lime, urea, fertilizer) on the condition that farmers supply cane to them. Private mills also provide more support to farmers through the provision of technological services such as the introduction of new, higher-yield seed types; and through financial support including loans underwriting farmers' preparation, seed, planting, fertilizer, and labour costs. One private mill has reportedly also built schools and power stations for villages that supply it with regular, specified volumes of good quality sugar cane.

The private / JV mills perform better despite the fact that SOE mills enjoy significant advantages e.g. better access to finance, and the fact that any losses are underwritten by the state. The State does not establish a separate fund for compensating losses of the sugar sector. When losses occur, the Board of Directors must report this situation and request compensation. When such requests are approved, funds are provided. If not approved, the Government would in any case ultimately bear responsibility for the loan through its ownership of the banking system. This may allow inefficient and underperforming state owned mills to continue production, thus distorting competition.

The study team were told that sometimes the mills set up agreements with each other to prevent competing with each other for the sourcing of cane. Thus each mill would source its cane from a different catchment area. This would mean that mills have a certain degree of monopsony power which could be used to keep the payments made to farmers lower than would be the case if farmers had a choice of mills to they could sell to. However, it seemed that farmers could renege on their commitment to supply cane to specific mills, and that as a result, some mills had a problem in sourcing a sufficient amount of cane.

The products of the different mills do compete with each other to some extent within regions, and there are different brands of sugar available on the market at both the wholesale and retail levels. The large mills distribute sugar using both Government-owned and private distributors who then sell onwards to the wholesale and retail market. The study team found no evidence of market distortions created by distribution channels. However, sugar produced in the south does not tend to get distributed in the north, as most sugar demand is in the south, particularly for industrial sugar, so there may be some degree of geographical market segmentation.

There is evidence that the different mills are innovating in the face of competition. For example, one firm invested 10,000 tonnes of breeding sugar cane for farmers and applied new planting techniques, leading to high yield crops and reduced production costs. In addition, a number of mills are using byproducts such as bagasse as a fuel to generate thermal energy to power their own

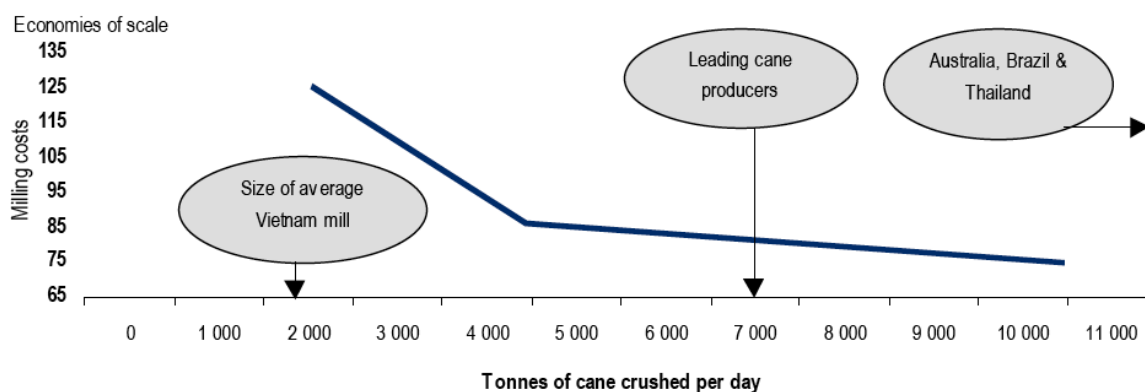
operations and to generate electricity to meet industrial demand, thereby giving themselves an additional source of revenue²⁴.

The Vietnamese sugar industry is by far the least concentrated of those studied by the ODI Research Team, with the greatest number of mills by some margin (see Table 2). These mills are widely dispersed across the country as well, in contrast to the other countries, where sugar industries tend to be located mainly in one area of the country. While we have concluded that the concentration of sugar production in some countries such as Zambia is too high, (as the lack of competition results in a very high domestic price of sugar, despite Zambia being a very cost efficient producer of sugar), it seems likely that the concentration of sugar production in Vietnam is too low, and does not allow companies to exploit economies of scale.

Vietnam's sugar industry is moderately efficient, compared with the other countries studied, as shown in Figure 2 at the beginning of this section. Mills in the south of the country are far more efficient than those in the north due to climatic factors, thus the northern mills tend to bring down the average efficiency of sugar production in the country. If the industry was established on a commercial basis, rather than with an objective of job creation in mind, it would likely make more sense to grow sugar in the south and transport some of it to meet demand in the north, especially as transportation costs are relatively low.

The fact that there are many smallholders involved in agricultural production in Vietnam (many cane plots are as small as 0.2 hectares) as opposed to large estates, also increases transaction and coordination costs, and reduces scale economies. Thus Vietnamese sugar production is not very efficient compared with leading cane producers, as reflected in figure 4 below, although consolidation since then may be helping to ameliorate this problem.

Figure 4: Milling costs reflecting economies of scale in production



Source: Centre for International Economics (2001)

A deliberate government policy of selecting a greater number of small mills over fewer larger ones to satisfy regional objectives has resulted in the building of high cost mills with low throughputs, instead of fewer, larger mills, operating on a more efficient scale. As a result unit costs of milling are substantially higher than need be. In addition, farms supplying larger mills appear to perform better than farms supplying small mills due to better extension efforts provided by the larger mills. However, the Government regularly underwrites the losses of small mills, which means the small mills are likely to be able to go on matching the prices paid for cane by big mills, even if this means operating at a loss. Without such financial support from Government, small mills would feel the full competitive forces of large efficient mills and would be unable to continue operating. The continued government subsidisation of losses by inefficient sugar mills is likely to undermine competition in the market, and represents a waste of resources that could be spent better elsewhere.

²⁴ Subhes C. Bhattacharyya and Dang Ngoc Quoc Thang (2004)

A Centre for International Economics study (2001) states that since 1998, the State has only recommended prices of cane as raw materials, leaving open the opportunity for farmers and sugar processors to negotiate the price of cane, and avoiding unilateral price-fixing. The Sugarcane Industry Association (an association of the mills) confirmed that individual mills are free to set their own prices for cane, and to choose whether to have long term contracts with farmers or set spot prices. However, in a meeting with the Ministry of Agriculture in December 2008, the Department explained that they are trying to implement a pricing policy for sugar cane such that the price paid to the farmer is set in relation to the price at which the mill sells to the distributor. It is not clear what the objective of such a policy would be, and it does not seem to be in line with the principles of free competition. It is unclear whether this will apply only to Government mills or private mills as well.

Overall, putting the sugar industry on a strong growth path will require achieving economies of scale in milling (and closing many small inefficient mills), and for mills to compete with each other for cane. Although the Government has made some changes since the OMTSP came to an end, more needs to be done. To increase competition would require changes to subsidies, regulatory controls, ownership structures, mill governance, trade restrictions and research, development and extension.

Closure of small mills will displace mill workers, which may generate political barriers to reform. Social safety-nets may help to assist affected mill workers. For cane farmers, mill closures will have mixed effects. In the North where all mills are small and are likely to close, closures will require conversion to alternative crops. However, most other cane farmers will benefit from supplying larger mills, which are better able to invest in the farmers they source from.

By world standards, cane transport costs are not high. With mill closures many growers in the centre and south would still have access to an alternative larger mill. To better utilise their equipment and to gain other economies of scale, medium and large mills are likely to be keen to take such cane. The economies of scale they achieve will also enable them to pay for higher transport costs. In addition, larger mills are likely to be able to better help farmers to achieve higher yields through more targeted extension programs.

Private ownership structures place powerful incentives on a company's management to be as efficient as possible in its use of resources. Managers and boards of directors of state-owned mills do not face the same powerful commercial incentives and disciplines. Thus governance of state owned mills could be restructured so as to more closely resemble that of private mills. Equitisation of mills is an important route to this end and a precedent has been set in this area.

There are some parallels between the sugar industry in Vietnam, and the sugar industry in Kenya, which was also developed by the government with the objective of creating livelihoods in rural areas rather than for commercial reasons, and is now struggling to survive and compete on world markets, and faces high levels of debt and inefficient production processes. Once again, the sugar mills that are performing best are the ones with most private ownership, while the government mills are struggling to survive.

Already foreign investment in Vietnam has played a big role in ensuring the establishment of several relatively efficient mills. Ensuring that the commercial environment remains attractive to foreign investment is likely to be important. For the best type of foreign investment, an attractive commercial environment is one that is benign.

This is an environment that: does not discriminate against or favour one mill over another; does not place restrictions on mill managers' options to choose what combination of inputs to use, what scale to produce at, where to operate or how to market the output; and is predictable and transparent in terms of implementation and administration of any regulations.

Promoting domestic competitiveness will do much to promote international competitiveness indirectly. But open trade will provide the ultimate incentive to adopt best practices as quickly as possible. With Vietnam's signing of the ASEAN Free Trade Agreement, import tariffs will be significantly lowered by 2011, which will help the industry become more competitive in the long run. The Vietnamese sugar industry has considerable potential to achieve productivity improvements. A strong argument exists to transfer some money currently used for various subsidies to fund R&D instead.

The economic performance of Vietnam's sugar mills could also be improved if they could generate other revenue streams. Vietnam produces about 5 million tonnes of bagasse per year, and there is potential for cogeneration using bagasse, which can also help overcome power shortages in the country. One study finds that up to 300 megawatts of power-generating capacity could be produced from sugar mills, and finds cogeneration to be a cost-effective option for all types of mill²⁵. Especially interesting is the finding that the cost savings from cogeneration would more than offset the cost of introducing cogeneration in sugar mills with inefficient cane-processing technologies, by reducing their energy costs substantially. The Government could play a role in this, by establishing a Cogeneration Policy which established the framework for profitable electricity generation by the mills, and created the right investment environment to attract this kind of investment.

Thus overall, the Vietnamese sugar industry has considerable growth potential, which could generate more jobs, exports and income. However, the industry requires considerable restructuring, reduced protection and subsidization by government and an improved competitive environment if the right incentives are to be created that will allow this growth to be achieved.

3.6 Bangladesh sugar market

Sugar consumed by individuals comes from three main sources in Bangladesh:

- private sector sugar refiners, who import raw sugar and process it;
- domestically grown sugar which is milled by the Bangladesh Sugar and Food Industries Corporation (BSFIC) which is run by the Government; and
- imports.

Thus in Bangladesh the private sector does not use domestically produced sugar as it can import sugar of a higher quality more cheaply from abroad. Domestic sugar production is entirely dependent on state subsidies to SOE mills.

The estimated share of sugar coming from each of these sources is shown in Table 3 below.

Table 3: Sugar market share of different participants

	Estimated share (%)
BSFIC	10-15%
Direct Import	5-10%
Private sector refiners	80%

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

²⁵ Subhes C. Bhattacharyya and Dang Ngoc Quoc Thang (2004)

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 2009²⁶. 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 refineries and/or the wholesalers were restricting supply in order to increase prices²⁷. 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.

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 3 above, only around 10% of sugar consumed in Bangladesh is being supplied by BSFIC production. Moreover, BSFIC sugar cane production is very inefficient as shown in figure 2.

The level of sugar production per hectare is relatively low in Bangladesh. This is because of inefficiencies in the growing of cane and in the processing of cane into sugar. Inefficiencies in the growing of cane can be attributed to the fact that Bangladesh's sugar growing regions are characterised by many smallholder farmers, which reduces scale economies in production and contributes to low yields. This also increases transaction costs associated with coordinating cane supply from many farmers. Inefficiencies in the milling of cane can be attributed to the use of outdated milling machinery and poor management.

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 handicraft sugar products such as 'jaggery'²⁸ 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.

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, as previously noted, the use of obsolete

²⁶ <http://www.thefinancialexpress-bd.com/2009/04/05/63127.html>

²⁷ The Financial Express, September 13, 2009, available at: <http://www.thefinancialexpress-bd.com/2009/09/13/78829.html>

²⁸ Jaggery (also known as Gur) is a traditional unrefined sugar consumed in Asia, that is brown in appearance

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.

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/kg²⁹, 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 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. .

²⁹ Based on interview with BSFIC

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 – when there is surplus production of subsidised sugar in India - enables their producers to sell at tk.24/kg to the 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. Of course low prices associated with dumped imports do still benefit consumers however.

3.7 Conclusions

1. State led sugar industries are inefficient, uncompetitive, and unsustainable

The sugar industry is one which is often dominated by the state, which may establish, support, protect, own, subsidise and control the industry in order to create and maintain rural livelihoods. However, in all three of the five countries studied which have adopted this approach, the sector is failing, uncompetitive and ultimately unlikely to be sustainable, with damaging consequences for the many people whose livelihoods depend on it, as well as taxpayers in those countries who foot the bill.

2. Far reaching reform of these sectors is required, but is politically difficult

Steps to a healthier sugar sector in these countries would appear to be the establishment of efficient new entrants, a reduction of state intervention in the sector, an end to bail-outs, a reduction in trade protection, and an acceptance that some of the existing sugar mills will go out of business. This will displace mill workers, so is deeply unpopular politically, and thus difficult to achieve. Social safety nets and retraining programmes might help to make such reform more politically acceptable.

In addition, a move away from sourcing sugar from many smallholder farmers towards large plantations would increase efficiency. However, land reform to create larger estates from the current number of smallholder plots is also likely to be politically challenging.

Undertaking the required reform thus appears to be extremely difficult. Those who are likely to lose from the reform are easily identifiable, stand to lose a great deal, are likely to be concentrated and well organised, and hence to lobby a lot more vociferously than those who stand to gain from reform. Those who will gain from reform in this case would be both consumers who would obtain sugar more cheaply (though this would be a relatively small gain per person, spread across many people), and those people who would gain from the new jobs created in a more healthy, dynamic sector and economy, but for whom that eventual outcome is not yet clear or certain.

3. Competitive forces could help to facilitate a restructuring of the industry to make it more viable

In Kenya, Vietnam and Bangladesh, Governments have set up too many mills and the poor performers need ongoing subsidies and other support to remain viable. In the absence of such support, competitive forces would cause the industry structure to change in a way that made it more competitive in production.

4. *Private sector incentives and management expertise are important for creating a successful, efficient and internationally competitive sugar industry*

In stark contrast to the countries with state led industries, the Zambian sugar industry is private sector led, and is extremely efficient and internationally competitive. It is expanding to take advantage of new market opportunities, and has the potential to create new jobs and growth.

5. *The existence of monopoly power can lead to high domestic prices*

Although production costs are low, and Zambian sugar exports are internationally competitive, Zambia still has very high *domestic* sugar prices when compared to other countries, which is detrimental to Zambian consumers, from poor households to confectionary companies. It seems likely that this is due at least in part to the monopolistic market structure of the sugar industry in Zambia, where one firm yields significant market power and is protected from external competition by barriers to imports.

6. *Sometimes government may have an interest in protecting business from competition because it can share in the profits in some way*

There is no clear economic rationale for protection of the Zambian sugar industry, especially as it is an industry that would probably still be internationally competitive and profitable without any protection. An alternative explanation is that the Zambian sugar industry is protected from domestic competition because the government has vested interests in its profitability, because it can share in that profitability through high tax revenues, and / or through other mechanisms such as social initiatives paid for by the business which contribute to government objectives. This, it has been suggested, may have created a mutually beneficial relationship between business and government, and resulted in strong vested interests opposed to pro-competition reform.

7. *Where there are strong vested interests opposed to reform, competition authorities may struggle to effectively tackle competition problems, though they can still play an important role in building the evidence base and raising awareness of competition problems and associated costs*

Although the Zambian Competition Commission has investigated the sugar industry, and agrees that prices are high, it does not appear to have been able to tackle the problem effectively. This raises questions as to the extent to which competition authorities, particularly where they are not independent of government, are able to tackle problems in sectors where there may be strong vested interests opposing reform. Nevertheless, the Zambian experience shows that competition authorities can still play an important role in investigating and publicising evidence about competition problems that may exist in a particular market, and their negative impacts for consumers.

8. *Interest groups can be mobilised in favour of reform, thus offsetting vested interests against reform*

Confectionery and brewery companies within Zambia got together to complain to the Zambian Competition Commission about the uncompetitive sugar industry, thus demonstrating that businesses can be mobilised to agitate *in favour of* pro-competition reforms, as well as to oppose them, which is perhaps more commonly the case. If these groups can be mobilised to lobby effectively for reform, this can help to offset the political pressure to maintain the status quo.

Competition authorities could play an important role here, in coordinating such groups, publicising and investigating the issue and providing evidence of the benefits of reform.

9. *There may be pressure to provide protection from competition in order to attract market players to establish or enter a market, although in the longer term this may have economic costs*

Sometimes governments face pressure to provide protection in order to attract players to establish or enter a market, as the Ghana experience in relation to potential new entrants into the sugar industry shows. Even if an industry would be viable without protection, it may be the case that a country is competing for such foreign investment with other countries, and thus may consider some kind of protection to be warranted in order to secure the contract, with the capital, jobs, and other beneficial economic spillovers this may bring. In the longer term though, such protection may result in higher prices and an uncompetitive industry, with detrimental impacts for the economy as a whole. Even if such protection is only given on a temporary basis, experience shows it can be difficult to unwind when there are strong interests in favour of continued protection.

4. Cement market study

4.1 Introduction and overview

The relevant market we have studied is the market for 50kg bags of Portland Cement, which could be either Ordinary Portland Cement (OPC) or Pozzolan Portland Cement (PPC) – of which the proportions purchased differed to some extent across the five countries. PPC is cheaper to produce and generally durable enough for most construction work and is more commonly used in most developing countries than OPC.

Cement is an important input for construction and infrastructure development, which are often paid for out of the government budget, and which underpin growth and industrialisation. Thus the price and availability of cement is important.

The cement sector is one that is often highly concentrated because of the cost structure and high minimum efficient scale of production. Being a heavy and bulky product, it is also expensive to transport, which generates the possibility of local monopolies within specific areas. Thus it is a market which often suffers from limited competition and has been a source of concern for competition authorities in many countries across the world, including in the countries we studied. There is significant scope for anti-competitive practices in the cement industry to result in much higher prices than would otherwise be the case, with negative economic consequences.

The five countries in our study have very different market structures as shown in table 4 below.

Table 4: Cement market structure across the 5 case study countries, 2008

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

Source: ODI, United Nations Population Division³⁰

Table 5 provides information relating to the proportion of cement factories which are of minimum efficient scale (MES). Minimum efficient scale is the smallest amount of production a company can achieve while still taking full advantage of economies of scale with regard to costs and supplies. In the cement industry, the minimum efficient scale is quite large due to the high ratio of fixed costs to variable costs. According to one source the minimum efficient scale for a cement plant is around 1 million tons of production a year³¹.

³⁰ Population data from United Nations Population Division: <http://esa.un.org/unpp/index.asp>

³¹ www.philippelasserre.net/contenu/.../Global_Cement_industry.pdf

Table 5: Proportion of cement mills of minimum efficient scale

	Total number of factories	Total national production capacity	Average cement firm size	Proportion of the mills which are operating at or above MES
Kenya	3	2.06	0.69	33%
Zambia	2	1.91	0.64	33%
Ghana	2	3.83	1.92	50%
Vietnam	90	42.20	0.47	22%
Bangladesh	34	21.40	0.63	21%

The column furthest to right in the table shows what proportion of mills in each country are operating at MES. In the two Asian countries where there are the highest number of mills, there are a lower proportion of the total which are operating at MES. In contrast, in the African countries where there are fewer mills, a higher proportion are operating at MES. How the concept of MES is relevant in each country's cement market is discussed in the forthcoming sections.

Where there is a high MES there may be a trade-off between technical efficiency which is achieved by large scale production, and competitive efficiency which is achieved through a more competitive environment with more market players, which creates stronger incentives to reduce price. So even if it may be technically efficient to have just one or two players in the market, this may result in less competition and hence higher prices than would be the case if there were more market players. In any case, the scope to export cement means that domestic market size should not necessarily constrain the number of cement firms that can viably operate within a country.

