

# Assessing the Economic Impact of Competition: Findings from Ghana

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## Executive Summary

The Overseas Development Institute has been conducting research examining:

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

The policy framework and economic performance has been compared in four product markets (sugar, cement, beer and mobile phone services) across five countries (Zambia, Kenya, Ghana, Vietnam and Bangladesh). This paper summarises the findings from Ghana. A synthesis of the broader findings based on the results from all five countries has been published in an ODI Research Report<sup>1</sup>.

Key findings from Ghana are 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. 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 establishment of a competition 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.
- There seems to have been some opposition to the introduction of competition policy from business lobby groups. One way to tackle vested interests, who oppose reform, is to establish and facilitate coordination amongst other interest groups who stand to gain from reform. This includes consumers, both household (who can be mobilised through consumer groups) and industrial, who may gain considerably from lower priced inputs. It also includes potential new entrants to the market, who can make their voices heard through business associations.
- 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 vulnerable to competition problems. Indeed, our research identified a

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<sup>1</sup> "Assessing the Economic Impact of Competition", Ellis & Singh (2010) available from: [www.odi.org.uk/bdp](http://www.odi.org.uk/bdp)

number of possible competition concerns and allegations 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.
- The Ghana Investment Fund for Telecommunication development (GIFTEL – now known as GIFEC) was established in 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 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.

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

showed that the introduction of competition – or indeed even the prospect of increased competition - can have a significant and immediate impact on prices.

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

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

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

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

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

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

# 1. Introduction

The Overseas Development Institute has been conducting a research project investigating the impact of competition in four product markets (sugar, cement, beer and mobile phone services) in five countries (Ghana, Kenya, Zambia, Vietnam and Bangladesh). This paper summarises the findings from Ghana. The findings from all the countries have been synthesised and published in an ODI Research Report<sup>2</sup>.

The paper first provides a brief overview of the competition policy framework, then discusses the key competition issues that were identified in relation to each of the 4 product markets, and draws some comparisons with the findings from other countries – it does not provide comprehensive analysis of each of the markets.

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

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<sup>2</sup> Ellis & Singh (2010)



## 2. Overview of competition 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, CUTS<sup>3</sup> were contracted to revise and modernise the old Competition Bill of 1992. This has been done with 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 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.

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<sup>3</sup> 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.

### 3. The sugar market

**Table 1: Sugar market structure across the 5 case study countries**

Country	No. of firms 2008	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 mills & 4 private refiners	Yes, State owns nearly all mills	47%	10%

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 in Asutsuare and Komdenda. 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, 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. 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 some have 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
- if 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, such 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.

## **Allegations of sugar import cartel**

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 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 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.

## 4. The beer market

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

Table 2 shows the structure of the beer market in each of the countries we studied<sup>4</sup>, and chart 1 provides a comparison of prices. 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. This makes the sector vulnerable to competition problems. Indeed, competition concerns were identified in the beer sector by the competition authorities in both Zambia and Kenya. Though other country specific factors will also affect prices, the figures show that prices are highest in the most concentrated markets.