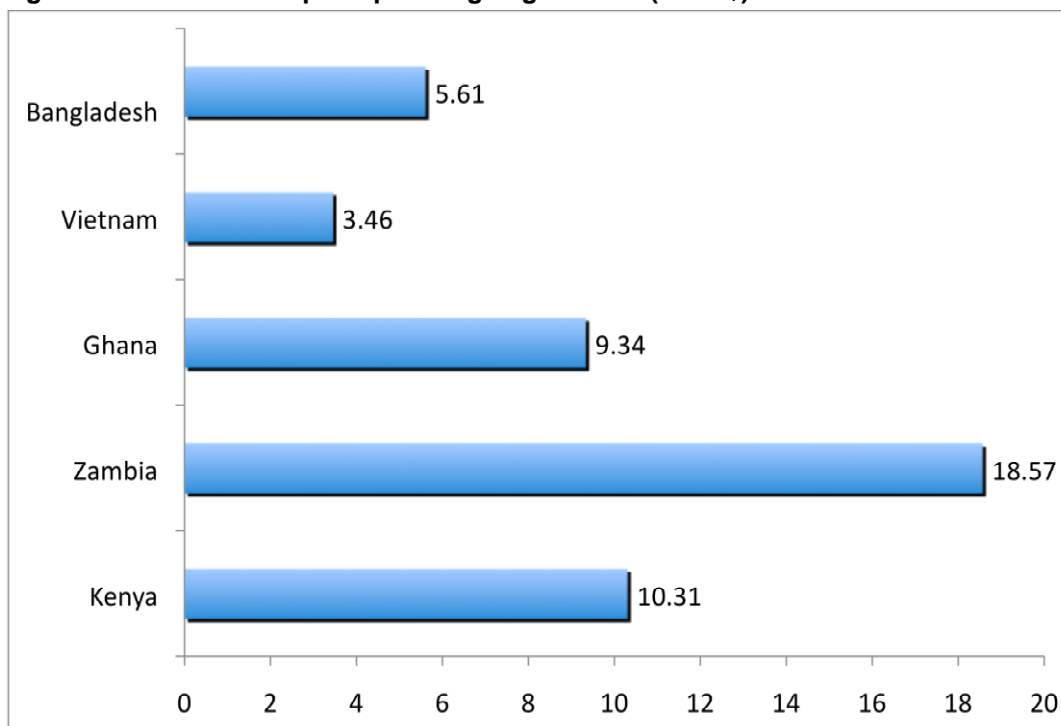
Key findings from the cement industry analysis:

- In comparison with the African countries which all had a more concentrated cement industry, there appeared to be a much greater degree of both price and non-price competition in Bangladesh and Vietnam, which had very unconcentrated cement industries. The two Asian nations enjoy the lowest prices of all the countries, and we also observed significant non-price competition, with cement firms trying to attract customers by offering credit, technical support and various promotions.
- In the cement market there is a high minimum efficient scale (MES) which means that large players have a significant cost advantage, which often generates a highly concentrated market structure with relatively few players. However, although large size delivers technical efficiency, having fewer players in the market reduces competition, and makes the sector vulnerable to anti-competitive practices, which is likely to result in higher prices. Thus there is a trade-off between technical efficiency and the need for a competitive stimulus to create incentives to reduce price. The high risk of anti-competitive practices suggests there is a need for careful monitoring of the cement sector by competition authorities.
- The cement sector is often dominated by multinational firms, who operate on a regional basis. Thus cross border competition issues come into play, which can either be tackled through regional competition authorities, or through wider policy coordination.
- Kenya has three cement manufacturers, but the dominant firm has ownership stakes in both the others, giving it some degree of influence over the other firms (e.g. with joint Directorship), which could potentially result in reduced competition between the three firms. It is possible that predatory behaviour permitted this joint ownership to happen in the first place. The weaknesses of the competition law and lack of effective review of mergers and acquisitions may have allowed this to happen. However, subsequent efforts to consolidate the pattern of joint ownership through merger, appear so far to have been successfully blocked by the Kenyan Competition Authority (MPC).

- Zambia's cement industry is a monopoly created by the takeover of an incumbent SOE by a multinational firm in 2001. The competition authority (ZCC) has been actively monitoring competition issues in the sector. In particular, during a major cement shortage, the ZCC investigated allegations against the dominant cement firm for constraining supply of cement in the market.
- The ZCC's investigation found that the firm had been playing a role in reducing the domestic availability of cement by curtailing all local sales when orders were received from abroad. The ZCC advocated increased imports of cement, and recommended that the Government revisit the tariff structure of cement in order to make the landed price of imported cement more competitive. This highlights the scope for government policy coordination – which may be influenced by the advice of the competition authority - as an alternative way of dealing with competition issues.
- Ghana's cement industry is a duopoly of two firms, with one dominant player. Prices of cement doubled in 2007 causing great concern in the building industry. Stakeholders alleged that because the company enjoys strong market power it is able to set higher prices without fear of losing customers. Stakeholders have also alleged that the dominant player blocks their attempts to import cement bags into the country through informal means. As there is no Competition Authority in the country and the consumer associations are not strong, there is little or no investigation into allegations such as these.
- Vietnam has 90 cement firms, of which 33 fall under an SOE umbrella company. Of the 90 firms, less than twenty are operating at minimum efficient scale. Despite this apparent inefficient industrial structure, Vietnam's cement prices are the lowest of the case study countries.
- The SOE umbrella company for cement in Vietnam has a dominant market share and benefits from some specific advantages that other companies do not. The SOE umbrella company is the decision making body on the clinker (one of the raw materials required for cement production) import quota for other producers, which are also its competitors, suggesting a conflict of interests and a lack of competitive neutrality between state and private players.
- Bangladesh has 34 cement firms, and the industry 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 possible future attempts at coordination through the trade body represent a risk.

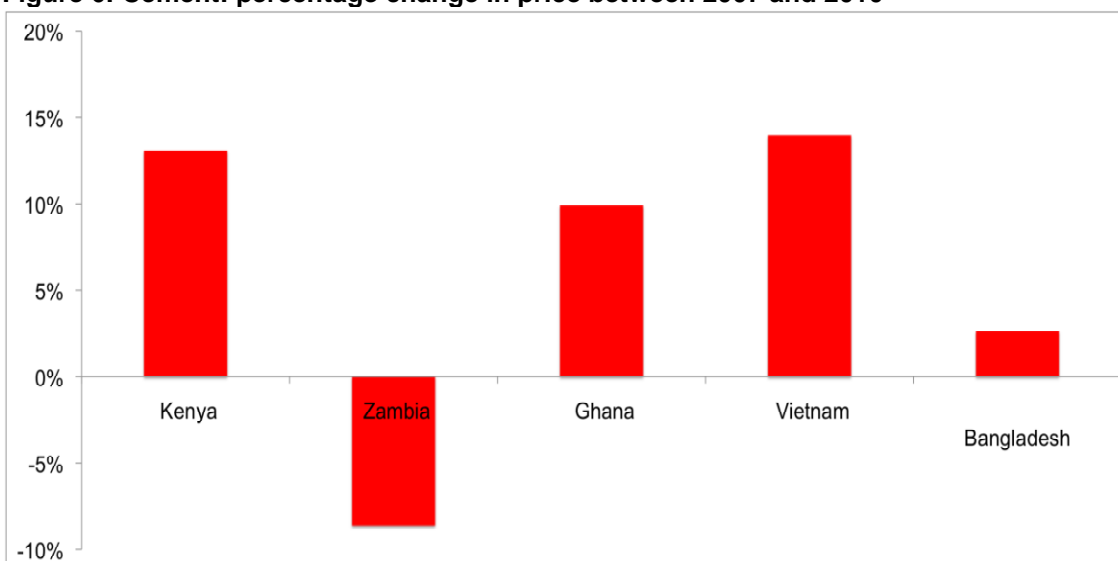
The retail cement price across the 5 countries is shown in Figure 5 below. It is notable that prices are highest in the most concentrated markets, and lowest in the least concentrated market.

Figure 5: Retail cement price per 50kg bag 2007/08 (in US\$)



Source: ODI research

Figure 6: Cement: percentage change in price between 2007 and 2010



Of course other factors, such as higher costs of doing business in Zambia (e.g. much higher fuel and transport costs), and the fact that Vietnam is the only country with an abundance of clinker also need to be taken into account when comparing costs and market performance. However, it seems likely that market structure and competition are also important determinants of price.

A large new privately-owned plant commenced production in Zambia in late 2009³², breaking up the previous monopoly, and Figure 6 shows that prices have dropped by almost ten percent since 2007, while prices in other countries have risen. This shows that the introduction of competition can have an immediate and dramatic impact on price.

³² http://www.laurencepaul.com/index.php?option=com_content&view=article&id=177:zambezi-portland-cement-begins-operations&catid=1:Latest%20News&Itemid=54

4.2 Kenya cement market

In 2008 Kenya had 3 cement manufacturers, and the dominant cement player had an estimated market share of around 65%. By 2010 a new firm had entered the market, and we were told that the market share of the largest firm had decreased to around 50%.

Although in 2008 Kenya had three cement manufacturers, it was also the case that the largest firm had ownership stakes in both the others. This could potentially mean that they had some degree of influence over the other firms (e.g. through joint Directorship), or knowledge about their competitive strategies, which could potentially result in reduced competition between the three firms. It was also suggested that there was a degree of price leadership, with the other firms following the largest firm.

Anecdotal evidence suggests that this happened after a price war which started soon after a new (third) entrant came into the market in the mid 1990s. It was reported by market participants that the price of a 50kg bag of cement fell from KSh450 to KSh250 at that time, and that exclusive distribution arrangements with the incumbents prevented the new entrant's product being stocked by dealers.

We were told that during this period, the new entrant built up considerable debts and was facing potential closure, until the market leader acquired a share in its business, in return for settling some of its debts. If this was the case, it is possible that anti-competitive practices such as predatory behaviour, permitted this joint ownership to happen in the first place. The weaknesses of the competition law and lack of effective review of mergers and acquisitions (which covers partial cross ownership linkages) has also allowed this to happen.

Further efforts seem to have been made to consolidate the pattern of joint ownership. One of the cement companies is still partially state owned, although the government has been attempting to privatise it for several years. In 2000 the MPC blocked the sell-off of these shares to the largest (private) firm, as it would have obtained a majority stake, and resulted in an even higher degree of joint ownership. Rumours of a possible merger between the two firms arose again in 2007³³, but the competition authority has informally said to the ODI study team that such a merger is unlikely to be approved. Thus the MPC appears to date at least, to have succeeded in blocking a merger that could potentially reduce competition in the cement market, and which could in turn have resulted in higher prices. Since the time of the study team's visit to Kenya it is understood that the market leading firm has now divested from the smallest firm, thereby decreasing the level of cross-ownership in the sector. This bodes well for competition.

In terms of market structure, the most interesting comparison to make is with the Bangladesh and Vietnam markets, which are the least concentrated and probably the most competitive of the five cement markets we studied, as discussed below. In comparison with the African countries which all had a more concentrated cement industry, there appeared to be a much greater degree of both price and non-price competition in Bangladesh and Vietnam. Section 4.1 shows that they enjoyed the lowest prices of all the countries, and we also observed significant non-price competition, with cement firms trying to attract customers by offering credit, technical support and various promotions.

The larger number of players in these countries cannot simply be explained by their larger market size in terms of population, as Tables 4 and 5 show (section 4.1). This suggests it could be economically feasible to increase the number of cement firms producing in African countries too. In any case, the scope to export cement means that domestic market size should not necessarily constrain the number of cement firms that can viably operate within a country. Indeed Kenya

³³ Business Daily Africa (15th August 2007)

already exports significant volumes of cement, which could potentially be increased, creating more jobs and yielding greater foreign exchange.

In any case, there has been significant growth in demand for cement within Kenya, and projections for continued growth. There is evidence that the inflow of imported cement from Egypt is also increasing, which is likely to be putting competitive discipline on the producers. The domestic cement producers are increasing capacity, and several new entrants are poised to enter the market over the next few years so the cement market in Kenya may become more competitive going forward. Market entry by new independent cement producers bodes well for competition in the market, and may result in lower prices, resulting in cheaper construction and infrastructure development, and more jobs and exports, all of which contribute to growth.

4.3 Zambia cement market

Zambian cement production started with the founding of a state owned cement company in 1949, which was privatized in 1957, renationalized in 1973, and was then re-privatized in 1994³⁴, at which point the UK Government's Development Finance Institution (CDC) bought the controlling stake. In 2001, a multinational cement company bought a 51% controlling stake in this company. The competition authority (ZCC) had concerns over the takeover, and applied some undertakings that the company should not³⁵:

- Reduce production
- Fix prices
- Refuse to supply
- Make use of regional cross subsidies

It is not clear how well these undertakings are monitored, but one respondent stated that simply the knowledge that the competition authority was monitoring the situation and may publish criticism of market players in the media if it sees a problem, itself constrains pricing behaviour. If this is the case, then it is evidence of the benefits of having a competition authority – though it also shows how difficult it is to observe and quantify such effects.

When multinationals own companies which are operating in several countries in a region, they sometimes manage their operations regionally, so as to prevent direct competition between their own plants within any one country – i.e. they allocate the market in a country to a specific plant, and impose a 'restrictive territorial strategy' so as to prevent other plants that they own from exporting to that country. There is no law preventing this kind of cross-border arrangement, and many multinationals compete on a regional basis in this way, though it may not be optimal in economic terms for the countries affected.

Where this results in reduced competition in individual countries, this may be detrimental to that country, but it is not within the power of a national competition authority to examine cross-border activities for any possible competition concerns. However, regional competition laws and authorities, such as the new COMESA competition authority, may have the power to examine and intervene into these kinds of arrangements. Thus regional competition authorities can complement national competition authorities and play a very important role in policing the activities of multinationals that operate across borders, and ensuring consumers' interests are protected.

Between 2002 and 2003, concerns arose that the cement firm was engaged in activities that appeared to be preventing, restricting and distorting the production and marketing of cement from Zambia to the traditional export markets for Zambian cement in the Democratic Republic of the Congo (DRC), Burundi and Rwanda, and that its production and pricing strategies were making

³⁴ <http://www.mbendi.com/orgs/canc.htm>

³⁵ Zambia Competition Commission (August 2003)

Zambian cement less competitive compared with a plant located in Tanzania³⁶. An UNCTAD report based on information gathered from the ZCC found that the Zambian cement exports were being targeted at the Democratic Republic of Congo, while the Burundi and Rwandan markets were to be supplied from the same company's Tanzanian plant. The report suggested that such conduct was likely to make the Zambian plant less competitive by restricting its production capacity, and that the export pricing strategy also appeared to make the landed price of Zambian cement higher than cement produced elsewhere.

In 2003, during a major national shortage of cement, the ZCC received allegations against the dominant cement firm for constraining supply of cement in the market as well as high prices of cement. After being formally instructed to do so by the Zambian Parliament and Ministry of Commerce and Trade and Industry, the ZCC undertook an investigation into the nation's biggest cement firm³⁷.

The ZCC's investigative report found that the dominant cement firm had been playing a role in reducing the domestic availability of cement by curtailing all local sales when orders were received from abroad and this was also having the effect of raising domestic prices. The report said that further investigations had revealed a possible cartel of distributors who were alleged to be hoarding the product and thus creating an artificial shortage in the Zambian marketplace, leading to higher prices. This was also compounded by higher unofficial exports of cement to Malawi and the DRC (including smuggling).

In response to this problem, the ZCC advocated increased imports of cement, and recommended that the Government revisit the tariff structure of cement in order to make the landed price of imported cement more competitive. Furthermore, it was decided that further investigations to test the recommended retail price regime were necessary in order to ensure that appropriate market prices prevailed in the market in Zambia.

This case shows that in the absence of the required legal framework or evidence base needed to prosecute anticompetitive practices, it is also possible to use other government policies to tackle a competition case; in this instance, government import policies were brought into play. This highlights the scope for government policy coordination – which may be influenced by the advice of the competition authority - as an alternative way of dealing with competition issues. Whether or not such recommended policy changes are actually implemented may not matter if the threat of their implementation is enough to change the behaviour of firms, and stop anti-competitive practices.

There has been significant growth in demand for cement within Zambia in recent years, resulting in an apparent shortage of cement, and some new entry into the Zambian cement industry had taken place, though at the time of the fieldwork, this had not made major inroads into the leading firm's market share. However, a large new privately-owned plant, commenced production in late 2009³⁸, so the cement market in Zambia is likely to become more competitive going forward. Anecdotal evidence suggests that the new entrant is building its market share, and it seems that cement prices have fallen considerably in the country (see section 4.1). The recent expansion of production capacity of the incumbent from 800,000 metric tonnes to 1.46 million metric tonnes may also have contributed to this price fall, since greater economies of scale can lead to lower production costs which may be passed on to the consumer. This bodes well for competition in the market, and should allow cheaper construction and infrastructure development, as well as potentially creating more jobs and exports, all of which contribute to growth.

³⁶ UNCTAD Secretariat (Antalya, Turkey 14-18 November 2005)

³⁷ Zambia Competition Commission (ZCC) Paper (December 2003)

³⁸ http://www.laurencepaul.com/index.php?option=com_content&view=article&id=177:zambezi-portland-cement-begins-operations&catid=1:Latest%20News&Itemid=54

4.4 Ghana cement market

Ghana's cement industry is a duopoly of two firms. Until around 2000, there was a monopoly of cement production in Ghana, held by a state owned enterprise (SOE). However, it was privatised in 1999, and another firm started to import cement at around the same time, and then established a manufacturing plant in 2002. We understand that this increased competition resulted in falling prices (though unfortunately no price data exists to substantiate this assertion), as the new entrant strived to undercut the incumbent in order to increase its market share (which it succeeded in doing), and this reportedly forced the incumbent to reduce prices also. The new entrant also introduced transportation and credit incentive schemes to entice distributors of the other cement company's product, to stock their cement.

As already noted, a high degree of concentration is common in the cement industry, and reflects the relative efficiency of large scale production in the industry, given the cost structure and significant economies of scale that large producers enjoy. However, as the final column in Table 4 (section 4.1) showed, Ghana's two cement producers have a proportionately large market to divide up between them compared with cement producers in other countries, which suggests there may be room for more cement firms in Ghana. In any case, the scope to export cement means that domestic market size should not necessarily constrain the number of cement firms that can viably operate within a country.

Imported bags of cement are not widely available, and various stakeholders, for example in the construction industry, have alleged that one of the domestic cement producers blocks their attempts to import cement bags into the country through informal means. For example, we heard that cement shipments sometimes get waylaid at the port. Thus construction companies may in the end give up in their attempts to import cement from other sources, so these unofficial import barriers appear to reduce competition from potentially cheaper imported cement.

We were told that prices of cement doubled in 2007 causing great concern in the building industry. Although there had been some electricity load shedding which contributed to the price increases, in the view of many analysts, the price hikes had continued beyond the load shedding period. The dominant cement company attributes the increase in prices to the higher prices associated with imported raw materials. However, stakeholders hold a contrary view and point to the domestic producer as a major factor in the price rise. They alleged that because the company enjoys strong market power it is able to set up higher prices without fear of losing customers.

Even the presence of another domestic player in the market may not act as a sufficiently strong competitive restraint, as the market is a duopoly and the incumbent may act as a price leader, with the other firm following. As there is no Competition Authority in the country and the consumer associations are not strong, there is little or no investigation into price increases such as this. High cement prices represent a constraint to construction and infrastructure development, which underpin growth, and thus may have negative repercussions for the wider economy.

We were told that a third cement plant has recently been commissioned, which is to be established in Northern Ghana. If this is the case, this bodes well for increased future competition. In Zambia, the introduction of a new entrant in the market in 2009 has led to significant price reductions.

4.5 Vietnam cement market

As table 4 showed, the Vietnamese cement industry consists of around 90 companies. Of these, 33 fall under the state owned cement industry 'umbrella' company. There are 5 joint venture (JV) companies where large multinational cement manufacturers are involved. The remaining 50 or so smaller firms are mainly owned by provincial governments. The SOE 'umbrella' company holds the

largest share in the domestic cement market with more than 40 per cent of total production. JVs hold 30% and small enterprises hold 30%.

Vietnam is clearly the least concentrated market by far, reflecting the country's distinctive approach to regional state led development, and a desire to have cement production capabilities (as well as many other industrial products) in each province of the country. If the domestic market was divided equally between the cement companies, the market size would be very small compared to all other case study countries, as shown in the final column of Table 4. Of course, the scale of production varies considerably between the companies, but nonetheless the high number of production facilities suggests that economies of scale cannot be fully exploited, and there are many cement firms in Vietnam that appear to be operating at well below the minimum efficient size (see Table 5). There are 90 firms in the industry and less than twenty of them are operating at or above this size. In some provinces there are several factories operating, and there is even one small village which has 4 cement factories.

However, the competitive radius of a typical cement plant extends no more than 300 kilometers given the high costs of transporting cement which is bulky and heavy. This is especially true where the cost of transportation is high, as it is in Vietnam, where there is a distance of over 1,500km from the North to the South, and which has poor overland infrastructure. Thus to avoid the high cost of transportation, cement is imported from other countries into the South as an alternative source of supply. This may partly explain why there are so many cement firms in Vietnam. Another reason could be that many provincial governments have simply decided to set up inefficient sized mills for reasons of job creation or other social objectives, as discussed above.

As can be seen in section 4.1, Vietnam, with its 90 cement producers, has the lowest price of the five countries. We were told that the Government ensures that prices remain stable, within a band of +/- 20%, to minimise the risk of price overheating and prevent speculation. Market players told us that this could be evaded however, through the use of creative price promotions, so it was unclear how effective such price stabilisation was. In the past, cement was included in the list of 14 goods and services which are subject to Government price controls. All cement enterprises were required to register the selling price to the Price Control Department (Ministry of Finance) seven days before introducing this price level. The Price Control Department examined this price level and based on agreement, the enterprise could sell at this price; otherwise, the enterprise was required to adjust the price. Although today there is no price control of this form in the cement industry, there is still a government price control on coal, a key input for the production of cement.

Although government price controls can prevent over-heating of prices which may otherwise constrain construction activity, price controls have a number of inherent problems. Price controls distort the allocation of resources. Price ceilings, which prevent prices from exceeding a certain maximum, cause shortages. Price floors, which prohibit prices below a certain minimum, cause surpluses, at least for a time. Because controls prevent the price system from rationing the available supply, some other mechanism must take its place. This could be queuing, rationing, and black markets for example. Each of these generate other problems.

Overall, this kind of price control is not consistent with a free market economy, and undermines the competitiveness of the economy as a whole. An example of the negative impact of price intervention was provided in May 2008³⁹. Cement makers had been facing a rising price for clinker, an important material in cement production. However, they were unable to pass this cost increase on to consumers due to a freeze on wholesale prices imposed by the government in an attempt to tackle price inflation. Thus some smaller cement companies had chosen to temporarily close, to avoid making losses, in the hope that the price ceiling would be removed in due course. This left only a few cement firms still operating, and reduced the supply of cement on the market. Higher than expected increases in demand, exacerbated partly by speculative behaviour in expectation of

³⁹ <http://www.vnbusinessnews.com/2008/05/southern-metro-hit-by-cement-price.html>

future price rises (which sometimes causes distributors to hoard supplies in the hope of obtaining a higher price in future) generated large increases in the retail price in Ho Chi Minh City. Cement producers were unable to expand production fast enough to meet demand, nor could they respond by increasing wholesale prices, so cement had to be rationed; this led to many orders being rejected, and some wholesalers imposed sale quotas on retailers. While this episode may have benefited distributors who were able to cash in on the supply shortage, it would likely have resulted in considerable costs for both cement producers and consumers.

Another competition concern relates to the lack of competitive neutrality between state and private players. The state owned umbrella company for cement in Vietnam has a dominant market share and benefits from some specific advantages that other companies do not. The SOE umbrella company is the decision making body on the clinker (one of the raw materials required for cement production) import quota for other producers, which are also its competitors, suggesting a conflict of interests. The SOE umbrella company also controls almost all domestic resource exploitation - only SOEs are allowed to excavate mines or extract raw materials, while others have to sign contracts through SOEs. Control of inputs by the SOE umbrella company may act to some degree as a barrier to entry in the market.

In addition, since all companies under the SOE umbrella company combined have a dominant market share, the umbrella company seems able to act as a price setter in the market, through managing the price at which cement is sold by its members. For example, in 1995, a cement price crisis was caused by the decision by the SOE umbrella company to double the price from US \$46 US / ton of cement to US \$90 / ton due reportedly to increasing input costs. We were told that this price increase was the result of a joint lobby effort between the members of the SOE umbrella company, and the Ministry of Construction, to encourage the Price Control Division of the Ministry of Finance to permit an increase in the price of cement. Apparently all the other firms in the industry followed suit.

Domestic demand for cement has continuously exceeded domestic supply in Vietnam over the past decade and extra cement has been imported. However, production has been increasing fast in recent years – indeed, more than 13 cement factories with a combined capacity of about 11.7 million tonnes are expected to become operational in 2010, raising total production in Vietnam to approximately 70 million tonnes, according to the Ministry of Construction⁴⁰. Over the next decade, it is expected that Vietnam's products in the cement industry will become increasingly competitive in terms of price, there will be fewer price fluctuations, and that the cement industry will increase exports, especially to markets such as Bangladesh, the Middle East and Africa. The imported volume of clinker and cement is estimated to be small (only about one per cent of demand)⁴¹. Reduced government intervention into pricing in this market may also be expected to facilitate improved competitiveness and growth in the market.

The cement industry in many countries is concentrated, and vulnerable to anti-competitive practices, so while the industry is relatively unconcentrated in Vietnam, it is possible that further liberalisation and consolidation will facilitate an increase in market dominance going forward. The existence of VCAD and prospect of monitoring and investigation should help to minimise the risks of this occurring however. The structure of the cement industry, and dominant role played by the state owned umbrella company, could be examined by VCAD, to ensure there are no barriers to the development of the market.

⁴⁰ <http://www.vnbusinessnews.com/2010/02/vietnams-new-cement-plants-to-bolster.html>

⁴¹ Source: Decision no. 108-2005/QĐ-TTg

4.6 Bangladesh 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.

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, and prices are lower than all other case study countries except Vietnam. 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 year⁴². 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 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

⁴² www.philippelasserre.net/contenu/.../Global_Cement_industry.pdf

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.

4.7 Conclusions

1. *In the cement market large scale operation is more efficient, but the countries with more players and a more competitive cement sector had lower prices.*

In the cement market there is a high minimum efficient scale (MES) which means that large players have a significant cost advantage, which often generates a highly concentrated market structure with relatively few players. However, although large size delivers technical efficiency, having fewer players in the market reduces competition, and makes the sector vulnerable to anti-competitive practices, which is likely to result in higher prices. Thus there is a trade-off between technical efficiency and the need for a competitive stimulus to create incentives to reduce price.

This research has found far fewer market players and a much higher degree of concentration in the African countries than in the Asian countries studied, which cannot just be explained by the larger market size in the Asian countries. In the Asian countries the market was not very concentrated at all, with a multitude of companies operating and none really dominating the market significantly.

We also found that the Asian countries have much lower cement prices, and also more non-price competition. However, in those countries, many of the players were operating inefficiently, below the minimum efficient scale, and consolidation is deemed likely, with many firms expected to exit the market or be acquired by other larger firms going forward.

Prices have fallen dramatically in Zambia since a new player entered the cement market in 2009, breaking up what had previously been a monopoly situation.

2. *The cement sector often suffers from competition problems and anti-competitive practices, and competition authorities play an important role in disciplining market behaviour.*

In both Zambia and Kenya the competition authorities have been monitoring the cement sector and in Zambia they have placed undertakings on the cement monopolist to constrain its behaviour. In Zambia, we were told that just the knowledge that the ZCC was monitoring the cement monopolist had helped to constrain the price they set. In Kenya, the competition authority had prevented the consolidation of the sector by preventing an increase in joint ownership of the 3 cement firms that could have resulted in less competition and potentially higher prices.

There have also been concerns about competition problems in the cement industry (a duopoly) in Ghana, with suggestions that this has resulted in significant price hikes. However, there is as yet no competition authority which could investigate these allegations and tackle any problems identified.

3. *The cement sector is often dominated by multinational firms, who operate on a regional basis. Thus cross border competition issues come into play, which can either be tackled through regional competition authorities, or through wider policy coordination.*

In section 4.3 the case was described where the dominant firm in the Zambian cement market wanted to divide the regional market in such a way as to reduce competition (i.e. issues of market allocation and territorial restrictions). The Zambian Competition Commission advocated increased imports of cement, notably from Zimbabwe in order to curb this likely abuse of market power by the dominant firm. The Commission advocated that the Government revisit the tariff structure of cement in order to make the landed price of imported cement from Zimbabwe more competitive. Furthermore, it was decided that further investigations to test the recommended retail price regime were necessary in order to ensure that realistic market prices prevailed in the market in Zambia.

This case shows that in the absence of adequate evidence to prosecute anticompetitive practices, other government policies can be used to tackle competition problems. In this case, government policies in Zambia in the area of exports, imports and tariffs were brought into play. This highlights the scope for government policy coordination to grant the competition agency an alternative avenue (or at least a means of influence) for dealing with competition issues, particularly in competition issues of a cross-border nature.

Cross-border competition authorities (such as the new COMESA competition authority) could potentially have an important role to play in tackling cross border competition problems. However, the COMESA competition authority is still new, and remains to be effectively operationalised.

It is also helpful if competition authorities establish networks with other government bodies and with other competition authorities and as part of their advocacy programmes.

4. *There is a lack of competitive neutrality in the cement sector in Vietnam which could undermine the development of the sector going forward, as further liberalisation and consolidation are expected.*

Sometimes state enterprises can have unfair competitive advantages, which hinders free market competition. For example, in Vietnam, the SOE umbrella cement company is the decision making body on the clinker import quota for other producers, which are also its competitors, suggesting a conflict of interests. The SOE umbrella cement company also controls almost all domestic material exploitation - only SOEs are allowed to excavate mines or material zones, while others have to sign contracts through SOEs. These regulations do not appear conducive to the creation of a level playing field among enterprises in the cement industry (or other industries). Competition authorities may be able to play a role in advising Governments against setting policies which create such distortions in the market.

5. The Beer market

5.1 Introduction and overview

For this study we focused on the market for formally produced ‘clear’ beer. There are also local brews of different sorts produced in each of the countries, but we considered these to be operating in a separate market, as they are usually purchased and consumed in different ways, and by a different market segment, thus do not appear to be close substitutes for clear beer.

Beer is consumed throughout the developing world and can constitute an important part of the budget of poor people. It is also an industry that is often highly concentrated, and plagued by anti-competitive practices, because of the high fixed costs and importance of marketing and brand loyalty, which represent significant barriers to entry. Thus the beer industry is one that ideally needs careful monitoring by a Competition Authority. When there is a monopolist and low likelihood of market entry, import liberalisation can help to increase competition.

The structure of the beer market in each country is shown below. It has only been possible to study the beer market in four of the five countries in this research as Bangladesh does not have a beer market.

Table 6: Beer market structure across the case study countries

Country	No. of firms 2008	State Ownership	Estimated market shares of leading firm	Imports as % domestic consumption
Kenya	1	No	90-100%	<5% (premium end)
Zambia	1	No	85-90%	4% (premium end)
Ghana	2	No	60%	4% (premium end)
Vietnam	7 (of which, 3 are large with combined market share of 60%)	Yes, majority of firms are SOEs incl. 2 of largest 3	31%	<5%(premium end)

To summarise key findings in the beer market:

- The Kenyan beer market is essentially a monopoly where the dominant firm has a market share of at least 90%. Previous competition studies of the Kenyan market have found many anti-competitive practices including territorial allocation, exclusive dealership and price fixing.
- In Kenya, another large beer producer attempted to enter the market, and this resulted in a ferocious price war where prices fell dramatically⁴³. Eventually, the new entrant withdrew from the market, but at the same time signed a share swap agreement with the incumbent, which allowed it to maintain a stake in the Kenyan market⁴⁴. At the same time the Kenyan incumbent closed its plant in Tanzania, but retained its investment in that country by taking a shareholding in a Tanzanian beer company that was owned by the retreating firm. This agreement ended direct competition between the two firms in both markets, potentially allowing greater profits to be made in both and to be shared, to the benefit of both parties.

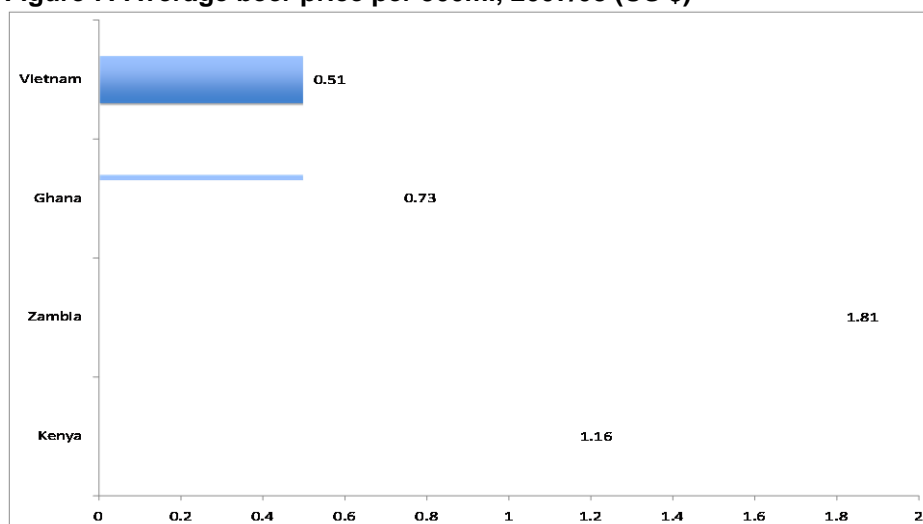
⁴³ Evenett & Jenny (2004)

⁴⁴ Details of the deal were published on the Kenyan company's website at the time, and are also reflected in company reports.

Such a regional carve-up is anti-competitive and needs to be tackled by regional competition authorities.

- The Zambian beer market was privatised as a duopoly in the mid-1990s, but over time became a monopoly, as one producer acquired the other. The remaining domestic beer producer has a 85-90% share of the beer market. The Zambian Competition Commission (ZCC) was concerned about the impact on competition of the takeover, but agreed because it was argued that the firm to be acquired would otherwise fail, with considerable losses for the 500 employees in the economically depressed city of Ndola and many creditors.
- In Zambia, the strength of the dominant firm, loyalty to existing brands, the relatively small size of the domestic market, and the high costs of doing business do not bode well for potential new entry. Given the lower production costs in other countries in the region, imports seem to be the most likely way to facilitate increased competition in the beer market in Zambia, but this is currently constrained by high import tariffs.
- The beer market in Ghana is a duopoly of two firms, the largest with an estimated market share of around 60%. There appears to be fairly strong competition between the two companies in terms of advertising and competition for market share, which may explain why beer prices are considerably lower in Ghana than in Kenya and Zambia, which both have markets which are in effect monopolised by one firm.
- In Ghana, we were told that the dominant firm may be acting as a price leader which the other firm follows. This may represent a form of tacit collusion whereby firms have an unspoken agreement to monitor each other's prices and keep theirs the same so as to avoid direct price competition. As a result, they are collectively able to charge higher prices to consumers, and to obtain higher profits. However, the suspicions that have been cited could only be properly investigated by a Competition Authority, which does not currently exist in Ghana.
- In Vietnam there are seven major formal beer producers. This is the most highly contested and competitive of the beer markets being studied. Nonetheless, competition concerns still exist. For example, a new Vietnamese brand of bottled draught beer attempted to enter the market in 2004⁴⁵, but was allegedly prevented because of exclusive distribution agreements associated with incumbent beer producers. The company exited the market after unsuccessful legal action. If a competition law had existed at the time, such exclusive agreements and the possible associated abuse of dominance might have been considered unlawful, and quite a different outcome may have been achieved.

⁴⁵ VietnamNet (04/07/ 2004 & 18/05/2004) and <http://www.cuts-international.org/E-NewsletterVol1.htm>

Figure 7: Average beer price per 500ml, 2007/08 (US \$)

Source: ODI, various sources

Figure 7 shows that prices are highest in the most concentrated markets, as was the case also in the cement market. In Zambia and Kenya where a monopoly prevails, prices are the highest, whereas in Vietnam, where there are 7 firms, prices are the lowest. The relatively low prices also reflect the fact that the costs of doing business in Vietnam are lower than in the African nations, though when purchasing power parity adjustments are made, the pattern of results and ranking across countries remains the same.

5.2 Kenya beer market

In Kenya, the clear beer market is essentially a monopoly, with one player holding over 90% market share, and with some small, high end players and imported premium beers accounting for the rest of the market.

We were told that in the late 1990s, another large beer producer attempted to enter the market, and that this resulted in a ferocious price war, in which prices fell dramatically⁴⁶. In the end the new entrant withdrew, citing difficulties in accessing barley. (We were told that the sourcing of barley is controlled by the dominant beer producer in Kenya, which if true, would be a potential source of market power, given that there is an import tax on barley, which would create a price disadvantage for any firm forced to import it)⁴⁷. In addition, it was claimed that because individuals in the Kenyan Government had an interest in the Kenyan beer monopolist, no foreign entrant could hope for a level playing field upon which to compete⁴⁸.

But the retreating company also signed a pact – a share swap agreement - with the incumbent, which allowed it to maintain a stake in the Kenyan market⁴⁹. At the same time the Kenyan incumbent closed its plant in Tanzania, but retained its investment in that country by taking a shareholding in a Tanzanian beer company that was owned by the retreating firm. This agreement

⁴⁶ Evenett & Jenny (2004)

⁴⁷ Export Processing Zones Authority (2005)

⁴⁸ <http://www.allbusiness.com/africa/1130729-1.html>

⁴⁹ Details of the deal were published on the Kenyan company's website at the time, and are also reflected in company reports.

would thus end direct competition between the two firms in both markets, potentially allowing greater profits to be made in both and to be shared, to the benefit of both parties.

There is no law preventing this kind of cross-border arrangement, and many multinationals compete on a regional basis in this way. Where this results in reduced competition in individual countries, this may be detrimental to that country, but it is not within the power of a national competition authority to examine cross-border activities for any possible competition concerns. However, regional competition laws and authorities, such as the new COMESA competition authority, may have the power to examine these kinds of arrangements. Thus regional competition authorities can complement national competition authorities and play a very important role in policing the activities of multinationals that operate across borders, and ensuring consumers' interests are protected.

A study by Kenya's Monopolies and Prices Commission (MPC) and UNCTAD/UNDP (2005)⁵⁰ found evidence of a number of anti-competitive practices taking place in the beer market in Kenya, including:

- territorial allocation (where each distributor operates only within a specific area precluding direct competition);
- exclusive dealership (preventing dealers from contracting with any other beer producers); and
- price fixing (whereby the wholesale price of beer which distributors must charge is fixed by the producer).

There is also evidence that the incumbent beer monopolist provided coolers to bars, as long as they are only used for their own products. In fact, some sources suggest that bar owners faced automatic withdrawal of the facility if they were found to put rival products in the coolers.⁵¹ The MPC noted the absence of adequate provisions to tackle these problems in the market. This suggests a review and strengthening of the competition law could help the MPC to tackle these kinds of practices in future, which could have benefits for consumers.

As shown in table 6, the beer market is often highly concentrated, due in part to the cost structure, and to the importance of brands and marketing which can represent a barrier to entry. Though other country specific factors will also affect prices, section 5.1 shows that prices tend to be highest in the most concentrated markets, as was the case in the cement market. Kenya is the second most expensive country, after Zambia.

Since the time of the study team's visit to Kenya, taxes on spirits have been reduced which may be applying some competitive discipline on the domestic beer monopoly. A new locally owned brewery has also entered the market, which has brought more competition in the beer sector. Reports in the media have suggested that this new entrant has experienced some difficulties in entering the market and gaining market share due to actions by the dominant firm. According to one media report in May 2010⁵², the new entrant alleges that the dominant player had instructed bar owners not to stock the new entrant's brand of beer. Furthermore, the new entrant has alleged that the incumbent firm has appointed agents to remove all of the rival's advertising material. It is understood that the aggrieved new entrant, has written to Parliament's Public Investment Committee asking the watchdog team to investigate.

It seems likely that greater competition would reduce prices in the market, to the benefit of consumers. As there are one or two small, newish players in the market, it will be interesting to see whether they are able to expand their market share going forward, and what impact this will have on price.

⁵⁰ United Nations Conference on Trade and Development 2005

⁵¹ Ong'olo (2004)

⁵² <http://www.nation.co.ke/business/news/-/1006/555598/-/j0j9xtz/-/index.html>

5.3 Zambia beer market

In Zambia, the beer market is effectively a monopoly, as one firm holds around 85-90% market share of the clear beer market. One other firm operates in the market, importing beer, but does not produce it domestically.

Section 5.1 shows that Zambia has the highest beer prices of the four countries which is probably linked to the fact there is a dominant monopoly in the market. Of course, many other factors also affect relative prices, such as fuel and transport costs and tax rates, all of which are relatively high in Zambia. (Indeed, prices have fallen since 2008 as a result of reductions in excise duty, aimed at bringing the level of excise duty on beer onto a par with the regional average.) It was also argued by some that the legacy of previously state owned enterprises meant that private players felt pressure to maintain higher numbers of employees than would otherwise have been the case, which if true, may also serve to reduce the competitiveness of Zambia's beer industry.

However, the lack of competition is also likely to be contributing to the high price. The Zambian clear beer market, was privatised as a duopoly in the mid 1990s, but over time became in effect a monopoly, as one producer acquired the other. There is now only one domestic beer producer, with a 85-90% share of the beer market, though this has waned slightly over time due to increased competition from imported beer brands. However, imported beers tend to fulfil demand in a somewhat different, higher income, market segment.

The Zambian Competition Commission (ZCC) was concerned about the impact on competition of the takeover, and initially declined to authorise it. However, in the end ZCC agreed because it was argued that the firm to be acquired would otherwise fail, with considerable losses for the 500 employees in the economically depressed city of Ndola and many creditors. Additionally, because of operational problems, the Zambia Privatisation Agency (ZPA) could not find a suitable alternative buyer to take over the second firm, other than its competitor.

The acquiring firm was required by the ZCC to give undertakings at that time, for example⁵³:

- that the two subsidiaries would have independent separate Boards, management teams and financial records;
- conditions were attached to distribution arrangements;
- both companies were encouraged to penetrate export markets; and
- they must not be seen to discourage entry into the clear beer market by other players or investors.

However, it is not clear how effective these undertakings are, and the current capacity and resources of the ZCC to monitor and enforce them is also unclear.

According to the ZCC⁵⁴, barriers to entry exist in the beer industry:

- There is evidence of excess capacity which could act as a barrier to entry, and beer has been stockpiled;
- There are no domestically produced glass bottles in the country (all are imported);
- The high cost of doing business, and limited access to capital in Zambia, also contribute to barriers to entry, which may mean that firms, other than multinationals, with deep pockets and access to international capital, may find it hard to survive (sustain operations) and compete.
- Technology requirements and minimum efficient scale.