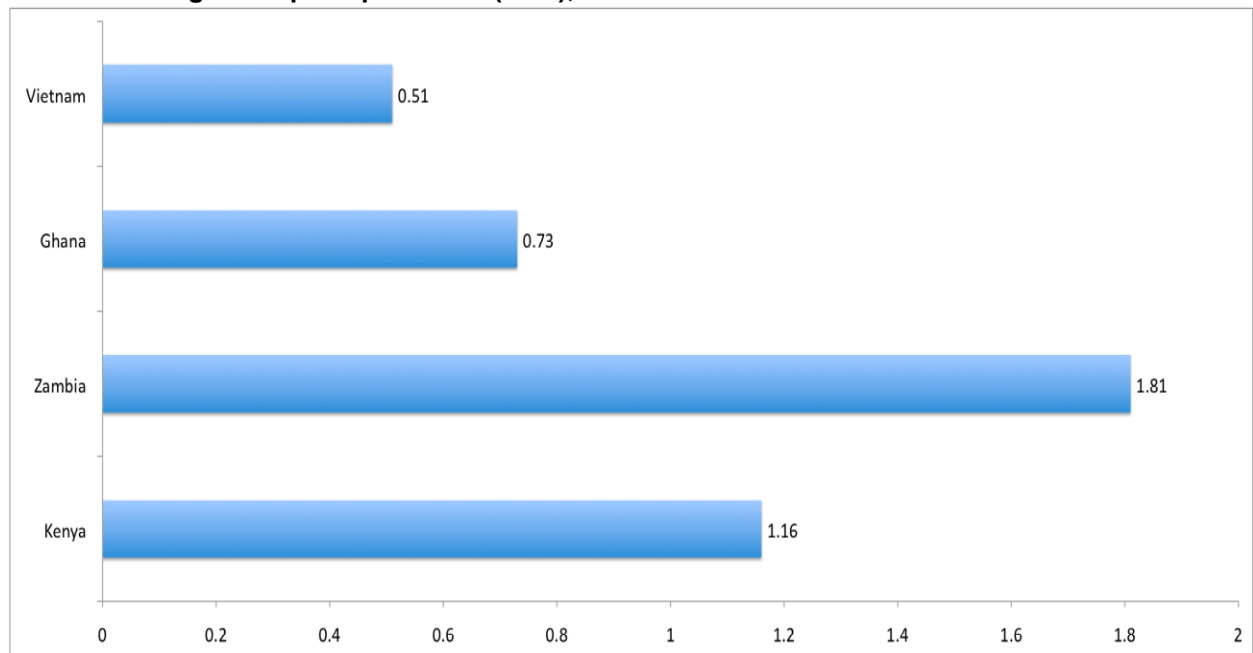
**Table 2: Beer market structure across the 5 case study countries**

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)

Source: ODI, various sources

<sup>4</sup> Bangladesh does not produce beer.

**Chart 1: Average beer price per 500ml (USD), 2007/08**



Source: ODI, various sources

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.

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.

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 maintenance<sup>5</sup> as it is in

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<sup>5</sup> 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

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 RRP. 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. This may explain why the price for beer has increased in Ghana since 2008, unlike in the other countries where prices have fallen.

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.

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too fiercely on price, and thus prevents them from driving down profits for themselves as well as the manufacturer.



## 5. The cement market

The cement sector is one that is often highly concentrated, and thus suffers from limited competition and has been a source of concern for competition authorities in many countries across the world including Zambia and Kenya. However, the five countries in our study have very different market structures, as shown in table 3 below, which facilitates some interesting comparisons:

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

Country	No. of firms 2008	State Ownership	Estimated market shares of leading firm	Head of population (millions) per cement company <sup>6</sup>
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, various sources

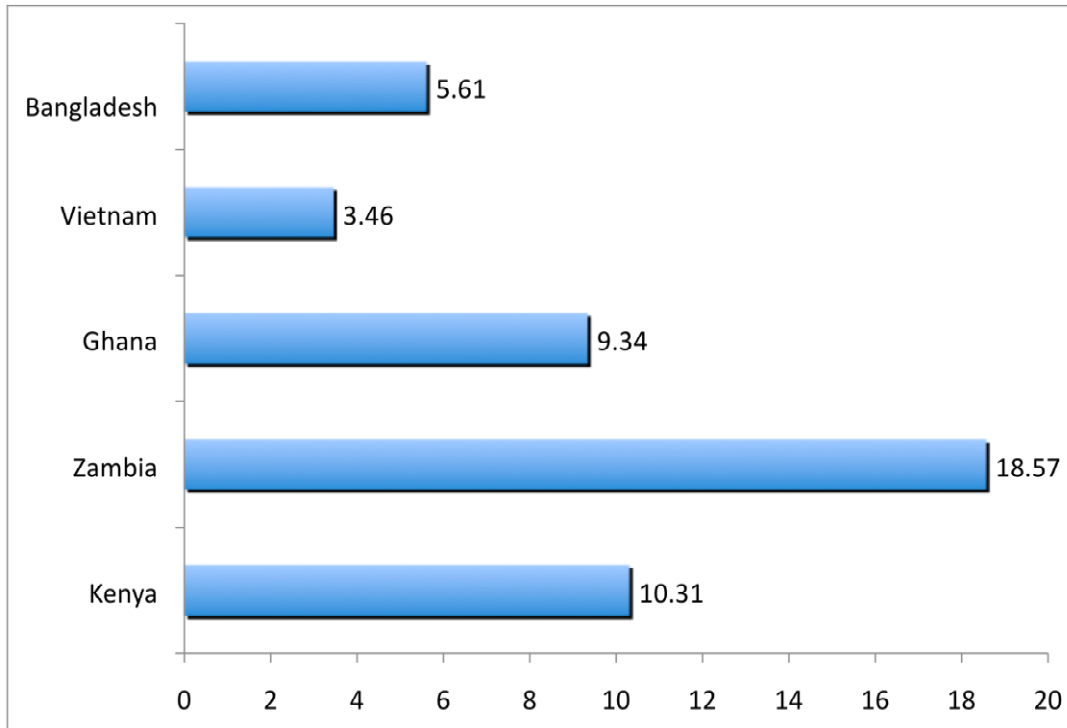
The retail cement price across the 5 countries is shown in chart 2 below. While other country-specific factors will also of course affect prices, such as input costs, and the costs of doing business, it is interesting that prices are highest in the most concentrated markets, and lowest in the least concentrated markets (as was also the case in the beer market).