⁵³ "Annual Report 1999," Zambia Competition Commission

⁵⁴ Based on interview with ZCC

- Although there are no legal barriers to import, high import taxes do limit the amount of competition faced. However, market players believe that smuggled cheap clear beer as result of tax evasion reduces their ability to compete.

In September 2005, the beer producer asked for authorisation to implement a recommended retail price for the distribution of its clear beer. ZCC considered that this behaviour was likely to lessen competition in the clear beer market. ZCC was concerned that the recommended retail price was linked with an offer to supply retailers with free coolers provided that the coolers were only used for that company's beer. ZCC feared that this would foreclose the market. ZCC authorised the conduct subject to undertakings whereby the company would not link the recommended retail price with any cooler offers.

The beer producer notified their exclusive distributorship and cooler usage arrangement with the Commission. ZCC determined that the company was a monopoly, controlling 95% of the clear beer market in Zambia, and that the object of the exclusive arrangements were anti-competitive by foreclosing market access of competing products. The Board observed that certain clauses in the distributorship agreement forbade distributors from carrying competing products. Further it was observed that the placement of coolers in a retail outlet was on condition that competing brands were not placed in the coolers supplied by the company. The Board declared the exclusive distributorship anticompetitive and placed conditions in the placement of coolers in the retail outlets. These decisions were made part and parcel of undertakings concerning the takeover of the other firm, through the compliance programme mentioned earlier⁵⁵.

In sum, the strength of the dominant firm, loyalty to existing brands, the relatively small size of the domestic market, and the high costs of doing business in Zambia do not bode well for potential new entry. Given the lower production costs in other countries in the region, imports seem to be the most likely way to facilitate increased competition in the beer market in Zambia, but this is currently constrained by high import tariffs. Thus it seems that the beer market in Zambia may continue to be relatively uncompetitive going forward, resulting in continued high prices, to the detriment of consumers.

5.4 Ghana beer market

The beer sector in Ghana is a duopoly of two firms, the largest with an estimated market share of around 60%. There appears to be fairly strong competition between the two companies in the domestic market in terms of advertising and competition for market share, which may explain why beer prices are considerably lower in Ghana than in Kenya and Zambia, which both have markets which are in effect monopolised by one firm (see table 6).

Nonetheless, a number of competition concerns were identified in the Ghanaian beer sector during the research. Firstly, we were told that one of the firms may operate as a price leader which the other firm follows. Price leadership can sometimes represent a form of tacit collusion whereby firms have an unspoken agreement to monitor each other's prices and keep theirs the same so as to avoid direct price competition. As a result, they are collectively able to charge higher prices to consumers, and to obtain higher profits. As we have seen, beer prices in Ghana are low compared with Kenya and Zambia, and we have no evidence of tacit collusion beyond this anecdotal suggestion of price leadership. However, the suspicions that have been cited could only be properly investigated by a Competition Authority, and such an authority does not currently exist in Ghana.

⁵⁵ Zambia Competition Commission (1999) Annual Report

Secondly, we were told that both companies ask outlets to adhere to recommended retail prices (RRPs), which could have the effect of constraining price competition at the retail level. At face value this is not as problematic as retail price maintenance⁵⁶ as it is in principle more voluntary on the part of the retailers, but it may be similar in effect, as it is still possible that retailers may be blacklisted if they do not adhere to RRPs. Thirdly, we were told that both companies have exclusive dealer relationships (exclusive dealers who on-sell to retailers). Indeed, one of the companies took the other to court on the grounds of exclusive dealing, but lost the case. The result may have been different if Ghana had a competition law.

Thirdly, we were told that duty on imported beers had been increased significantly, which may also decrease the competitive pressures on domestic producers to the detriment of consumers.

Thus in sum, although the beer industry in Ghana seems fairly competitive compared with the other African countries in our study, there are still only two firms, and some competition concerns have been cited which could be investigated if Ghana had a competition law and authority.

5.5 Vietnam beer market

In Vietnam, there are seven major formal beer producers. The top three players account for over 60% of market share. Two of these three were once fully state-owned firms which have now been partially privatised. One is based in northern Vietnam and has the highest market share in this region. The other is based in southern Vietnam and has the highest market share in this region but also has some presence in the central and northern region (it is the market leader for the country overall). The third of these three is a joint venture between a local firm and a foreign firm. The extent of brand loyalty within regions may serve to reduce the degree of competition amongst different producers and brands. The study team heard that although the dominant firm in the south is now expanding in the north, this has not led to any obvious price decrease. This would suggest that brand loyalty rather than price is a prevalent factor amongst consumers in Vietnam⁵⁷.

Vietnam appears to be the most highly contested and competitive of the beer markets being studied. There has been both new entry (through high profile international players forming joint ventures with domestic companies) and expansion in capacity by existing players in recent years, and both domestic demand and exports (largely to East Asian and South East Asian nations) have grown considerably. There has been an average compound annual growth rate in beer production of almost 13% for bottled beer, and just over 21% for canned beer over the period 2000-07⁵⁸. There has also been a trend away from state ownership in the sector, resulting especially from the partial privatisation of the largest beer producers. The proportion of FDI enterprises in the market has remained relatively constant.

Beer prices are low compared to the other four countries in this study (see section 5.1). However, we were told that the presence of a multi-level agency distribution network for beer may be contributing to higher prices than could be achieved otherwise. First level agents buy beer directly from brewers and then pass on the products at a marked up price to second, third, and then fourth level agents. This distribution pattern reportedly results in significant cumulative agency costs which consumers end up bearing. Increased investment in the industry is expected to lead to an improvement of current distribution networks, leading to lower prices.

⁵⁶ Resale price maintenance is the setting by the manufacturer of a minimum price at which its goods are to be sold at retail. If a reseller / retailer refuses to maintain this price, either openly or covertly, the manufacturer will stop doing business with it. Resale price maintenance prevents resellers from competing too fiercely on price, and thus prevents them from driving down profits for themselves as well as the manufacturer.

⁵⁷ ODI Dissemination Workshop held in Hanoi in March 2010

⁵⁸ Ministry of Industry & Trade (MIT) 2008.

Beer producers may have their own bottle manufacturing units, or import bottles from overseas; China in particular. One large bottle manufacturer has also recently set up in Vietnam, so the market for bottles is fairly competitive. This contrasts with Kenya, where the beer monopoly owns the only bottle producer in the country and where such vertical integration appears to act as a barrier to entry.

No beer company in Vietnam has a dominant position, although the top 3 have a combined market share of 60% which is reasonably close to the threshold specified by Vietnam's Competition Law of 65% for the top 3 firms. Whether these firms would be in a position to exercise their potential dominance in the market is unclear. Although two of the big firms focus their production on different parts of Vietnam geographically (north and south respectively), it is hard to say whether this is a result of deliberate 'market division' on the part of the producers, or whether it simply reflects transportation costs and local brand loyalty. In any case, we understand that one of the firms has now expanded its activities into the other geographical location, which should serve to increase competition, and lessen concerns about geographical market division.

As in many industries in Vietnam, there have been very few cases of competition complaints and investigations. One of the reasons for this may be that law enforcement has been rather weak and companies are reluctant to take recourse in the legal system to dispute claims⁵⁹. However, there have been some reports of anti-competitive practices taking place in the sector, relating to exclusive distribution agreements which act as a barrier to entry.

A specific legal case arose in 2004, when a new Vietnamese brand of bottled draught beer attempted to enter the market⁶⁰. It was alleged that incumbent beer producers forced distribution agencies, retail shops and bars to sign a contract with them, which included an exclusive term preventing these sellers and distributors from selling, exhibiting, introducing, marketing or even allowing marketing staff of any other beer brands to work on their business sites. As compensation, these shops and distributors would receive sums of cash. This strategy reportedly prevented promotional campaigns of this new entrant anywhere in Vietnam and the product could not access retail shops, distribution agencies and bars. However, the court rejected the complaint by the new entrant, and concluded that the exclusive contracts were binding. The company subsequently exited the market. If a competition law had existed at the time, such exclusive agreements and the possible associated abuse of dominance might have been considered unlawful, and quite a different outcome – and probably a more competitive one – could have been reached.

In another episode, in August 2006, we were told that a foreign entrant to the beer market sold their factories in Vietnam to another foreign brewery, after an unsuccessful market entry. Although the company's exit was partly for other reasons, it was suggested that exclusive agreements between other foreign firms and restaurants may also have hindered the company. Beer in Vietnam (particularly the more expensive foreign beers) are often consumed through restaurants. When the company tried to enter the market, they reportedly found that most of the restaurants had already committed exclusively with other foreign or joint venture beer producers.

A competition law and authority should be able to investigate and rectify such exclusive agreements which could serve to limit competition. We understand that while exclusive dealing is now no longer practiced, and dealers are now allowed to sell different types of beers, marketing / promotion deals reportedly remain strongly exclusive i.e. if a dealer signs a marketing / promotion contract with a beer company, it commits itself not to enter into a similar arrangement with another company, although it is still free to sell other beers⁶¹. This could also serve to hinder competition to a degree, especially given that beer is a market in which branding and marketing are so important.

⁵⁹ (VCCI, 2007)

⁶⁰ VietnamNet (04/07/ 2004 & 18/05/2004) and <http://www.cuts-international.org/E-NewsletterVol1.htm>

⁶¹ <http://www.thesaigontimes.vn/Home/doanhnghiep/chuyenlaman/2616/>

The study team were told that VCAD has recently conducted a study into the beer market. It found that in Vietnam, 70% of beer consumption happens in restaurants and only 30% of beer is purchased to take home. The VCAD study found that a large number of these restaurants have exclusive contracts with specific brands, which limits competition quite significantly. Although no directives have been issued by VCAD to rectify this situation, this is evidence that the Competition Authority is bringing such competition problems to light.

Overall however, the beer market in Vietnam appears to be quite competitive, and the potential for future growth of the beer industry in Vietnam seems to be very strong. The Government approved a new Masterplan for the Beer industry in 2009, and the projected growth for the industry is shown in Table 7 below.

Table 7: Future growth of the Vietnamese beer industry, 2006-2025 (annual growth rate projection)

	2006-10	2011-15	2016-20	2021-25
All industry	12.9	9.9	6.5	3.2
Bottle beer	13.0	13.5	8.0	4.0
Canned beer	13.5	10.0	6.0	3.0
Draught beer	2.9	4.0	6.0	7.0

Source: Institute for Industry Policy and Strategy (IIPS), 2008

With strong economic growth, demand for beer has increased rapidly, yet per capita consumption is still below the world average, so there is room for further growth in consumption. Income growth has led to consumers demanding more mid and high range beer, and has thus resulted in more differentiation of customers which has further segmented the beer market in terms of quality and price.

However, in responding to public health concerns, the government has imposed a special consumption tax on beer and alcoholic drinks, and is developing a national policy to deal with the effect of excessive alcohol consumption, which has a proposed goal to reduce production of alcoholic drinks by 50% by 2015. This could, if adopted and implemented successfully, offset to some extent the growth in domestic demand for beer. However exports have also grown fast, reflecting Vietnam's competitive market structure, and may continue to do so, so prospects remain bright. Growth in the beer industry will contribute to broader economic growth and job creation going forward.

5.6 Conclusions

Overall, this research has found that the beer market is usually highly concentrated, due to the cost structure (i.e. economies of scale and scope which yield a relatively high minimum efficient scale) and the importance of marketing and brand loyalty, which represent potentially significant barriers to entry.

The research has found that the typical structure of the market and conduct of companies within it commonly generates competition problems which should ideally be monitored by a competition authority, where one exists.

1. The beer industry is prone to anti-competitive practices and ideally needs monitoring by a Competition Authority

This study has found that there are a number of anti-competitive practices occurring in the beer sectors of the four countries. These practices hinder competition and can prevent market entry. The types of anticompetitive practice that have been found were:

- territorial allocation (where each distributor operates only within a specific area precluding direct competition);
- exclusive dealership or retailing (preventing dealers/retailers from contracting with any other beer producers);
- price fixing (whereby companies fix the price of beer which distributors or retailers must charge);
- the provision of coolers to bars as long as they only used them for their own products.

2. The beer sector often has barriers to entry which can be monitored by a competition authority

This study has found that various barriers to entry exist in the beer markets of the case study countries. For example, in addition to traditional barriers to entry in the sector (e.g. the importance of brand loyalty etc.), there was a case of a vertically integrated beer monopoly which had exclusive ownership of the upstream parts of the production chain and thus can discourage or prevent market entry by other players. For example, in Kenya, the dominant firm appears to control all sources of barley in the country, and owns the only large glass bottling company. The control of both of these important beer producing inputs constitutes an important barrier to entry by other potential market players. Competition authorities can monitor and try to tackle such barriers to entry.

3. When there is a monopolist and low likelihood of market entry, import competition should be facilitated

This was particularly seen in the Zambia case, where high import taxes limit the amount of competition that the dominant firm faces. This means that the monopolist does not really face any competitive discipline from legal imports (although it does from smuggled imported beer). A Competition Authority could recommend that the Government should change its policy with respects to import duties in order to provide some degree of competition in an industry which is dominated by a single firm.

4. The importance of regional competition authorities in investigating cross-border competition concerns

The research has found that multinational beer companies can sometimes limit the amount of competition in a particular domestic market, through agreements to divide up a regional market between them,. As this relates to competition across borders it is difficult or impossible for national competition authorities to tackle by themselves. However, such issues could potentially be dealt with at a regional level, e.g. by the SADC or new COMESA competition authorities.

5. Privatisation can sometimes replace a state monopoly with a private one

The Zambian clear beer market provides an example of a market that was privatised as a duopoly, in 1994, but over time became in effect a monopoly, as the dominant producer purchased the other smaller firm in the sector. There is now only one domestic beer producer, which has around 90% of the beer market. This is a common problem in Zambia, where many of the privatised industries are now monopolies.

In the Zambia case, the ZCC did set certain requirements for the monopolist that emerged as a result of the privatisation. But it is not clear how effective these undertakings are likely to be, and the current capacity and resources of the ZCC to monitor and enforce these is unclear. Thus, it is desirable to follow appropriate measures when privatising state enterprises, to prevent the replacement of a state monopoly with a private one, and to ensure there is an adequate degree of competition going forward. This can be achieved by, for example, ensuring that the state monopolist is broken up into two or more viable components that can be expected to survive

individually going forward, that acquiring firms have a strong business plan and investment strategy, and that the privatisation takes place in a fair and open manner, and decision making is based on sound economic and financial principles, and is not subject to corruption or favouritism.

6. Governments may sometimes overlook the existence of monopolies or uncompetitive market conditions because they benefit in some way e.g. in terms of tax revenue or through the protection of jobs, or because politicians have a direct interest in the company

It appears that, as in the sugar case, governments may have an incentive to overlook the existence of limited competition in the market to some degree if the industry's tax contribution is high, particularly in countries with a limited tax base. The beer sector is often heavily taxed, for health reasons as well as revenue generation. The dominant beer firm in Kenya is the second highest enterprise contributor of taxes (combined excise, corporate and VAT) to the Kenyan government for example.

Sometimes monopolies can also help governments to meet social objectives. In the Zambia case, at the time of privatisation, the private beer industry inherited a business with many employees and high wages, but it was politically difficult to make workers redundant. The dominant firm continues to provide employment rather than shedding jobs, which may otherwise have been warranted in pure economic terms. If there was a more competitive environment, such a practice may not continue to be viable.

Sometimes politicians may have an interest in a company (i.e. through ownership), and thus share in the profits it makes. In that case, they may have an incentive to block increased competition. It has been claimed that this is a common problem in Kenya, and that it helps to explain the ongoing monopoly of the incumbent beer firm, and failure of a powerful foreign multinational to successfully enter the market.

6. The mobile telephony market

6.1 Introduction and overview

The telecommunications market includes domestic and international mobile voice and sms services, domestic and international fixed-line services, and internet (data) services. However, this study has been focusing on the mobile voice segment of the market in each of the countries. Although fixed line telephony is clearly a possible substitute for mobile telephony in some situations, it is a very small part of the market in the case study countries, and is not likely to be exerting much, if any, competitive pressure on the mobiles markets.

There is a large body of evidence on the development benefits of mobile telephony, in terms of improved connectivity (especially where it has enabled countries to leapfrog the need to develop fixed line infrastructure, and thus provided connectivity to many people for the first time), job creation, and its role in reducing transactions costs, facilitating private sector development and improving access to finance. The mobiles market is relatively young, and is still evolving fast globally. Regulation is an important determinant of competition in this market, and regulators across the world are grappling with this fast changing market. Thus in each country we look not only at market structure, but also at the impact of regulation on competition, with a view to identifying any policy lessons.

The structure of the mobile telephony market in each of the five countries is shown below.

Table 8: Market structure and regulatory information about the 5 markets

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

Source: ODI, various sources

Key findings from the analysis of the mobiles market are listed below:

- Competition drives rollout, subscriber growth and falling prices.
- Competition creates incentives to design services to meet the needs of customers, including price and product promotions targeted at poor customers, and value added services with additional development benefits.
- The level of private investment (both foreign and domestic) is an important determinant of the development of the mobile services market.
- Appropriate regulation is important to facilitate competition in the mobile services market.

- Ensuring competitive neutrality for private vs. state owned enterprises is important.
- The state may have a role to play in incentivising rollout to underserved areas, but this is best done in a market friendly way.

To summarise some of the issues relating to the performance of the mobiles markets in the case study countries:

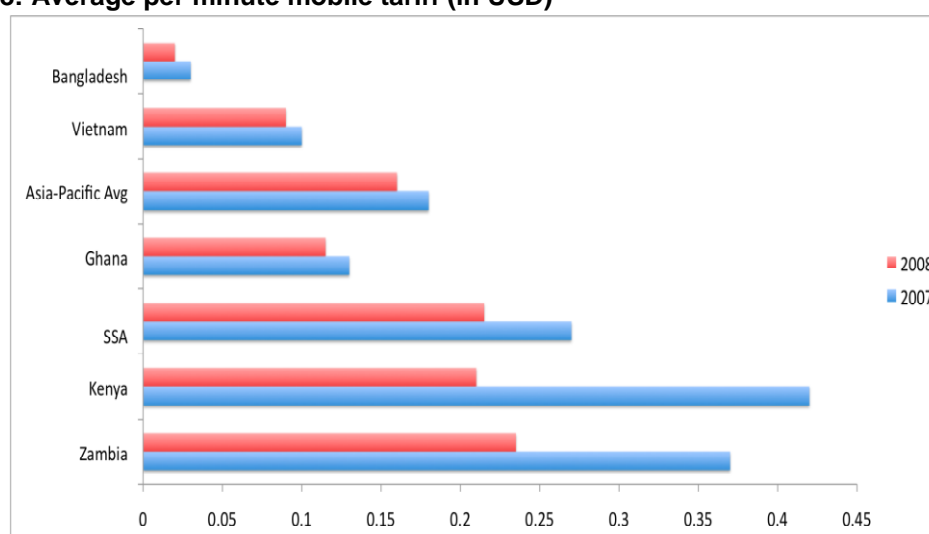
- Kenya had only two operators at the time of the research mission, with an ex-SOE having a dominant market share of around 77%. The regulator CCK oversees regulatory concerns such as interconnection, spectrum allocation and international gateway effectively. Termination charges have been regulated since 2007 and this, in combination with new market entry, has led to a dramatic fall in cross network tariffs, by as much as 50%, although tariffs are still higher than the other countries except Zambia.
- Kenya has performed very well in terms of investment per head of population. It is possible that, while there had been a lack of competition, the dominance of the market by one firm (which may have enjoyed higher profits as a result) for some years may have permitted greater investment to take place than would have been the case in a more competitive market. However, this relative lack of competition also appears to have a trade off, as prices were relatively high until new entry occurred in 2008/9.
- Zambia has the lowest mobile penetration rate and the highest tariffs of the five countries. The country has a widely dispersed population and there are difficult geographic challenges involved in providing mobile coverage to the whole population. International calls are very expensive because the government monopoly operator charges high tariffs to private operators to access the international gateway. This distortion appears to permeate into the domestic calls market, as private operators have to subsidise their international calls, in order to be price competitive with the state firm.
- In Ghana there appears to be intense competition between the operators. The country has good mobile penetration and relatively low prices. Ghana has an effective regulator which has facilitated a competitive market. There has been good regulation of interconnection and the liberalisation of the international gateway – issues which have slowed down market development in other countries.
- Ghana has a mechanism akin to a universal access fund which has been operating since 2005, which seems to have effectively contributed to widening access to ICT services in non-served and under-served parts of the country. Other countries are further behind in implementing a universal access fund.
- The Vietnamese mobiles market is unusual in that it is heavily dominated by state owned enterprises; however, the operators do appear to compete with each other, and the sector is performing fairly well. Nonetheless further liberalisation may allow an influx of new investment into the sector which would help to expand mobile services even further, and help to underpin growth and development more broadly.
- Vietnam does not have a separate telecommunications regulator. The industry is regulated by the Ministry of Post and Telecommunications (MPT), which is also responsible for telecommunications policy, and also owns two of the largest operators. This generates scope for conflicts of interest, which could undermine effective regulation in this market.
- Bangladesh has a relatively competitive mobiles market and the lowest tariffs of the countries. Five out of six of the operators are partially or fully foreign owned and this has

helped in terms of gaining access to the best technologies to improve efficiency and decrease operational costs.

- There are some regulatory concerns in the Bangladeshi mobiles sector however. For example, there is a regulated price floor which has been set at less than the regulated termination charge. This means that calls to other networks are loss making, and gives a significant advantage to firms with the most subscribers thus creating an uneven playing field. This suggests that the potential competition impacts of regulatory decisions need to be considered carefully, perhaps through the implementation of a regulatory impact assessment process.

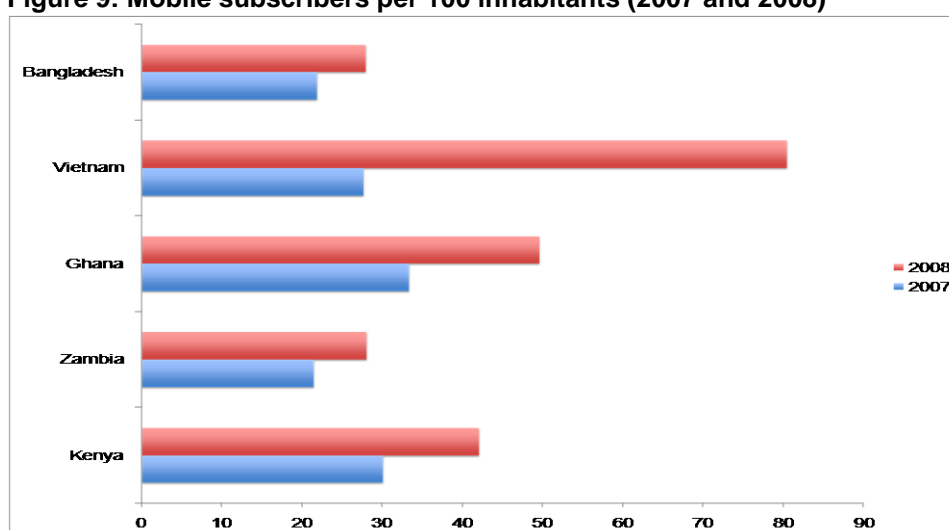
The graphs below show the comparative market outcomes in the mobiles market. They have been briefly discussed above, and are elaborated upon in the sections on each country's market which follows.

Figure 8: Average per minute mobile tariff (in USD)

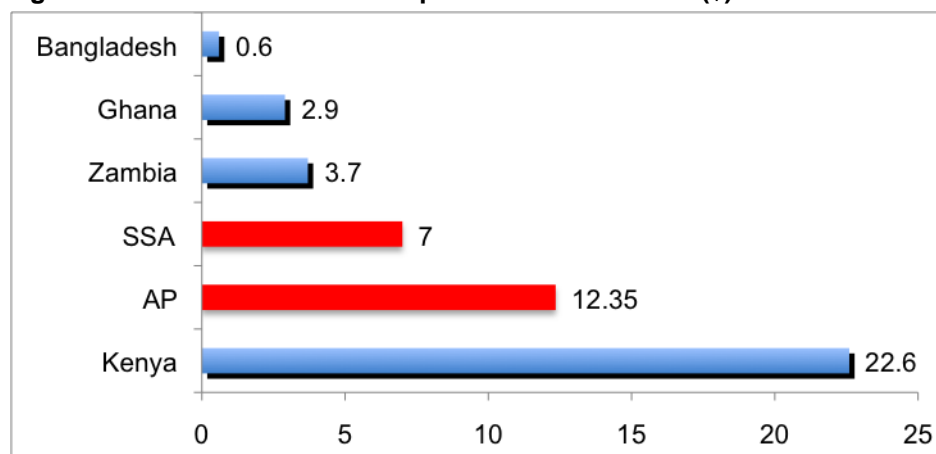


Source: ITU data, ODI Analysis

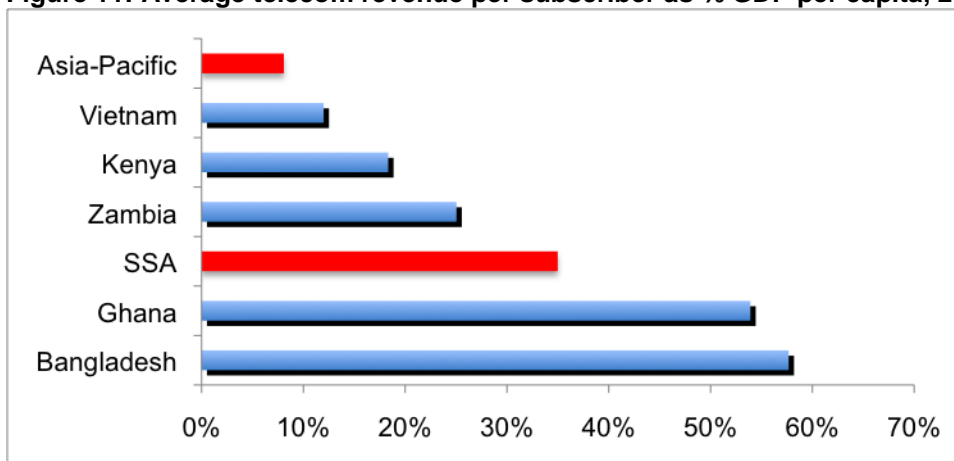
Figure 9: Mobile subscribers per 100 inhabitants (2007 and 2008)



Source: ITU data, ODI Analysis

Figure 10: Telecoms investment per inhabitant in 2006 (\$)

Source: ITU data

Figure 11: Average telecom revenue per subscriber as % GDP per capita, 2006

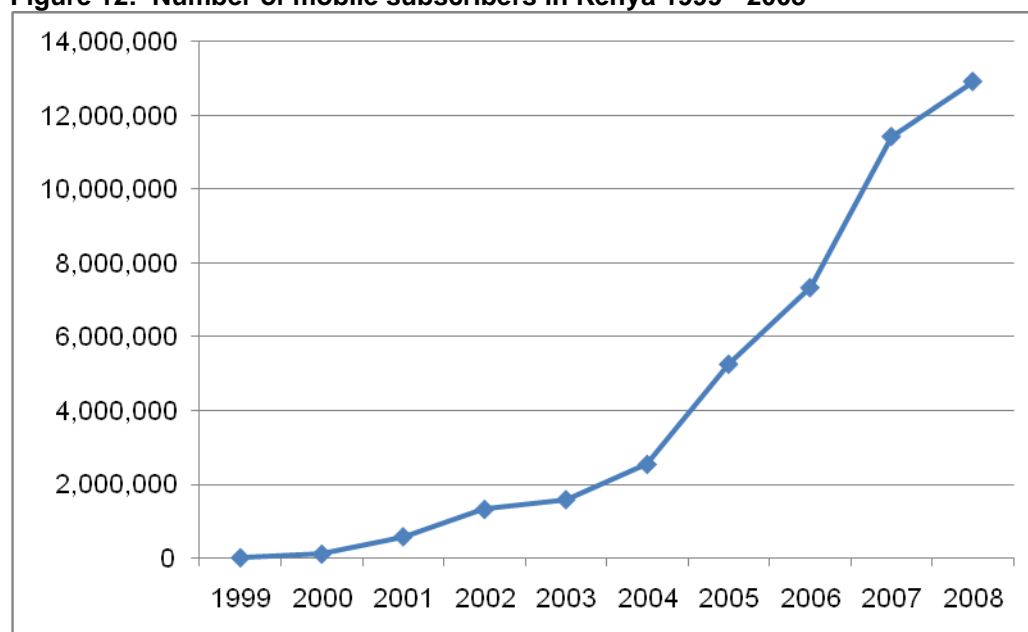
6.2 Kenya mobiles market

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. Kenya is no exception; the introduction of new entrants has coincided with falling prices and rising mobile penetration. Mobile services started in 1992 with the Government-owned mobile operator offering analogue services. During this initial period services were so expensive that it resulted in a mobile subscriber base of less than 20,000 for a period of seven years (from 1993 – 1999)⁶².

The enactment of the Kenya Communications Act, 1998 led to the introduction of competition in the cellular mobile industry. This started in 1999, when a 40% stake in the state owned incumbent operator along with management control was sold to a major international mobile services provider, and two new licenses were tendered in 2000 and 2003.

It was only after competition was introduced that penetration increased, as can be clearly seen in Figure 12 below. Prices have also been coming down.

⁶² http://www.cck.go.ke/market_information-telecommunications/

Figure 12: Number of mobile subscribers in Kenya 1999 - 2008

Source: Communications Commission of Kenya (2008)

Table 9: Average mobile tariffs (calls to the same network) in Kshs (nominal terms)

Year	2004	2005	2006	2007	Q1 2008/9	Q2 2008/9	Q1 2009/10	Q2 2009/10
Average Tariff	20.18	19.23	18.89	16.17	16.43	8.98	5.6	6.33

Source: Communications Commission of Kenya Reports (<http://www.cck.go.ke/resc/statcs.html>)

At the time we visited Kenya, there were only two operators in the market, including the previously state owned enterprise which was privatised in 2008, and which continued to dominate the market, with a market share of around 77%. Since then however, two new entrants have entered the market, in 2008/9. Tariffs subsequently fell in the market by around 50%, as shown in table 9, though this is also due in part to the decrease in the regulated termination charge implemented by the telecommunications regulator in 2007.

Figure 8 shows that in 2007, Kenya's prices were relatively high, as compared with the other countries studied (except Zambia), and as compared with Sub-Saharan Africa as a whole, though they fell significantly by 2008, for the reasons noted.

Kenya performed relatively well in terms of mobile penetration, although it was being outstripped by Ghana and Vietnam by 2008. This can be seen in section 6.1.

Kenya also performed very well in terms of investment per head of population, as shown in Figure 10. It is possible that, while there had been a lack of competition, the dominance of the market by one firm (which may have enjoyed higher profits as a result) for some years may have permitted greater investment to take place than would have been the case in a more competitive market. However, this relative lack of competition also appears to have a trade off, as prices were relatively high until competition in the market increased through the entry of two new players.

In terms of facilitating new entry and competition, the number of licences issued is clearly important, but also the conditions attached to them. For example, it appears that government restrictions on levels of foreign ownership in the mobiles sector has been a hindrance to growth and expansion of the sector in some countries. Until 2008, the Communications Act in Kenya required at least a 30% local stake for mobile telecommunications licence holders. However we

were told that this requirement had created some problems for new entrants, and may have served to prevent or slow down market entry, with potentially detrimental impacts on competition.

In the mobile telephony market, the regulatory framework is an important determinant of competition. The Kenyan mobiles regulator, the CCK (Communications Commission of Kenya), appears to have relatively strong capacity, and to be fairly independent with well qualified staff. It is financially well endowed through revenues collected from mobile phone companies, and thus does not rely on government funding. It seemed to be well regarded in the telecom industry, and is seen as a fair regulator, overseeing such issues as interconnection between the operators, spectrum allocation, and access to the international gateway reasonably effectively, all of which are important determinants of the competitive environment.

Up until 2004, there was a legal monopoly of the international gateway in Kenya. After that the Government liberalised, licensing the mobile operators to purchase satellite bandwidth on the international market. We were told that this had the effect of decreasing the cost of international calls by 50% compared with previously. This compares favourably with the situation in Zambia, in which the international gateway remains a monopoly, and which appears to explain at least in part the relatively high prices of international calls in Zambia. Liberalising the international gateway can remove one of the bottlenecks that can choke African businesses as they seek to compete in a global market, and thus can have significant knock-on benefits across the economy.

The regulation of interconnection tariffs also affects the extent to which new entrants can gain market share. In the absence of regulated interconnection tariffs, dominant firms are likely to charge high prices for connecting calls from other networks. Moreover, sometimes dominant operators can refuse or delay interconnection with other operators. This can effectively limit competition, as most people will probably be making regular calls to subscribers on the largest network, so if the costs of doing that are very high, they will subscribe to the dominant provider, rather than any small player or new entrant.

In Kenya, termination charges have been regulated only since 2007. The regulated termination charges are around KSh5 per minute. According to CCK implementation of interconnection rates follows a glide path that requires operators to continuously sign new agreements, and submit them to the regulator. Furthermore, during the study team's visit, we were told that CCK was considering a new proposal that would see new entrants to the market given preferentially low rates to enable them to gain a foothold in the sector. This may signal a more proactive stance against dominant players who, new entrants say, are eroding their profit margins and pigeon-holing subscribers on one network. Previous interconnection agreements have apparently led to price falls and also affected inter-network (calls within the same network) calling rates.

An aspect of regulation which is gaining importance in developing countries is related to infrastructure sharing. This is where different operators share telecommunication infrastructure in order to provide services to different parts of a country. The key advantage of such an approach is that it decreases the duplication of investment, reducing capital and operational expenditure for market players. In so doing, infrastructure sharing may facilitate the expansion of coverage into previously un-served geographic areas and reduce tariffs. Infrastructure sharing is also increasingly being used in congested urban centres where new site acquisition is difficult⁶³. In 2009, the regulator CCK developed a Code of Practice for the siting of infrastructure⁶⁴ via a multi-stakeholder process. Thus telecommunication firms are now required to share masts where this is possible.

Another important issue is the potential role of regulation in encouraging wider rollout of mobile services in underserved areas. Large parts of the country remain unserved by mobile phone

⁶³ www.gsmworld.com/documents/gsma.pdf

⁶⁴ <http://allafrica.com/stories/200906300949.html>

providers, and in 2006, the Government mooted the establishment of a Universal Access Communications Development Fund, to be paid for by telecommunications companies. Universal Service Funds typically go towards funding the roll out of telecommunications services in remote and unprofitable areas. There was thus a proposal to increase the fees payable by telecoms licensees from 0.5% of turnover to 1% to fund universal service. However, operators were opposed to such a levy. They argued that the large investments in infrastructure that they had already made to increase coverage negates the need for such regulation.

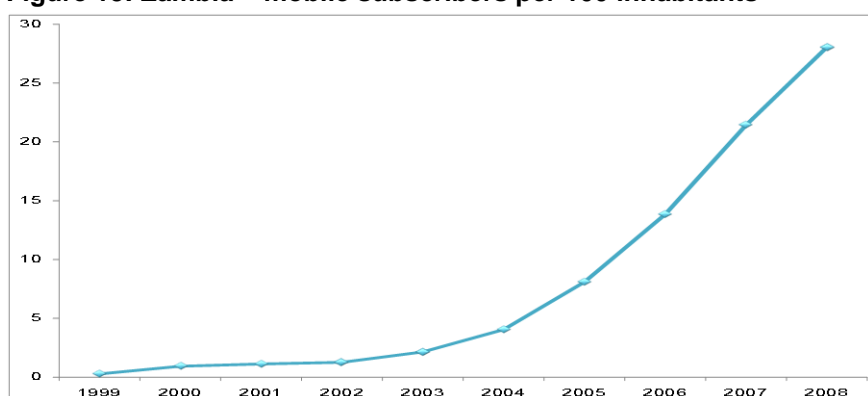
6.3 Zambia mobiles market

Prior to 1994, the telecoms sector in Zambia was fully in the hands of the Zambian Government. In 1994, the Government passed a Telecommunications Act which opened the sector to private capital. The Act created also a sector regulator, the Communications Authority of Zambia (CAZ).

Mobile telephony commenced in 1995 with the entry of the Government-owned mobile operator. This operator at the time of the mission had the lowest market share, at around 5%⁶⁵. This was followed in 1997 by the second entrant, a foreign, private operator. This company in 2008 had approximately 15% of the market. In 1998, the third operator was introduced in the market (also foreign owned) which in 2008 commanded an estimated 80% market share, despite being the last entrant into the market. The ranking of these three companies in terms of market share has been the same since 2002 (although actual market share figures have fluctuated)⁶⁶.

In Zambia the introduction of new entrants has coincided with significant increases in mobile penetration as shown in Figure 13 below.

Figure 13: Zambia – mobile subscribers per 100 inhabitants



Source: ITU data

However, Figure 8 shows that in 2007, Zambia's prices were relatively high, as compared with the other countries studied. In fact they were more than double the average for Sub-Saharan Africa, although they had come down dramatically by 2008⁶⁷.

Zambia also has fairly low penetration rates (see Figure 9) compared with most other countries studied, though it is better than the average for Sub-Saharan Africa. The relatively low population density of Zambia may make increasing the penetration of mobile services particularly challenging.

⁶⁵ Estimates of interviewed business and Government stakeholders in September 2008

⁶⁶ Based on Zambia Annual Reports provided to the Communications Regulators' Association of Southern Africa (CRASA)

⁶⁷ ITU data

Zambia also had relatively low levels of investment per head of population, as shown in Figure 10 – in contrast to Kenya in particular, which may have benefited from a relatively concentrated market facilitating high levels of investment, although with potential trade-offs in terms of competition and price, as discussed above.

The sector may be underperforming for a number of reasons. It may be partly because, as noted previously, the relatively low population density of Zambia makes infrastructure development particularly costly. However, there may also be structural problems within the market.

The Government intervenes in the telecoms sector at various levels. At the highest level, the Ministry of Communications and Transport sets out the legal framework and regulatory policy. At the intermediate level, the regulator monitors the activities of all market participants (and is not independent of government). On the ground, the Government directly participates in the market as a mobile operator (although the privatisation of this operator is now planned). This may generate some conflicts of interest.

One specific problem cited relates to the fact that the state owned mobile services provider in Zambia holds a monopoly on the international gateway⁶⁸ and charges a high price for its use. This means that the two private firms have to subsidise their international calls to compete with the state incumbent, which may be hindering their investment in infrastructure roll-out. This also in part explains the relatively high cost for mobile services in Zambia.

(By way of comparison, when the Kenyan government liberalised the international gateway in 2004, and licensed the mobile operators to purchase satellite bandwidth on the international market, we were told that this had the effect of decreasing the cost of international calls by 50%. Liberalising the international gateway can remove one of the bottlenecks that can choke African businesses as they seek to compete in a global market, and thus can have significant knock-on benefits across the economy.) Although the international gateway (IGW) in Zambia is in principal liberalised, the regulator has set an IGW licence fee of 12 million USD, and to date none of the operators have sought to purchase a licence. It is not clear why this is the case. In Kenya the IGW licence fee was \$25m and yet all the operators have bought it. It could suggest that the regulator has set the rate for the licence too high in Zambia, given the relatively small size of the market.

One factor may be the a general concern about the lack of competitive neutrality between state and private players - an issue that has been seen also in other countries in this study. This points to the need for accounting separation between the various parts of state owned telecommunications companies. This allows for better regulation of the market and prevents unfair practices such as cross-subsidisation – taking excess profits from one service (e.g. international gateway revenues) and using them to provide another service (e.g. domestic mobiles services) at below cost. The lack of such separation may be a problem in Zambia. The regulator cannot determine whether the state owned mobile operator is paying the same (relatively high) access fees for the international gateway as the private operators. The requirement for accounting separation has only recently been introduced for all market players, although it was alleged that this had still not been implemented in practice.

In addition, the state incumbent itself does not appear to be rolling out infrastructure or making great efforts to expand penetration, perhaps because it does not enjoy the incentives and managerial capabilities of the private sector. In Kenya, where a single private sector firm has dominated the market for several years, it has used the profits it has generated to invest a great deal in infrastructure rollout, thus entrenching its strong market position, and facilitating much higher penetration.

⁶⁸ An international gateway exchange is a telephone switch that forms the gateway between a national telephone network and one or more other international gateway exchanges, thus providing cross-border connectivity. This switch can be owned by a particular company.

In the mobile telephony market, the regulatory framework is an important determinant of competition. In Zambia, there is a financially, but not operationally independent⁶⁹ regulator then called the Communications Authority of Zambia (CAZ), but which is now called the Zambia Information and Communications Technology Authority (ZICTA), which undertakes activities such as radio spectrum and quality of service monitoring, runs consumer awareness programmes, and undertakes studies on ICT.

ZICTA regulates telecoms operators partly through their licence agreements. Authority over issues relating to competition is shared with the Zambian Competition Commission (ZCC). ZICTA focuses on ex ante regulation, while ZCC focuses on ex post regulation within the framework of competition abuses, (although ZCC has also been proposing that the international gateway should be liberalized). In the case of mergers, the merging entity first needs an approval by ZICTA under the licence agreement, before applying for approval by ZCC.

ZICTA is generally perceived as a relatively strong regulator by both business and non business stakeholders⁷⁰, though its lack of independence from government was highlighted as a concern, and it was alleged that CAZ had not defended its regulatory proposals very strongly when they are opposed by the government.

One important component of the regulatory framework, which affects the degree to which new entrants can gain market share, compete and innovate, is the regulation of interconnection tariffs. In the absence of regulated interconnection tariffs, dominant firms may charge high prices for connecting calls from other networks. Moreover, sometimes dominant operators can refuse or delay interconnection with other operators. This can limit effective competition, as most people will probably be making regular calls to subscribers on the largest network, so if the costs are doing that are very high, they will subscribe to the dominant provider, rather than any small player, or new entrant. Thus unregulated interconnection fees can stifle competition and innovation, keep prices high, hold back penetration and prevent additional investment in the sector.