Zambia (which has a near monopoly with 85% market share held by the leading firm as shown in Table 3), has the highest price, while Vietnam (which has 90 cement producers), has the lowest price. The high costs of doing business in Zambia, which is landlocked, compared to coastal Vietnam, which has abundant clinker deposits, should be recognised. However, it seems likely that market structure and competition are important determinants of price. A large new privately-owned plant commenced production in Zambia in late 2007/09, breaking up the previous monopoly, and Chart 3 shows that prices have dropped by almost ten percent since 2007, while prices in other countries have risen.

<sup>6</sup> Population data from United Nations Population Division: <http://esa.un.org/unpp/index.asp>

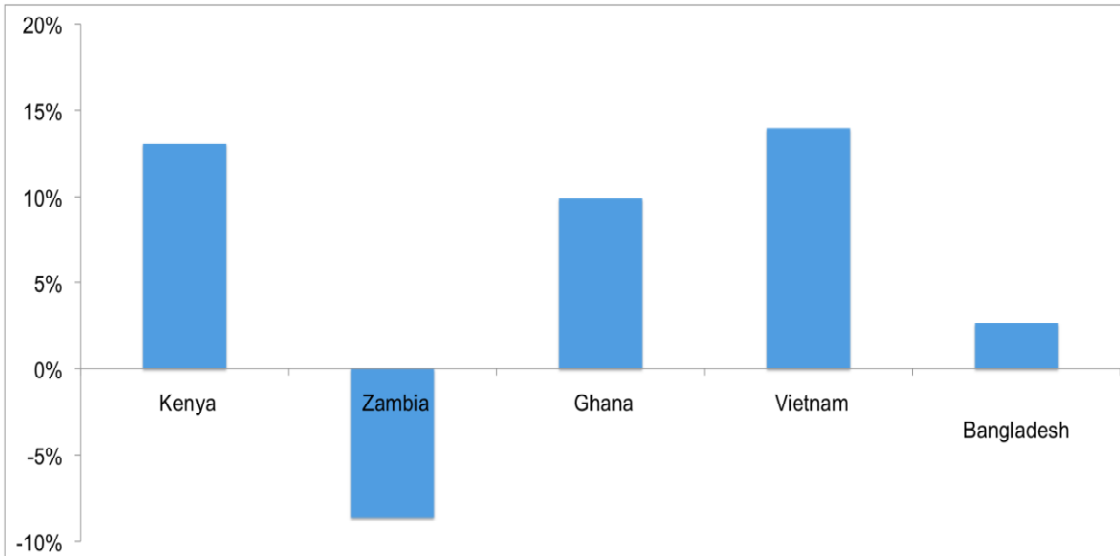
<sup>7</sup> [http://www.laurencepaul.com/index.php?option=com\\_content&view=article&id=177:zambezi-portland-cement-begins-operations&catid=1:Latest%20News&Itemid=54](http://www.laurencepaul.com/index.php?option=com_content&view=article&id=177:zambezi-portland-cement-begins-operations&catid=1:Latest%20News&Itemid=54)

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



Source: ODI research

**Chart 3: Cement: percentage change in price between 2007 and 2010**



Source: ODI research

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. In comparison with the other countries, there appeared to be a much greater degree of both price & non-price competition. Chart 2 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.