Until recently, interconnection charges have not been regulated in Zambia. Indeed, according to the ITU (2008)⁷¹, there has been a long term interconnection dispute, between the market leading mobile operator and the Government owned fixed line operator. However, in June, the Supreme Court ruled in the mobile operator's favour, bringing to a close this long standing issue⁷². In Kenya, mobile tariffs fell significantly after termination charges were regulated.

In late 2009, the Communications Authority of Zambia (CAZ) announced the change of its name to the Zambia Information and Communications Technology Authority (ZICTA). This was as a result of the operationalisation of the Information and Communications Technology (ICT) Act, which has replaced the Telecommunications Chapter 469 of the Laws of Zambia. The name change from CAZ to ZICTA is in line with the convergence of technologies of what used to be principally different sectors namely telecommunications, Information Technology (Internet). Thus ZICTA has a wider remit than CAZ. In addition, it has more powers to address problems e.g. through clearer penalties and fines.

ZICTA has put in place a new national band plan which involved the re-allocation of the GSM band. It has also made an effort to increase its technical capacity in administering radio frequency spectrum, the authority has installed a monitoring system, which means it is now in a position to detect and prevent illegal use of spectrum. In addition, in 2009, the Zambian government

⁶⁹ CAZ is not independent of the Ministry of Communications and Transport. The Ministry appoints the senior management of CAZ and the Ministry's Permanent Secretary provides direct oversight of CAZ. However, CAZ is entirely financially independent of the Ministry. CAZ has three sources of funds: licence fees, spectrum fees and operators contributions.

⁷⁰ Based on interviews conducted by ODI on mission in Zambia

⁷² www.zm.zain.com/.../Celtel_Zambia_Plc_Interim_Results_July_2008.pdf

introduced a new law that gives powers to ZICTA to regulate tariffs and agreements on interconnection fees⁷³, which should help to address the aforementioned interconnection problems. In addition, there are plans to facilitate infrastructure sharing by mobile operators, to reduce unnecessary costs associated with duplication of investment in network infrastructure.

Another important issue is the potential impact of regulation to encourage wider rollout in underserved areas. Some countries introduce Universal Service Funds (e.g. through a levy on mobile phone operators) to subsidise the roll out of telecommunications services in remote and unprofitable areas. One successful example of this from our case study countries is the Ghana Investment Fund for Telecommunication development (GIFTEL), which is discussed in section 6.4.

In Zambia, the regulator launched a rural development fund in September 2008, to be financed through licence fees. However, as far as we are aware, there are currently no mechanisms in place that would allow market participants to make use of this fund.

Interview evidence suggests that the state owned mobile services provider in Zambia believes it has a responsibility to deliver universal service, and that this undermines its ability to compete with other market players, which is why it needs to maintain the monopoly on the international gateway. In combination, it seems like this kind of arrangement may undermine the performance of the mobiles market across the board in Zambia, resulting in higher prices and lower penetration than would be achievable otherwise. Thus a carefully implemented universal service fund might be a more market friendly way of achieving the objective of widening access to mobile services in underserved areas.

6.4 Ghana mobiles market

In Ghana mobile services started in 1993, and the subsequent introduction of new entrants has coincided with falling prices and rising mobile penetration.

Ghana now has a relatively competitive mobiles market, with more players than Kenya and Zambia (see Table 8), and is performing well, with lower prices than other African countries, and high penetration rates, as shown in Figures 8 and 9 respectively.

However, investment per head has been relatively low compared with other countries, as shown in Figure 10, especially as compared with Kenya, which may have benefited from a relatively concentrated market facilitating high levels of investment as discussed previously.

In Ghana, there is an operationally and financially independent regulator, the National Communications Authority (NCA). According to most accounts, the NCA has been operating very effectively, overseeing such issues as interconnection between the operators, spectrum allocation, and access to the international gateway. These functions are important to ensure a competitive market outcome, and thus good regulation of these aspects of the market environment may help to explain the good performance of the Ghanaian mobiles market, with its high level of penetration and low prices. An inappropriate regulatory framework governing these aspects in some of the other countries studied appears to have undermined competition in a way that has not occurred in Ghana.

A specific issue worth noting in Ghana, is the new Electronic Communications Bill, which will give the NCA powers to grant licences to infrastructure providers. These are not mobile operators themselves but companies which specialise in constructing mobiles infrastructure and then lease space on their towers to various operators. By reducing the investment required by individual

⁷³ <http://www.computerworld.co.ke/articles/2009/09/30/african-providers-under-pressure-interconnection-charges>

operators to roll out their services more widely, this may be expected to increase mobile penetration and competition between mobile providers in new areas of the country, and may help to tackle dominance by any single market player in a particular location.

Despite the rapid expansion of mobile networks across the world, some locations may remain underserved, because services may be uneconomic in areas that have low population density, and where potential customers have much lower incomes, and in difficult terrain. Government intervention may thus be needed through licensing requirements or innovative funding schemes for the private sector to expand to underserved areas.

The Ghana Investment Fund for Telecommunication development (GIFTEL), 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 communities. The scheme is becoming increasingly popular with the operators, so this policy appears to be working well in Ghana, which had the best penetration of all the countries we studied In 2007, although it had been overtaken by Vietnam in 2008.

In 2008, Electronic Communications Act was passed. GIFTEL changed to Ghana Investment Fund for Electronic Communications (GIFEC). Apart from providing financial resources for the establishment of universal service and access for all communities (in line with the original objective of GIFTEL), GIFEC seeks to facilitate the provision of basic telephony, internet service, multimedia service, broadband and broadcasting services to these communities. The source(s) of money for the fund, which is mainly contributions from operators and service providers as stipulated in their respective licences, has not changed.

There is strong evidence from across the world of the various development benefits associated with mobile phone services. A survey on the use of mobile telephones for micro and small business development in Ghana, conducted by the Council for Scientific and Industrial Research in 2006⁷⁴ examined the level of usage and contributions of mobile phones to the growth of small business in rural and less urban areas in Ghana. The report found that the use of mobile phones is playing a catalytic role in business development for SMEs in these areas. According to the survey, the use of mobile phones made it much easier to link up with suppliers, existing customers, and potential new customers, and it reduced the cost of doing business, by reducing the time and costs associated with transportation. Thus mobile phone services can improve the investment climate, catalyse private sector development, and stimulate growth. Intuitively, a well-performing and competitive mobiles sector, with low prices and wide coverage, can have significant knock-on benefits for the economy as a whole.

6.5 Vietnam mobiles market

The mobiles market in Vietnam is somewhat different to the market in the other countries we studied. Telecommunications is one of several sectors in Vietnam reserved for largely state ownership on “strategic” and “security” grounds, which has prompted a gradual and cautious approach to liberalisation. In recognition that telecommunications is a key component of the infrastructure required for national economic development, the government has made substantial investment in the sector and gradually eased control, to expand and upgrade capacity. In 1990, the sector operated under strict state control, with effectively only one service provider, which was state-owned. Since then, however, foreign companies have been allowed to establish operations to

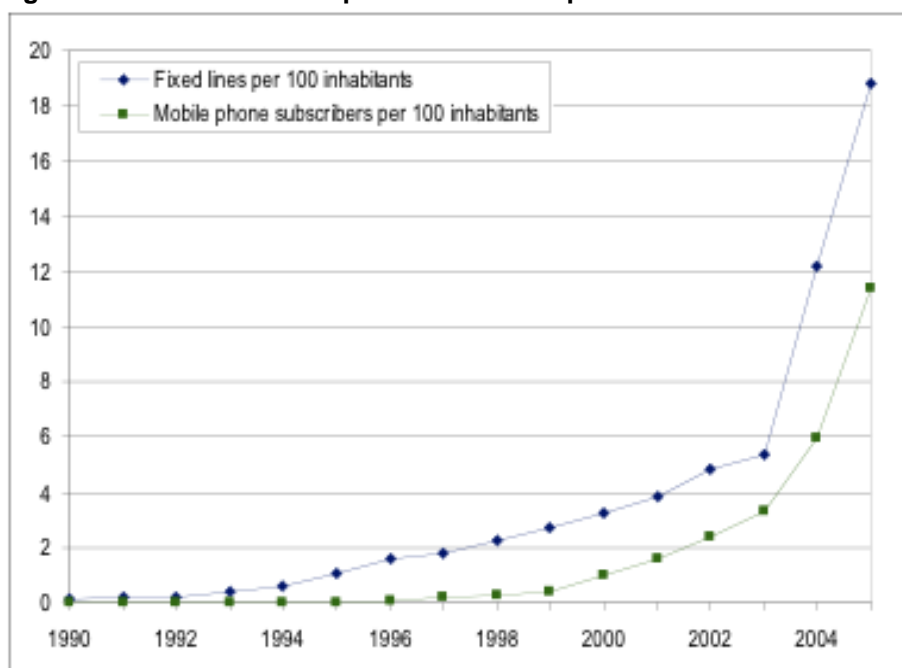
⁷⁴ G. Frempong, G. Essegbey, and E. Tetteh (2007)

produce telecommunications equipment and material or to assist domestic local operators in the provision of services.

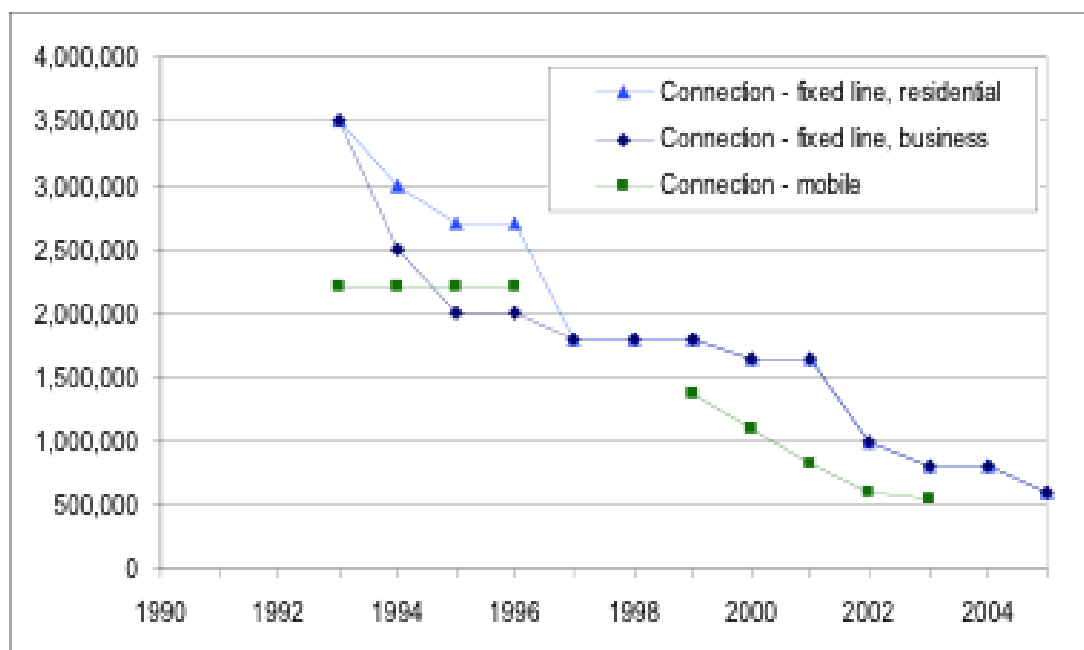
Since 1995, new domestic companies have been allowed to provide telecommunications services in competition with the state-owned monopoly and new services have been introduced. Since the late 1990s, service providers have been allowed greater flexibility in setting prices, authorities have sought to make regulations more transparent and streamlined, and a number of state-owned telecommunications companies have sought to increase the role of the private sector in providing capital for further investment in the industry. In areas where there is strong competition, operators are authorised to set tariffs and service charges, whilst the state-owned provider retains control over tariffs and service charges in monopoly areas, but aims to reduce service charges until they reach the regional level.

Obtaining reliable data on the number of mobile subscribers served has been difficult, and the telecommunications regulator was not forthcoming with data. For this reason, data has been compiled from secondary sources. However, what can be said with certainty is that the changes outlined above have brought about rapid growth in fixed lines and mobile phones, as well as a marked widening in the geographical and socioeconomic coverage of the expanding and multiplying networks. The Vietnamese telecommunications sector has been growing at a rate of around 25 per cent per year, double the average for the Asia region and triple the world average.

Figure 14: Vietnamese telephone services – penetration



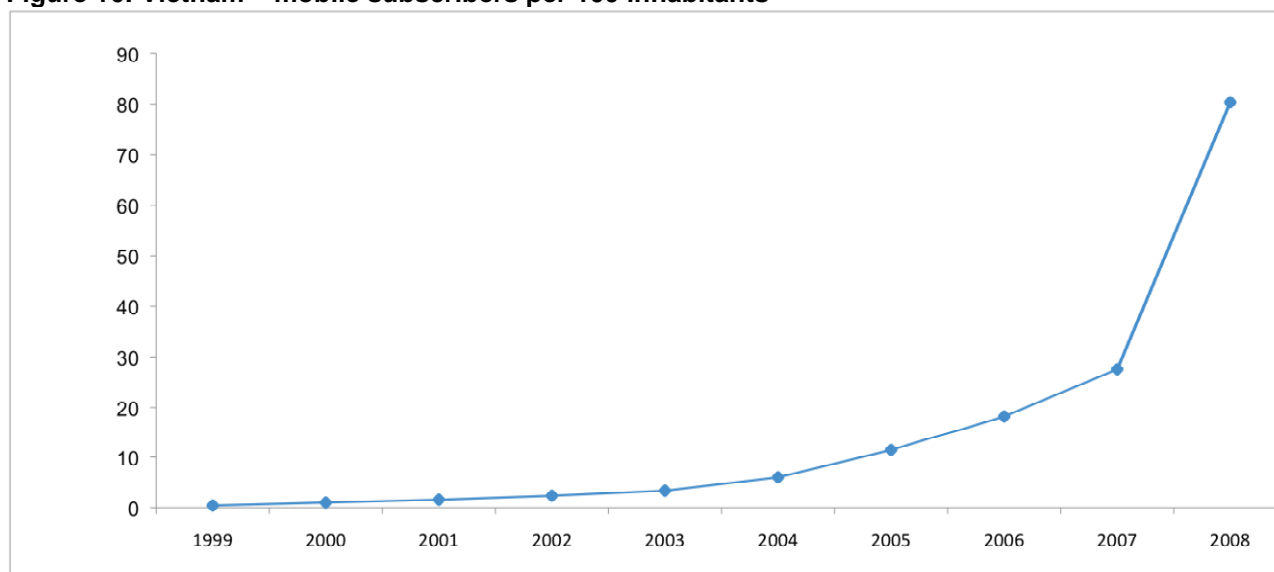
Source: NZIER

Figure 15: Connection charge (Vietnamese dong)

Source: NZIER

As Figure 14 above shows, in 1990 Vietnam had only 100,000 telephone subscribers, equating to 0.14 fixed lines for every 100 people, one of the lowest rates in the world. By 2000, it was approaching three million fixed lines, the equivalent of 4 for every 100 people⁷⁵. Whilst we have been unable to obtain time series tariff data, Figure 15 shows that cost of connection for the mobiles sector has been falling dramatically between 1992 and 2004.

Figure 16 shows the rapid expansion in mobile penetration that Vietnam has experienced between 2006 and 2008. According to ITU data, Vietnam had 27.56 mobile subscribers per 100 inhabitants in 2007 which increased to 80.37 in 2008. This is due to the expanding coverage and intense competition from a seven-player field.

Figure 16: Vietnam – mobile subscribers per 100 inhabitants

Source: ITU data

⁷⁵ New Zealand Institute of Economic Research (NZIER) (2008)

As section 6.1 shows, Vietnam has the second lowest mobile tariffs of the five countries, also lower than the Asian Pacific average. It performed less well in terms of penetration however, behind Ghana and Kenya in 2007, although penetration increased dramatically by 2008.

It is understood that even though the telecommunications sector has been seen by the Government as a strategic sector and closed to foreign ownership, the sector was partially opened to foreign companies in the form of Business Cooperation Contracts (BCCs), primarily as suppliers of equipment and finance for constructing network infrastructure for operation by Vietnamese companies. BCCs have fuelled network growth for all the SOE mobile companies and have brought large external investments at important junctures in the development of the Vietnamese telecommunications market. However, some sources have said that BCCs have brought in only limited private capital and expertise due to limited management control, and foreign investment has been focussed on short term investment for quick return. If joint ventures had been permitted, these sources argue, even more network growth and expansion could have occurred. In any case, with accession to the World Trade Organization, limitations on foreign companies providing telecommunications services will be relaxed, potentially bringing in further entry and more competition going forward⁷⁶.

Until mid-2003, Vietnam's mobile market was a duopoly in which both firms in the industry were 100% owned by the State telecommunications company. There are now 6 operators in the market, all of which are majority owned by various arms of the State. However, a high degree of competition was observed between the six companies with many innovative marketing and promotional campaigns which may explain the relatively low tariffs in the country. The mobile operator owned by the Ministry of Defence has become the market leader despite having to compete against two entrenched incumbent firms owned by the dominant state monopoly operator. We were told this was because the military operator has been able to use its existing military telecommunications infrastructure and personnel to roll out services across the country – more widely than the other operators.

Table 8 shows how the Vietnamese mobile sector compares with the other four countries structurally. A key difference with all the other countries is that Vietnam does not have a separate telecommunications regulator. The industry is regulated by the Ministry of Post and Telecommunications (MPT), which is also responsible for telecommunications policy, and also owns two of the largest operators. This clearly generates scope for conflicts of interest, which could undermine effective regulation in this market. International best practice in relation to the mobile telephony sector is widely perceived to require the establishment of a regulator that is financially and operationally independent from the government.

We understand there have been several regulatory problems in the market. For example, interconnection has been a problem for new entrants in Vietnam, where there is evidence that the incumbent operator has delayed interconnection with new entrants, citing lack of network capacity as a reason for denying interconnection (amongst other reasons). This can effectively limit competition, as most subscribers will likely be making regular calls to subscribers on the largest network, so if the costs of doing that are very high, they will subscribe to the dominant provider, rather than to a small player or new entrant.

It is understood that recently one of the large operators in the country requested the regulator to impose a floor price with respect to tariffs. Presumably this was because the operator did not want continued competition and continually lower prices to eat into its profits. The Regulator does not seem to have granted this request, however. International best practice suggests it is best if the market is allowed to determine the prevailing retail tariff.

⁷⁶ New Zealand Institute of Economic Research (NZIER) (2008)

Although penetration has been increasing fast, large parts of the country remain unserved by a mobile phone network. Vietnam has a Universal Access Fund (UAF) which is paid for by telecommunications companies, but it was not operational at the time of the research mission. During the ODI dissemination workshop in March 2010, the study team heard that the UAF is now operating in Vietnam, but no further information was made available.⁷⁷ UAFs can help to subsidise the roll out of telecommunications services in remote and unprofitable areas, and thus could help to improve penetration with significant economic benefits in these areas.

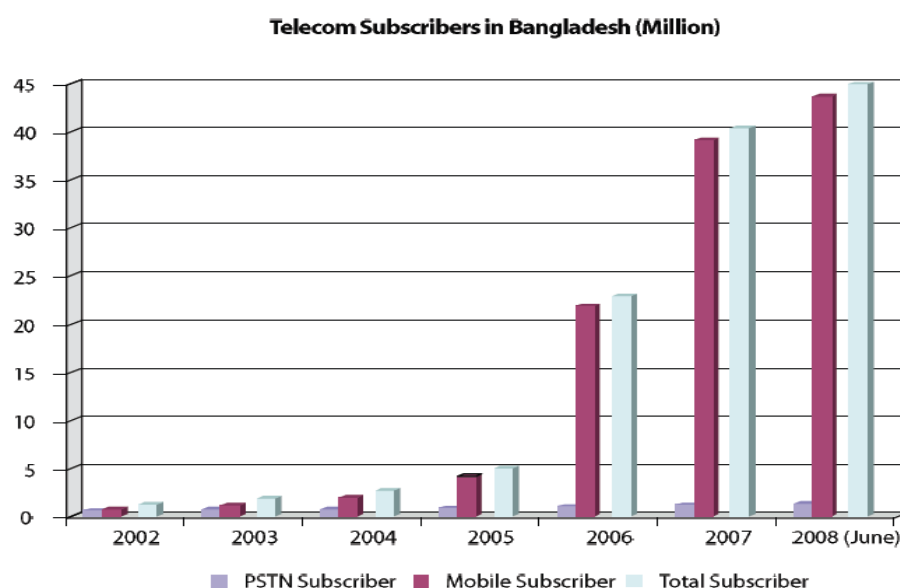
While the Vietnamese mobiles market is unusual in that it is so heavily dominated by state owned enterprises, it is performing fairly well. Nonetheless further liberalisation may allow an influx of new investment into the sector which would help to expand mobile services even further, and help to underpin growth and development more broadly.