A high degree of concentration is common in the cement industry, and reflects the relatively 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 2 shows, 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. Although it may be argued that high costs of doing business may limit the potential international competitiveness of domestic cement producers, this in itself points to the importance of a stronger competition framework, to improve the competitiveness and reduce prices of business inputs, including services such as mobile telephony, and infrastructure, which in turn relies heavily on cement costs.

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 this increased competition resulted in falling prices (unfortunately, no price data exist 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 used by the other cement company, to stock their cement.

### **Unofficial import barriers**

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.

### **Cement price increases**

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 wider repercussions for the 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.

## 6. The 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. Ghana is no exception; mobile services started in 1993, and the subsequent introduction of new entrants has coincided with falling prices and rising mobile penetration.

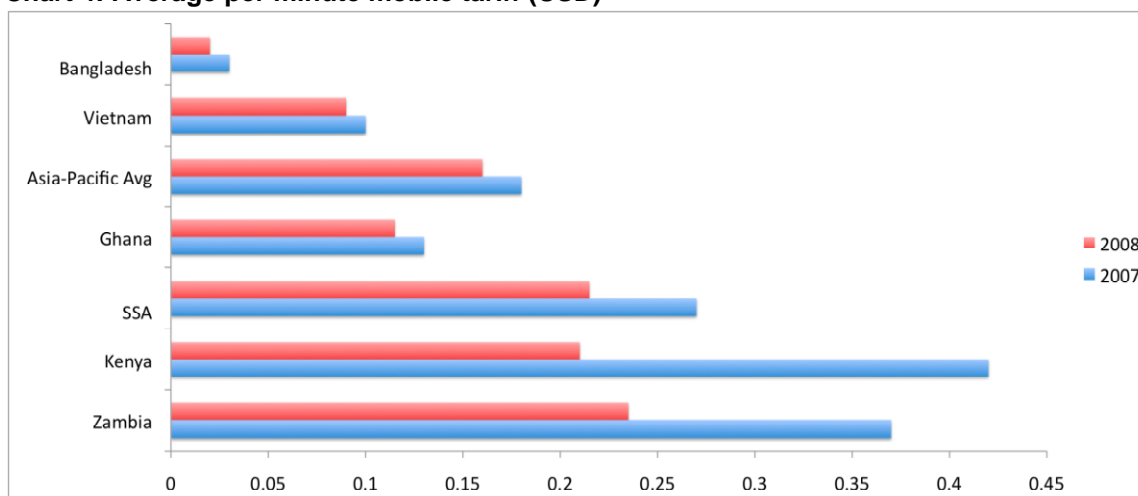
Ghana now has a relatively competitive mobiles market, with more players than Kenya and Zambia (see Table 4 below), and is performing well, with lower prices than other African countries, and higher penetration rates, as shown in Charts 4 and 5 below.

**Table 4: 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

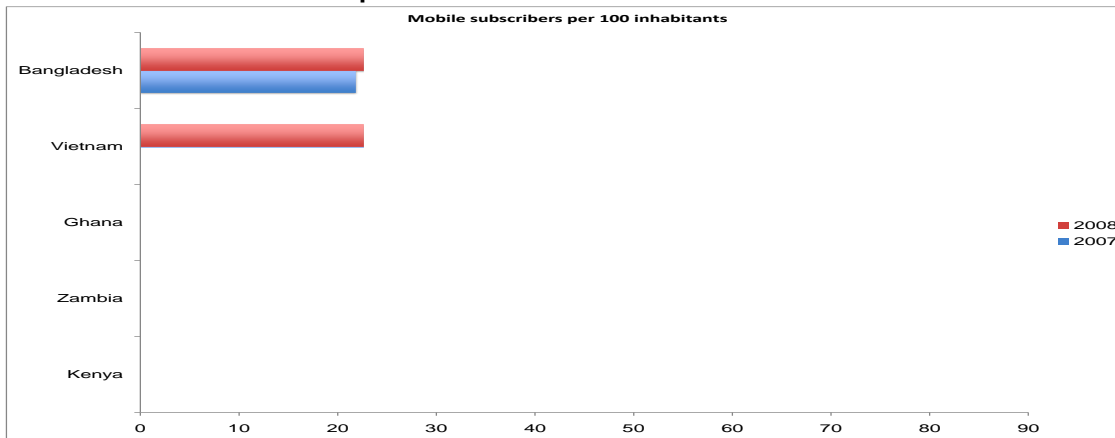
Source: ODI, various sources

**Chart 4: Average per minute mobile tariff (USD)**



Source: ITU data, ODI Analysis

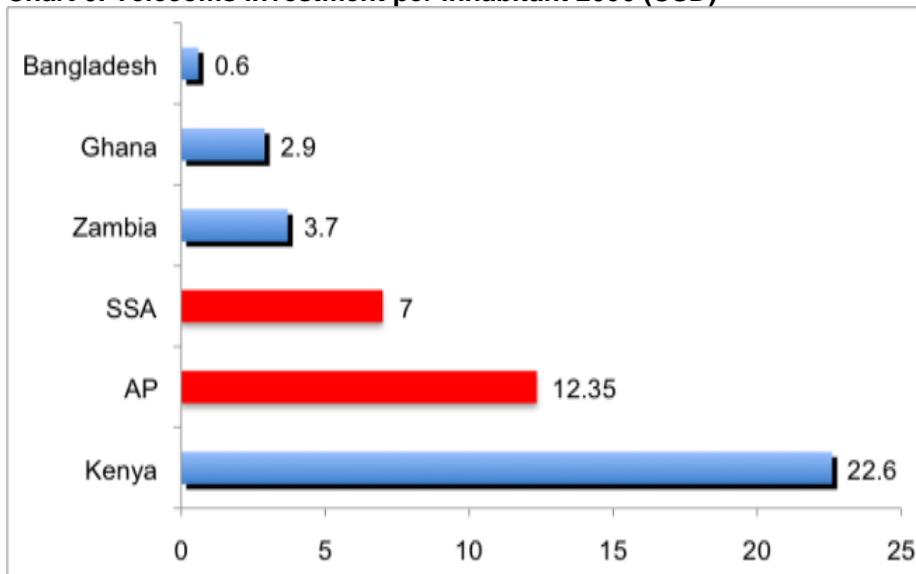
**Chart 5: Mobile subscribers per 100 inhabitants**



Source: ITU data, ODI Analysis

However, investment per head has been relatively low compared with other countries, as shown in Chart 6 below, especially as compared with Kenya. In Kenya, the mobiles market has been dominated by one firm (which may have enjoyed higher profits as a result) for some years, and this 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.

**Chart 6: Telecoms investment per inhabitant 2006 (USD)**



Source: ITU data, ODI Analysis

In the mobile telephony market, the policy and regulatory framework is an important determinant of competition. First, the number of licences issued is clearly important, as are the conditions attached to them. For example, it appears that government

restrictions on levels of foreign ownership in the mobiles sector have been a hindrance to growth and expansion of the sector in some countries.

In Ghana, we were told that one of the mobile operators had faced numerous difficulties with its local partner, and this had hindered network expansion. With the local partner now having dropped out, the business is expanding.

Similarly in Kenya, the law required at least a 30% local stake for mobile telecommunications licence holders until recently. 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. The law was changed and the requirement was removed in 2008.

The regulatory framework is also very important. 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 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 under-served areas.