6.6 Bangladesh Mobiles Market

Mobile services in Bangladesh started in 1989, and the subsequent introduction of new entrants has coincided with falling prices and rising mobile penetration (see Figures 17 and 18 below).

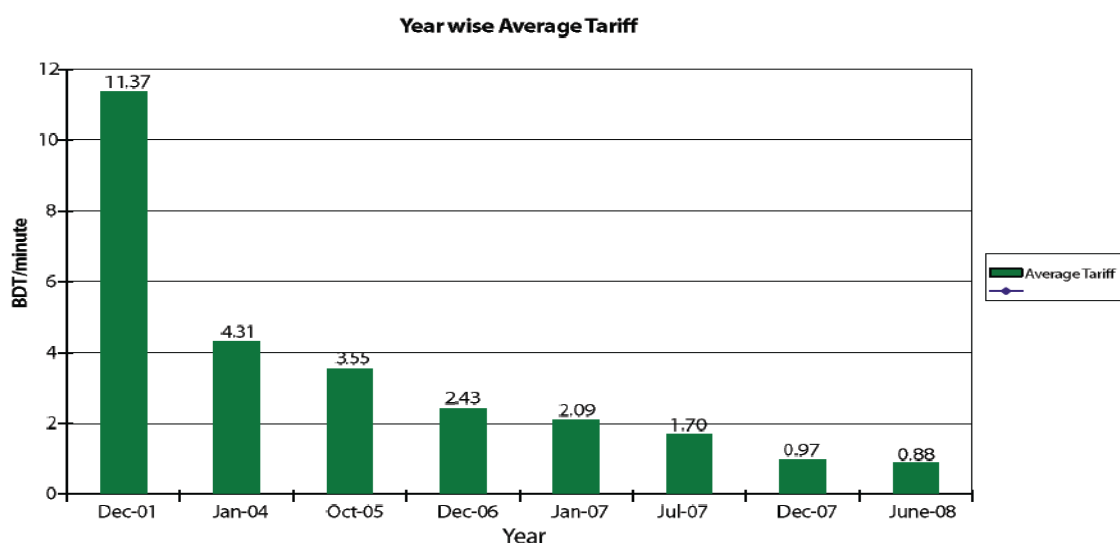
There was a monopoly mobile operator until 1996 when two further licenses were awarded. A fourth license was awarded in 2004 and the entry of this foreign player coincided with a big increase in subscribers and drop in prices. In 2005, an SOE mobile operator was introduced, and a sixth licence was awarded in 2007. There are therefore now 6 mobile operators in Bangladesh.

Figure 17: Telecom subscribers in Bangladesh



Source: BTRC Annual Report 2007-08

⁷⁷ ODI Dissemination Workshop held in Hanoi in March 2010

Figure 18: Average mobile tariff in Bangladesh

Source: BTRC Annual Report 2007-08

Bangladesh now has a relatively competitive mobiles market. Five out of six of the operators are partially or fully foreign owned and this has helped in terms of gaining access to the best technologies to improve efficiency and decrease operational costs. One operator enjoys 46% market share. It was one of the first GSM licensees, has the widest network coverage throughout the country, and has dominated the market for some years. 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.

Figure 8 shows that Bangladesh has the lowest tariffs, and competition between the 6 operators seems to be strong.

Despite low prices, Figure 9 shows that Bangladesh had a relatively low mobile penetration rate compared with the other countries. This is surprising given that the country has a very high population density, but may be due in part to the fact that Bangladesh is relatively poor: it has the lowest GDP (PPP) per capita of the five countries (see table below).

Table 10: GDP (PPP) per capita of case study countries

Country	GDP (PPP) per capita (international \$)	Mobile subscribers per 100 inhabitants (2008)
Vietnam	2933	80.37
Kenya	1751	42.06
Ghana	1572	49.55
Zambia	1544	28.04
Bangladesh	1470	27.9

Source: IMF data⁷⁸, ITU data

Bangladesh also has the lowest levels of telecommunication investment per inhabitant of the five countries (see Figure 10) 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 it has a very high population

⁷⁸ World Economic Outlook Database, October 2009, International Monetary Fund.

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.

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 Government⁷⁹. 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, thus providing cross-border connectivity. 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

⁷⁹ <http://www.ittefaq.com/issues/2009/07/30/all0940.htm>

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 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 2007-2008⁸⁰, 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 operators⁸¹. 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, there are now numerous

⁸⁰ BTRC Annual Report 2007-2008

⁸¹ www.thedailystar.net/newDesign/news-details.php?nid=129699

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 2007⁸².

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. As discussed previously, 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.

However, 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.

⁸² <http://www.thedailystar.net/newDesign/news-details.php?nid=94479>

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.

6.7 Conclusions

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. Thus a well-performing and competitive mobiles sector, with low prices and wide coverage, can have significant knock-on benefits for the economy as a whole.

1. Competition drives growth in penetration and falling prices.

This research has found that the introduction of competition in mobile services has helped drive growth in penetration and falling prices in all of the countries studied. While the Kenyan experience suggests that the dominance of the market by one (thus relatively profitable) firm may have permitted greater investment to take place than would have been the case in a more competitive market, this lack of competition also appears to have had a trade off, as prices were relatively high until two new players entered the market in 2008/09. The incentives to invest are also likely to have been strengthened by the knowledge that new entry and a more competitive environment was likely to evolve going forward.

2. Competition creates incentives to design services to meet the needs of customers, including price and product promotions targeted at poor customers, and value added services with additional development benefits.

Low-income consumers have different preferences, usage patterns, and cash-flow restrictions to better off customers. Given the strong network externalities in the industry, and the strong incentives to expand market share, operators – especially in the most competitive industries - have been tailoring their offering to attract a wide range of customers, including low income individuals, by packaging prepaid minutes in lower denominations to accommodate users' limited cash flow, and by offering free off-peak minutes for example.

In addition, operators have generated additional revenue by offering value-added services such as mobile banking and internet services, including to many people who were previously unbanked and had never accessed the internet, thus yielding significant additional development benefits.

3. Private investment (both foreign and domestic) has played an important role in the development of the mobile services market.

Market liberalisation i.e. allowing private investment and ownership, can mean rapid improvements in terms of mobile technologies in infrastructure and handsets, and in marketing, distribution, accounting and billing. This research has also found that in each of the countries, foreign direct investment has helped to roll-out affordable mobile phone services to the masses.

For example, in Kenya, mobile services started in 1992 with the Government-owned mobile operator offering analogue services. During this entry period services were so expensive that this resulted in a mobile subscriber base of less than 20,000 for a period of seven years (from 1993 – 1999). It was only after FDI started to come into the sector that prices start to fall and penetration

increased. In Ghana, up until 1993, the SOE telecommunications company had an almost complete monopoly over all telecommunication services and mobile penetration was very low and prices were expensive. In 1994, the Government launched the Accelerated Development Plan 1994-2000, which encouraged private sector participation in the sector, as a result of which new foreign entrants entered the market and penetration rapidly increased.

Even in Vietnam, where telecommunications has been seen by the Government as a strategic sector and closed to foreign ownership, the sector was partially opened to foreign companies in the form of Business Cooperation Contracts (BCCs), which have helped fuel network growth for all the SOE mobile companies and have brought large external investments at important junctures in the development of the Vietnamese telecommunications market.

4. Appropriate regulation is important to facilitate competition in the mobile services market.

Regulation of things like interconnection rates, termination charges, spectrum allocation, access to the international gateway, and infrastructure sharing can make a significant impact on the ease with which new market players can enter and compete successfully in the market. For example, if interconnection rates are allowed to be set too high by dominant, incumbent mobile operators, this would constitute a major disadvantage to new entrants and smaller players. The problems in the regulatory regime in Zambia with regards to the international gateway and interconnect regulation have been highlighted. In contrast, the liberalisation of the international gateway in Ghana and the imposition of regulated termination charges have led to significant benefits for consumers. The impact of regulation on competition may not always be well understood by regulators however and they may also have other objectives in mind. This suggests that consideration should be given to competition impacts when designing regulation, perhaps through a formal process of regulatory impact assessment.

International experience suggests that regulators work best when they are financially and operationally independent from government, but have a clear mandate to promote the growth and development of the sector. This gives them the ability and capacity to regulate in an impartial and effective manner.

5. Ensuring competitive neutrality for private vs. state owned enterprises is important.

In several of the countries there seemed to be an uneven playing field for private players vis-a-vis state owned mobile providers. In Zambia, for example, the state mobiles operator has a monopoly on the international gateway, and charges high tariffs to private operators to access the gateway. This revenue could also potentially be used by the state firm to subsidise national calls, thus distorting competition and undermining the development of the market.

A requirement for accounting separation of the various parts of the SOE telecommunications companies would allow for better regulation of the market, and prevent unfair practices such as cross-subsidisation.

6. The state may have a role to play in incentivising rollout to underserved areas, but this is best done in a market friendly way.

Despite the rapid expansion of mobile networks, some areas in developing countries are likely to remain underserved, because services are uneconomic in areas that have low population density, customers with much lower incomes, and difficult terrain. In these cases, government intervention may be needed through licensing or regulatory requirements, or through funding mechanisms, such as a Universal Access Fund, to encourage mobile providers to expand coverage.

However this needs to be done carefully to avoid distortions, e.g. where the state may inadvertently be subsidising service rollout in what could otherwise be commercially profitable

areas. It can be difficult to identify the threshold where service will be unprofitable without additional incentives or subsidy. Research carried out for the World Bank in 24 sub-Saharan African nations, found that only a very small proportion of the population would likely remain unserved by 2015 given expected market investments over the next few years⁸³. Over-regulation, or the imposition of a levy can itself reduce commercial incentives for rollout. So governments must be careful to avoid undermining the market solution, which has delivered significant benefits so far.

⁸³ World Bank (2007)

7. Conclusions

In this study we have attempted to assess the impact of government policy on competition (taking market fundamentals into account to the extent possible), and the impact of competition on market outcomes, by comparing the performance of four product markets across five countries with contrasting policy frameworks and market structures. In this we have faced many challenges:

- Difficulty in obtaining robust data and information to substantiate claims made by stakeholders interviewed.
- Difficulty in finding data that is comparable across countries.
- Aggrieved companies seemed more willing to meet with the study team, and incumbents less so, and this created challenges in terms of obtaining both sides of the story, and being able to substantiate claims of anti-competitive practices. For this reason, Competition Authorities with the ability to demand information are likely to be able to obtain much better data than researchers with no such mandate.
- It is difficult to draw firm conclusions about the impact of competition on market performance from price / cost comparisons because of other factors e.g. subsidies, and differences in country-specific costs, such as transport costs and taxes etc. Many factors determine price, competitiveness and other aspects of a market's overall performance
- Comparing African and Asian countries was particularly problematic, as Asian countries tend to have a much larger market size, lower costs of doing business, and a very different institutional framework – especially in the case of Vietnam.

Nonetheless, it was possible to build up a very clear picture, albeit hard to quantify, of the main reasons for differences in overall performance, particularly given the strongly contrasting market structures governing competition in each sector across the different countries.

Conclusions from each sector have already been discussed in sections 3 to 6 but are summarised again below. Tables 11 – 14 then provide a graphical summary of the areas where competition problems have been identified, or where allegations have been made about potential competition concerns, in each of the four product markets studied. Conclusions on the policy framework, competition conditions and impact on market performance in each country are then provided. Finally, there is a discussion of the broad, overall conclusions that can be drawn from this study, in relation to the impact of competition on markets, and the role of government policy.

7.1 Overview of competition issues observed in the four markets

The conclusions identified in relation to each of the product markets examined in this study, are summarised below. For further discussion, please see the relevant section earlier in the report.

7.1.1 The sugar market

1. State led sugar industries are inefficient, uncompetitive, and unsustainable.
2. Far reaching reform of these sectors is required, but is politically difficult.
3. Competitive forces could help to facilitate a restructuring of the industry to make it more viable.
4. Private sector incentives and management expertise are important for creating a successful, efficient and internationally competitive sugar industry.

5. The existence of monopoly power can lead to high domestic prices.
6. Sometimes government may have an interest in protecting business from competition because it can share in the profits in some way.
7. Where there are strong vested interests opposed to reform, competition authorities may struggle to effectively tackle competition problems, though they can still play an important role in building the evidence base and raising awareness of competition problems and associated costs.
8. Interest groups can be mobilised in favour of reform, thus offsetting vested interests against reform.
9. There may be pressure to provide protection from competition in order to attract market players to establish or enter a market, although in the longer term this may have economic costs.

7.1.2 The cement market

1. In the cement market large scale operation is more efficient, but the countries with more players and a more competitive cement sector had lower prices.
2. The cement sector often suffers from competition problems and anti-competitive practices, and competition authorities play an important role in disciplining market behaviour.
3. The cement sector is often dominated by multinational firms, who operate on a regional basis. Thus cross border competition issues come into play – for example where multinational companies agree not to compete with each other in the same countries and thereby ensure monopoly profits. Such cross-border competition issues can either be tackled through regional competition authorities, or through wider policy coordination.
4. There is a lack of competitive neutrality in the cement sector in Vietnam which could undermine the development of the sector going forward, as further liberalisation and consolidation are expected.

7.1.3 The beer market

1. The beer market is usually highly concentrated, due to the cost structure and the importance of marketing and brand loyalty, which represent barriers to entry.
2. The typical structure of the market and conduct of companies within it commonly generates competition problems which should ideally be monitored by a competition authority, where one exists.
3. When there is a monopolist and low likelihood of market entry, import competition should be facilitated.
4. As seen in the cement industry, cross-border competition concerns may arise, for example where multinational companies agree not to compete with each other in the same countries and thereby ensure monopoly profits, which can only be effectively tackled by regional competition authorities.
5. Privatisation can sometimes replace a state monopoly with a private one.
6. Governments may sometimes overlook the existence of monopolies or uncompetitive market conditions because they benefit in some way e.g. in terms of tax revenue or through the protection of jobs, or because politicians have a direct interest in the company.

7.1.4 The mobiles market

1. Competition drives growth in penetration and falling prices.
2. Competition creates incentives to design services to meet the needs of customers, including price and product promotions targeted at poor customers, and value added services with additional development benefits.

3. Private investment (both foreign and domestic) has played an important role in the development of the mobile services market.
4. Appropriate regulation is important to facilitate competition in the mobile services market.
5. Ensuring competitive neutrality for private vs. state owned enterprises is important.
6. The state may have a role to play in incentivising rollout to underserved areas, but this is best done in a market friendly way.

Tables 11 – 14 provide a graphical summary of the areas where competition problems have been identified, or where allegations have been made about potential competition concerns, in each of the four product markets studied.

Table 11: Sugar market - Overview of potential competition concerns

Issue	Kenya	Zambia	Ghana	Vietnam	Bangladesh
Abuse of Dominant Position		√			
Anti-competitive Merger		√			
Barriers to Entry	√	√		√	
Collusion/Cartels			√		√
Contractual Discrimination				√	
Creation of a Monopoly		√			
Cross-subsidisation				√	
Exclusive Arrangements		√			
Hoarding					√
Horizontal Agreements				√	
Minimum Resale Price	√	√			
Monopolistic Practices		√			
Vertical Agreements				√	
State subsidy	√			√	√
State intervention/distortion	√			√	√
Import protection	√	√		√	√
Vested interests	√	√		√	√
Requests for protection by potential new entrants			√		

Table 12: Cement market - Overview of potential competition concerns

Issue	Kenya	Zambia	Ghana	Vietnam	Bangladesh
Abuse of Dominant Position	√	√	√	√	
Anti-competitive Merger	√	√			
Barriers to Entry				√	
Collusion/Cartels	?		√		√
Contractual Discrimination					
Creation of a Monopoly		√			
Cross-subsidisation					
Exclusive Arrangements	√		√	√	√
Hoarding		√			
Horizontal Agreements				√	
Minimum Resale Price	√	√	√	√	√
Monopolistic Practices	√	√	√		
Predatory Pricing	√				
Vertical Agreements				√	
State subsidy	√			√	
State intervention/distortion				√	
Import protection	√	√	√	√	√
Cross-border competition concerns		√			

Table 13: Beer market - Overview of potential competition concerns

Issue	Kenya	Zambia	Ghana	Vietnam
Abuse of Dominant Position	√	√		
Anti-competitive Merger		√		
Barriers to Entry	√	√	√	√
Collusion/Cartels			√	
Contractual Discrimination				
Creation of a Monopoly	√	√		
Exclusive Arrangements	√	√	√	√
Minimum Resale Price	√	√	√	√
Monopolistic Practices	√	√		
Predatory Pricing	√			
Tying	√			
Vertical Agreements	√		√	√
Import protection	√	√	√	√
Cross-border competition concerns	√			

Table 14: Mobiles market - Overview of potential competition concerns

Issue	Kenya	Zambia	Ghana	Vietnam	Bangladesh
Lack of Licensing openness/transparency/fairness				√	
Poor interconnect regulation or implementation		√		√	√
Spectrum regulation issues		√		√	
Poor regulation related to International Gateway		√		√	√
Regulatory delays				√	√
Problems around access to infrastructure				√	
Inadequate regulation to promote infrastructure sharing		√		√	
Cross-subsidisation of inefficient SOE		√		√	
No accounting separation of SOE operator		√	√	√	
Lack of competitive neutrality in favour of SOE incumbent		√		√	
Local ownership requirement created problems / constrained investment	√		√	√	
No UAF to provide service to remote areas	√	√		√	√
Lack of financial independence for telco regulator				√	√
Lack of operational independence for telco regulator		√	√	√	√

7.2 Conclusions on competition issues in each country

This section provides a summary of our overall findings for each country.

7.2.1 Kenya

Our overall findings for Kenya were as follows:

- Kenya suffers from a relatively high degree of concentration in its cement and beer industries, and a number of competition problems and anti-competitive practices have been identified in both. Kenya's Competition Authority, the Monopolies and Prices Commission (MPC), has been monitoring both sectors, though many problems remain. Ongoing monitoring of these sectors, and publication of evidence on the costs of competition problems, could help to build public demand and support for reform;
- The mobile telephony market in Kenya is fairly well regulated, and is performing relatively well. It has been fairly highly concentrated until recently, and has exhibited relatively high prices. The recent introduction of more competition through new entry should help to increase competition however, and prices have dropped dramatically – by around 50% - since then, though this is due in part also to regulatory changes.
- The state led sugar industry is struggling to survive, and this will be exacerbated by further liberalisation required under the COMESA agreement. Thus the sector urgently needs

reform, but this is likely to be opposed by strong vested interests, as it means that some state owned sugar mills are likely to go out of business. The best way to overcome this may be to establish and facilitate coordination amongst other interest groups who stand to gain from reform. Competition authorities and consumer groups may be able to help achieve this, by establishing and coordinating such groups, publicising the issue and providing evidence of the benefits of reform.

- The Monopolies and Prices Commission (Kenya's competition authority) plays a valuable role in monitoring possible anti-competitive practices in the sectors reviewed, identifying and highlighting problems, influencing government decisions and building a culture of competition. However, it faces challenges in tackling competition problems when there are powerful vested interests, including in the Government, opposed to reform. The influence and impact of the MPC could be greatly strengthened through reform (e.g. to make it operationally independent, strengthen capacity, and update the competition law);
- Some cross border competition issues have arisen e.g. where multinational companies divide up the regional market between them, so as to avoid directly competing in specific countries. These go beyond the jurisdiction of national competition authorities, thus would need to be tackled through regional competition frameworks such as the new COMESA competition law and authority, though there has been some delay in starting operations.

7.2.2 Zambia

Our overall findings for Zambia were as follows:

- Zambia suffers from a relatively high degree of concentration in its cement, beer and sugar industries, (indeed Zambia's industry generally seems to be quite highly monopolised), and competition problems and anti-competitive practices have been identified in all three. Zambia's competition authority, the Zambian Competition Commission (ZCC), has been monitoring all three sectors, and tried to tackle some of the issues, though many problems remain. Ongoing monitoring of these sectors by the ZCC, and publication of evidence on the costs of competition problems, may help to constrain anti-competitive behaviour in the markets, and to build public demand and support for reform.
- When competition is introduced prices can fall quickly: the price of cement in Zambia has fallen by almost ten percent since 2008, with the introduction of a new entrant in 2009 to compete with the incumbent cement monopoly. This happened during a period when cement prices rose in all the other countries studied.
- Zambia's private sector led sugar industry is extremely efficient, in stark contrast to the failing state led sugar industries in the other countries we studied. Zambia produces sugar that is very competitive on international markets, and stands to gain considerably from future liberalisation, which is likely to create jobs and industrial growth. However, sugar is very expensive within Zambia itself, reflecting at least in part the lack of competition in the domestic market. The removal of sugar import barriers and new entry would help to improve the competitiveness of the sector. The ZCC has investigated the market, and noted the high domestic sugar price, but it is not clear that the recommendations it made will address the problem or benefit sugar consumers. It continues to lobby for reduced sugar import protection as one way to introduce more competition into the market, though no policy reform has resulted so far;
- The limited scope of the ZCC's response to some of these problems raises questions as to the extent to which it is able to effectively tackle problems in sectors where there may be strong vested interests opposing reform. However, there may be scope to mobilise interest

groups in favour of reform, to offset these opposing interests – as evidenced by the group of companies which complained to the ZCC about high sugar prices.