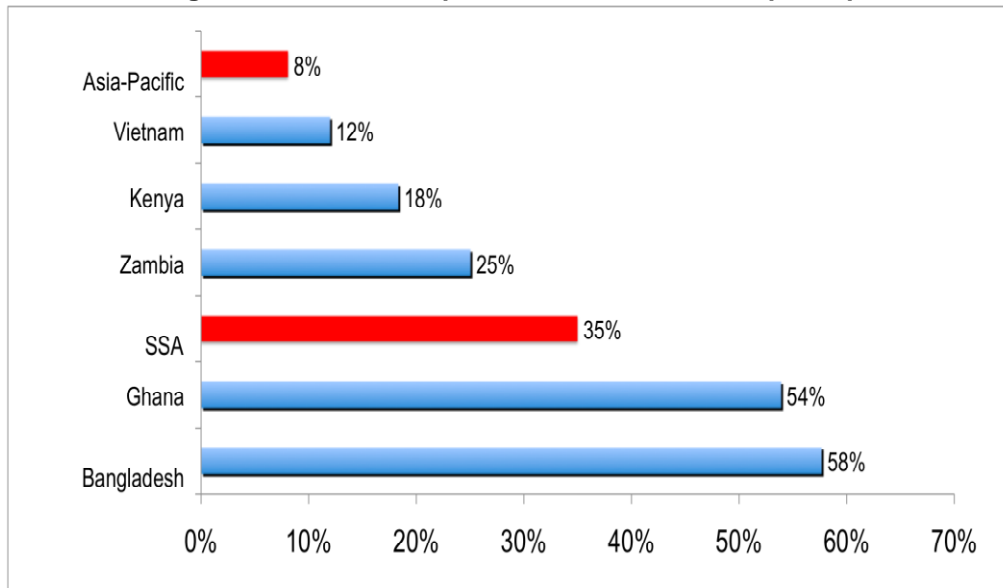
The Ghana Investment Fund for Telecommunication development (GIFTEL), has been running since 2005, and has the aim of improving access to ICT services in non-served and under-served parts of the country. One percent of net earnings of all mobile operators go towards the GIFTEL fund. Funds are used by 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, the 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. Generally speaking, policy to promote universal service needs to be implemented carefully to avoid distortions.

So this policy appears to be working well in Ghana. But generally speaking, policy to promote universal service needs to be implemented carefully to avoid distortions, where the State may inadvertently subsidise service roll out in what could 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 years<sup>8</sup>. 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.

**Chart 7: Average telecom revenue per subscriber as % GDP per capital, 2006**



Source: ITU data, ODI Analysis

Both Ghana and Bangladesh, which have some of the cheapest calls amongst the African and Asian countries respectively, also have the highest average revenues per user, as shown in Chart 7 above. This suggests that cheaper calls can translate into more mobile phone usage and thus greater revenues for the mobile companies, whilst also increasing the developmental benefits that increasing mobile phone usage brings.

<sup>8</sup> World Bank (2007)



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 2006<sup>9</sup> 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.

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<sup>9</sup> G. Frempong, G. Essegbey, and E. Tetteh (2007)

## 7. Conclusion

In sum, our research suggests that:

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.

In Ghana the beer, cement and sugar markets are slightly less concentrated than in the other African countries we studied, which bodes well for a competitive outcome, with benefits for consumers in terms of lower prices, increased choice, and better services. Nonetheless, our research has identified a number of possible competition concerns in these markets, which could be properly investigated if a competition authority was introduced.

International experience shows that these sectors – and particularly beer and cement - often experience competition problems. Indeed, problems have been identified in the other African countries studied, Kenya and Zambia, and steps have been taken to address these concerns in those countries – something which is not possible in Ghana in the absence of a competition law and authority. This strengthens the case for Ghana to move forward in adopting the revised Competition Bill that has been drafted and is awaiting Government endorsement.

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

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

Although these competition authorities do sometimes 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.

Ultimately, competition is fundamental to a well-functioning market economy, and appropriate competition policies and the establishment a competition authority can help to ensure markets work efficiently and effectively to deliver economic welfare and growth. Competition undermines corruption, facilitates international competitiveness, private sector development, and employment creation, and thus makes an important contribution to the wider economic growth that is needed to lift developing countries out of poverty.

## **Bibliography**

Ellis and Singh (2010) "Measuring the Economic Impact of Competition", ODI Research Report

G. Frempong, G. Essegbey, and E. Tetteh (2007) "Survey on the use of mobile telephones for micro and small business." A report by the Science and Technology Policy Research Institute (STEPRI) of Ghana

Preston John (June 2006) Speech given representing DFID London at 7 Up 2 Project Final Meeting, Bangkok

World Bank (2007) 'Costing ICT Infrastructure Investment Needs for Africa'. Study by Winrock International and Pyramid Research, October.