- The mobile telephony market in Zambia is not performing very well compared with other countries in Sub-Saharan Africa, or other countries covered in this study. The lack of competitive neutrality between state and private players, and the monopoly on the international gateway by the state owned incumbent may account for some of this poor performance and remains an issue. However, recent regulatory improvements, e.g. relating to interconnection tariffs, may help to facilitate increased competition and improved performance going forward.
- Like the MPC in Kenya, the ZCC is very active, and plays a valuable role in monitoring possible anti-competitive practices in the sectors reviewed (as well as many other sectors), identifying and highlighting problems, building a culture of competition, and influencing some government decisions. However, its influence and impact could be greatly strengthened through reform and improved resourcing;
- As in Kenya, some cross border competition issues were identified, which go beyond the jurisdiction of national competition authorities, thus would need to be tackled through regional competition frameworks such as the new COMESA competition law and authority, once it is up and running.

7.2.3 Ghana

Our overall findings for Ghana were as follows:

- Ghana does not currently have a competition law or authority, although it is currently being discussed by the Government. A previous competition bill was delayed for many years, and never implemented. There is still only limited political will to implement a competition law, and strong opposition from some business groups. There is also very limited understanding of competition issues, and of the costs of competition problems, (compared with Kenya and Zambia for example, which already have competition authorities), which may explain partly why support for the law is weak. It also meant there was relatively little information available to assess the issues. A competition authority with the power to demand information, and the mandate to build and publish evidence on the costs of competition problems, could help to raise awareness and create a stronger culture of competition.
- In Ghana the beer and cement markets are slightly less concentrated than in the other African countries we studied, though they are both duopolies, so still potentially very vulnerable to competition problems. Indeed, our research identified a number of possible competition concerns in these markets, although it was very difficult to obtain information about them with which to assess the validity and extent of any problems. These problems could be properly investigated if a competition authority was established. International experience (including experience in both Kenya and Zambia) shows that competition problems in these markets are very common, and require careful monitoring by competition authorities.
- There is currently no domestic sugar industry in Ghana – all sugar is imported. Some concerns have been expressed that there may be some anti-competitive practices in the sugar import business in Ghana, which could also be investigated by a competition authority if / when one is established.
- Two new market players have expressed interest in entering the sugar market, but are requesting import protection. While most governments are keen to attract this kind of

investment, with the potential growth benefits it can generate, the introduction of protection alongside it can serve to undermine the potential benefits of that investment. It is not clear whether such protection is actually essential in order to create a viable business for these new entrants. If it is the case then the merits of establishing a sugar industry that is forever destined to be inefficient are questionable. But even if protection is not essential, it may be the case that Ghana is competing for such foreign investment with other countries, and thus some kind of protection may be warranted – at least for a temporary period - in order to secure the contract, with the beneficial economic spillovers it may bring. However, international experience suggests that such protection is likely to lead to a lack of competitiveness in the sector, and may have other knock-on impacts e.g. deterring investment in confectionary or soft drinks companies that would have to pay uncompetitively high prices for sugar.

- The mobiles market in Ghana seems to be well-regulated and fairly competitive, and as a result is performing relatively well. This is having wider knock-on benefits in supporting private sector development e.g. by playing a catalytic role in business development for SMEs in non-urban areas.

7.2.4 Vietnam

Vietnam is very different from the other four countries in this study, and is still only transitioning to being a market economy, and thus requires rather more contextualisation. Our overall findings for Vietnam were as follows:

- Being a transition economy which is still classed as a non market economy by WTO, the policy framework in Vietnam is very different to the other four countries in this study. A one party government sets the policy for the economy, regulates the market and owns most of the business activity in the country. State owned enterprises are often conglomerates with investments in various different sectors and many hitherto non-commercial arms of government are also now engaged in commercial activities (e.g. the military own the leading mobile operator). Despite the very different economic structure, market outcomes seem to be relatively good when compared with the other countries studied. This is likely to reflect to some degree the high rate of growth Vietnam has enjoyed in recent years - an average annual real GDP growth rate of greater than 6% each year between 2003 and 2009, and above 8% in 2006 and 2007⁸⁴.
- In the past, private companies in general may have been deterred due to strong government involvement in markets, and the potential lack of a level playing field this implies. Foreign firms in particular have been deterred through regulations limiting foreign direct ownership and ownership of resources. Liberalisation is however, underway. In many sectors, foreign companies can now have 100% ownership although joint ventures tend still to be the most frequent mode of entry for foreign private companies. Even the telecommunications sector which has been seen as strategic and closed to foreign ownership, is now being liberalised to some extent.
- All the industries in this study have been structurally determined to a great extent by central government plans. Provincial governments have also played an important role. This is particularly true in the cement and beer sectors where there has been a proliferation of plants across the country in order to create rural livelihoods. This has prevented economies of scale in these industries, but there seems to be industry consolidation going on as a result of market forces, which should permit greater scale efficiencies – though may also jeopardise competition in the longer run if allowed to continue unchecked.

⁸⁴ http://www.indexmundi.com/vietnam/gdp_real_growth_rate.html

- The introduction of a competition policy is an important component in the set of pro-market reforms that the Vietnamese Government has initiated, and the Vietnam Competition Administrative Department (VCAD), and the Vietnam Competition Council (VCC), have been established since the competition law was passed in 2005. However, due to the heritage of central planning and past government policy interventions, these bodies will likely face a number of challenges moving forward. The dominance of state owned enterprises, and large, diversified state owned conglomerates, has the potential to distort competition considerably. Private sector firms allege that these enterprises enjoy many advantages, such as preferential access to capital, land and other resources, access to subsidies, some degree of regulatory power etc. which creates an unlevel playing field for competing private sector firms. The extent to which this may be the case will need to be gauged by VCAD in assessing the impact on competition in specific cases. Such cases could provide a window for rectifying a more systemic policy which allegedly discriminates between public and private sector enterprises.
- In fact there does seem to be a reasonable degree of competition taking place between such firms, and the loss of efficiency and competitive edge that are often observed in state owned enterprises in other countries does not seem to be evident here. Indeed, as already noted, the market outcomes generated are sometimes relatively good compared with sectors dominated by private firms in some other countries. Nonetheless it seems likely that as liberalisation and the development of the market economy continues, the role and dominance of these large state owned enterprises will need to be examined and addressed, and VCAD could play an important role in that.
- Another issue that VCAD may face is a relatively undeveloped 'culture of competition' amongst the policy and business community i.e. a limited understanding of competition principles and competition law given that it is very new to Vietnam, and quite different from previous concepts of economic organisation. Thus far, it is through a series of conferences, workshops, meetings with industry and trade organizations and various other forms of information dissemination, that the VCAD has sought to encourage compliance with the law. This coupled with a strategy of competition advocacy is appropriate in a country implementing its first competition law. Litigation is costly for both business and government. Moreover, enterprises require a reasonable amount of time to become familiar with new government policies impacting on the business environment in which they operate. However, the competition authority needs to balance compliance with enforcement of the law, especially if the law is to deter illegal, anticompetitive business practices.
- In the sugar sector, Government controls over investment and the potential for these to be politically manipulated have had a big influence on the number, size, location, technology, operational performance and growth of mills. Similarly, the government's role in supporting troubled mills affects the structure, conduct and performance of mills. All these measures affect the competition between mills, their efficiency and international competitiveness, such that the sector is struggling to some extent, and requires considerable subsidisation to survive. This represents a significant drain on the public purse and may not be sustainable in the long term. Thus as the economy continues to liberalise, further reforms may well be needed to allow continued growth. Natural market consolidation, industrial restructuring and new FDI would help to move the sugar industry onto a stronger growth path, and facilitate improved international competitiveness.
- Although the beer sector seems to be competitive and prices are relatively cheap, there do seem to be some exclusive agreements which have gone uncorrected in the past, and which have been confirmed after an investigation by VCAD, though it is not yet clear what steps have been taken to address this.

- Price stabilisation in the cement sector, and price leadership by the state owned cement umbrella company, alongside the control of various raw materials that company enjoys, are likely to result in major distortions to competition. These matters could be examined by VCAD. In the medium term, many smaller and less efficient firms will likely close down and there will be some natural consolidation of the market, leading to fewer, larger and more efficient firms, operating at or above the minimum efficient size. This will be beneficial for the industry and the wider economy but will also require ongoing monitoring to ensure new competition problems – which are so common in the cement sector internationally – do not arise.
- The mobile telecommunications market is performing quite well, and seems to enjoy a reasonable degree of competition, despite its dominance by state owned enterprises, and the constraints placed on foreign ownership. However, further liberalisation, new entry and the establishment of an independent regulator to oversee the market are all likely to facilitate increased investment and to improve market performance, especially in relation to market penetration and geographic coverage, with significant knock-on benefits to the economy as a whole.

7.2.5 Bangladesh

Our overall findings for Bangladesh were as follows:

- Bangladesh does not have a competition law or authority, although the Government is discussing it now. However, the progress of the bill has been somewhat delayed, and as in Ghana, the political will to implement a competition law is limited, and there is some opposition from business groups.
- 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.
- 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 other countries, 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. However, recent changes in regulation 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.

7.3 Overall conclusions and policy recommendations

The research has shown 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.

The introduction of competition – or indeed even the prospect of increased competition - can have a significant and immediate impact on prices. For example, the price of cement in Zambia has fallen by almost ten percent since 2008, coinciding with the introduction of a new entrant in 2009 to compete with the incumbent cement monopoly. This happened during a period when cement prices rose in all the other countries studied.

In Kenya, tariffs fell by as much 50% following the introduction in 2008 of two new entrants into the mobiles market, which had previously been a duopoly with one dominant firm (though this is also due in part to the decrease in the regulated termination charge implemented by the telecommunications regulator). Indeed, reviewing the early evolution of the mobiles market in the countries studied shows that the introduction of competition in the market very quickly resulted in reduced mobile tariffs and increased numbers of mobile phone subscribers.

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. Indeed in some instances they could be considered standard practice (such as exclusive dealing in the beer industry for example, which seems to have occurred in all the case study countries). Thus competition authorities have an important role to play in monitoring, publicising and tackling such behaviour.

However, it is also clear that the role of the state is very important in determining competition and market outcomes. Indeed in many cases it seems to be a much more important determinant than the behaviour of business. The influence of the state can be seen in various guises. It can be through regulation and privatisation; state ownership, price controls or subsidisation; it can be through other policy mechanisms, such as import protection, or industrial policy; or it can be through corrupt business deals, or ownership by individual politicians or their families. Let us consider the impact of each of these kinds of government influence in turn.

Regulation can make an important impact on the degree of competition in a market. In the mobiles market, regulation of interconnection rates, termination charges, spectrum allocation, access to the international gateway, and infrastructure sharing can make a significant impact on the ease with which new market players can enter and compete successfully in the market. The impact of regulation on competition may not always be well understood by regulators however, and they may also have other objectives to meet. International experience suggests that regulators work best when they are financially and operationally independent from government, but have a clear mandate to promote the growth and development of the sector. This gives them the ability and capacity to regulate in an impartial and effective manner.

In some cases government involvement is more direct, through state ownership or intervention. Sometimes the involvement of government is essentially benevolent in nature (though it may still not result in good market outcomes). Objectives may include the desire to create domestic jobs, rural development or stable prices for poor consumers. This perhaps most closely characterises the role of state involvement in Vietnam, and may explain why a high degree of state ownership and intervention does not appear to have undermined the achievement of relatively good market outcomes there. However, a perceived uneven playing field for private players vis-a-vis state owned enterprises may serve to deter market entry by private players, thus reducing competition.

The sugar industry provides an example where state involvement designed to promote rural development and job creation has backfired. The sugar industry is one which is often dominated by the state, which may establish, support, protect, own, subsidise and control the industry in order to create and maintain rural livelihoods. However, in all three of the five countries studied which have adopted this approach (Kenya, Bangladesh and Vietnam), the sector is failing, uncompetitive and ultimately unlikely to be sustainable, with damaging consequences for the many people whose livelihoods depend on it, as well as taxpayers in those countries who foot the bill.

In stark contrast to the countries with state led industries, the Zambian sugar industry is private sector led, and is extremely efficient and internationally competitive. It is expanding to take advantage of new market opportunities, and has the potential to create new jobs and growth. Thus the potential benefits of reform and liberalisation in Kenya, Vietnam and Bangladesh are clear.

However, reforming the sector appears to be very difficult politically, given the job losses and mill closures it may entail. Vested interests may be strongly opposed to new entry by more commercially viable enterprises, which may undermine further the market position of already struggling, state owned mills. These political economy barriers to reform can be hard to overcome, even if it is a case of short run pain for long run gain.

Those who are likely to lose from the reform are easily identifiable, stand to lose a great deal, are likely to be concentrated and well organised, and hence to lobby a lot more vociferously than those who stand to gain from reform in the longer term. In this case potential gainers would be both consumers who would obtain sugar more cheaply (though this would be a relatively small gain per person, spread across many people), and those people who would gain from the new jobs created in a more healthy, dynamic sector and economy, but for whom that eventual outcome is not yet clear or certain. This imbalance means the incentives for pro-competition, pro-growth reforms are significantly undermined.

In other countries, and especially in the African countries studied, a close relationship is often observed between business and government, as government actors seek to share in some way in the profits of businesses, whether this is through ownership, either by the state or by individual politicians, through corrupt business deals, through corporate social responsibility initiatives funded by the businesses e.g. building clinics or schools, through 'favours' such as discounts, or simply through high levels of taxation. This gives government a shared interest in the monopoly profits of certain businesses, and means that government may continue to protect those businesses from competition e.g. through barriers to imports or market entry.

For example, this may explain why in Zambia, the dominant sugar producer continues to be protected from competition through non tariff barriers. The sugar industry contributes considerable tax revenue to government, and undertakes a number of social initiatives in the country, (including the improvement of facilities at district hospitals, police stations, orphanages, and government schools, and maintenance of municipal roads), which may help meet Government objectives. This may be part of the reason why the industry enjoys continued import protection, despite complaints from industrial sugar users, and attempts by the Zambian Competition Authority to encourage more import competition.

Corrupt business deals seem also to be common, and clearly represent a far from benevolent reason for the close relationships observed between government and big business. In these situations, and whatever the underlying reason, the relationship between business and government seems more important for commercial success than market competition.

That big business needs government support in order to survive may also help explain why developing country governments often play quite a proactive role in attracting new, foreign firms to enter particular markets – actively wooing potential investors, often with inducements such as tax holidays, protection from competition, or discounted prices of inputs. This may be needed because the markets in poor countries are unattractive without the additional inducements that governments can provide (e.g. infant industry protection). But in some instances it may be that without clear government commitment and support for a new venture, market entry will not happen, even where there appears to be profit potential.

This provides a rationale for proactive industrial policy, though more market friendly ways to achieve this should be sought, rather than relying on the provision of protection or subsidy as is often the case, but which distorts competition and undermines market development. For example, an alternative approach could involve governments working to identify growth sectors through consultation with business, and ascertain priorities for reform, such as investment climate problems that may need tackling, in a targeted and coordinated way, so as to facilitate the growth of these sectors. This may involve building the necessary infrastructure (such as a road or port), and providing the specific skills training that is needed by the sector for example.

But there may sometimes be a trade-off between competition objectives, and the desire to attract new entry and investment into the economy. Sometimes governments face pressure to provide protection in order to attract players to establish or enter a market, as the Ghana experience in relation to potential new entrants into the sugar industry shows. Even if an industry would be viable without protection, it may be the case that a country is competing for such foreign investment with other countries, and thus may consider some kind of protection to be warranted in order to secure the contract, with the capital, jobs, and other beneficial economic spillovers this may bring. In the longer term though, such protection may result in higher prices and an uncompetitive industry, with detrimental impacts for the economy as a whole. Even if such protection is only given on a temporary basis, experience shows it can be difficult to unwind when there are strong interests in favour of continued protection. It is important that these longer term costs are taken into account when making policy decisions, and policy is designed appropriately to minimise such risks e.g. through the use of time-bound protection mechanisms, and the establishment of a competition authority or other body to monitor the protected industry and prevent any abuse of its dominant market position.

The kind of relationship between government and big business described above creates a powerful economic elite of business and government, with vested interests in opposing pro-competition, pro-growth reforms. Competition can potentially play an important role in breaking up this kind of economic elite, and distributing the gains from economic activity more fairly across the country.

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. Competition Authorities can potentially play an important role in building the evidence base, and mobilising these kinds of interest groups to lobby for reform.

Although no direct evidence of a competition authority actively mobilising such groups was obtained in the case study countries, an example from the Papua New Guinean (PNG) mobiles market illustrates how this can work⁸⁵. In 2007 the PNG Government declared the licences of two new entrants in the mobile market (one of which was about to start operations), as null and void in order to protect the state mobile monopoly from competition. However, a coalition of reform pushed for a reversal of the decision and built support for the new entrants to remain in the PNG Market. The competition authority in PNG (the ICCC) lobbied ministers and released a number of statements in the press highlighting and providing evidence for the benefits of mobile competition and the “underhand” nature by which the Cabinet decision had been passed. The coalition also included the PNG Chamber of Commerce and Industry, who saw the beneficial impact that cheaper telephony was having on the business community, as well as consumer groups, aid agencies and NGOs. In the end the decision was reversed, in light of political and public recognition of the benefits of competition in the mobiles sector that had been highlighted by the competition authority and others.

The competition authorities in Kenya and Zambia seem to have contributed to the development of a culture of competition compared with the other countries studied, by successfully raising the profile and understanding of competition issues, and by building awareness of the costs of competition problems, thus helping to arm the consumer movement with the evidence it needs to demand improved market outcomes. They have also played an important role in monitoring market behaviour; simply the presence of a competition authority by itself, 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.

So although competition authorities do appear to suffer from political interference when trying to tackle competition problems involving vested interests opposed to reform, they still 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.

Thus where political difficulties, and resourcing and capacity constraints make legal enforcement problematic for competition authorities in developing countries, they can still play a valuable role in promoting competition through advocacy and evidence building, and engagement with other agencies of government to ensure that policy is pro-competitive. Such a role may also be less controversial in some developing countries, such as Ghana and Bangladesh, where there is resistance from the business community to a full-blown competition authority with legal powers of enforcement, which has stymied progress for many years.

In sum, this study has shown that competition improves the performance of markets, generating better outcomes including lower prices, greater productivity and competitiveness leading to industrial growth and jobs, and better access to services. It can also undermine the dominance of

⁸⁵ Singh R & Ellis K (August 2009)

a few powerful players, allowing new enterprises to gain a foothold in the market, and underpinning private sector development, employment creation, and improved international competitiveness.

It has also shown that appropriate policies are crucial to create the conditions within which competition can thrive, and that competition authorities can help to build a culture of competition, and increase awareness of competition issues amongst policymakers and the public.

Policy recommendations include:

- Government policies should create competitive market conditions. This means assessing and factoring in the competition impacts of a wide set of policies, including trade policy, industrial policy, privatisation, regulation, state ownership, subsidisation and investment promotion. Competition authorities can help by raising concerns when government policy may have negative competition impacts.
- Regulatory bodies should take into account the competition impacts of regulation to avoid undermining the market and weakening economic performance. One way to achieve this is to implement a process for regulatory impact assessment to examine the competition implications of such issues as regulation of tariffs and interconnection, infrastructure sharing, and the implementation of a universal access fund.
- Governments should consider establishing competition laws and competition authorities, which can investigate anticompetitive practices, build a stronger competition culture, and advocate for pro-competition reforms.
- Competition authorities can help to build the evidence base on competition problems and associated costs, and publicise the findings that will inform and mobilise interest groups to lobby in favour of reform, in order to offset vested interests opposed to change. These interest groups may include household and industrial consumers and potential new entrants to the market.
- Tools such as DFID's Competition Assessment Framework can be used to guide competition analysis and help build capacity and understanding of competition issues in developing countries.
- The poor performance of the state-led sugar industries in Bangladesh, Kenya and Viet Nam, as compared with the successful, internationally competitive, private sector-led sugar industry in Zambia, demonstrates the superior performance that can be achieved through private management incentives. Steps to a healthier sugar sector in these countries would include the establishment of efficient new entrants, a reduction of state intervention in the sector, an end to bail-outs, a reduction in trade protection, and an acceptance that some of the existing sugar mills will go out of business. Social safety nets and retraining programmes might help to make such reform more politically acceptable.
- Competitive neutrality between state and private sector players can help to ensure a competitive market outcome. This is likely to become an increasingly important issue in Viet Nam, which is still heavily dominated by state players, as reform continues, but is also an issue elsewhere e.g. in relation to the Zambian mobile telephony market.
- A reduction of import tariffs can help to stimulate competition where there is limited domestic competition.

- Regional competition authorities and regional cooperation are needed to tackle competition problems caused by multinational companies, who sometimes seek to minimise competition by taking a strategic approach to cross-border production decisions.

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