Competition, Regional Integration and Inclusive Growth:
Key Insights from Cross Country Studies of Cement and Sugar

Simon Roberts
University of Nairobi
17 June 2014
Competition and regional integration

• Regional integration: gains from trade?
  – H-O models predict limited gains where countries are similar (rather should pursue UTR)
  – African countries largely expected to trade with north – commodities for manufacture
  – Models of trade incorporating learning effects, technology, positive externalities find comparative advantage shaped by industrial policies
    • Developing diversified productive capabilities is more effective in a bigger regional market
  – Economies of scale imply need a large ‘local’ market for investments in such industries
• Diversified industrialization now recognized as part of inclusive growth agenda
• What is relation of competition to development of capabilities?
Regional integration for competition

- Imperfect competition can drive trade flows:
  - E.g. simple reciprocal dumping model
- Consider two identical countries, one traded good X
- Due to scale economies each country has one producer
- Monopoly price charged; ceiling of import price plus duty of e.g. 40%
- Removal of duty between countries means duopoly (outcome depends on nature of competitive rivalry; transport costs)
- Gains from trade are gains from competition
  - Gains not evenly distributed: consumer gains across board, but producer returns likely to be uneven between countries
  - Both incumbent firms interests and regional rivalry can inhibit deepening regional integration to get gains from competition
Anti-competitive arrangements undermining inclusive growth

- Incumbent firms with market power naturally want to protect and exert that power
  - Tight oligopolies coordinate rather than compete
  - Entrenched dominant firms deter/undermine entry

- Methods of coordination:
  - Agreements on price are given most attention
  - Market division arrangements can be more effective as no need to agree price (as have agreed not to compete)
  - Borders & trade barriers are very convenient for dividing natural markets

- Exclusionary conduct by dominant firms:
  - Many ways, including control bottlenecks (access to ports, infrastructure, key inputs), regulatory barriers, licencing etc reinforce natural first mover advantages
  - Implication? Not rewarding effort, creativity but incumbency

- Anti-competitive arrangements can work at regional level
African Competition Forum six-country research study

• Initiative to:
  – Assess competition and markets on a cross-country, regional basis, for critical economic sectors
  – Bring together the key areas of competition, trade, regional integration and reducing barriers to entry
  – Co-operation on the part of six competition authorities
  – Link research to training and capacity building

• Authorities of Botswana, Kenya, Namibia, South Africa, Tanzania, Zambia

• Cement (all), Sugar (Kenya, Tanzania, Zambia, South Africa), Poultry (Botswana, Namibia, South Africa, Zambia)

• The studies were supported by the IDRC, available on www.africancompetitionforum.org (under resources, reports)
Cement

- Strong regional dimensions to understanding in the cement industry; several firms operate across countries
- Cement is critical input into the development of physical infrastructure and housing
- Scale economies relative to size of demand imply that separately each country will have a concentrated industry
  - Large investment cost; energy-intensive
  - Access to limestone also important
- Increased regional rivalry depends on:
  - The presence of different firms in neighbouring countries, as opposed to companies associated with the same group
  - The absence of coordinated arrangements at the regional level
  - Reducing trade barriers and improved transport infrastructure
Cement capacity by producer & country
(grouping associated companies)
Possible competition issues?

• Three countries with one producer (or group of associated producers) accounts for more than 50% of production capacity.
  – In Zambia and Kenya companies associated with Lafarge have accounted for the majority of capacity
  – Namibia recent entrant Ohorongo is effectively the only local producer.
• South Africa and Tanzania: three to four producers have accounted for 80% of production
• Botswana is largely served by imports
• cement cartel that operated across the whole of the Southern African Customs Union (SACU) until end 2009
Comparison of ex-factory prices

- Zambia’s prices highest throughout
- Kenya prices have generally been the next highest
  - until recent years when divestiture of Lafarge’s associated company from Athi River Mining and the entry of two smaller producers
- Tanzania prices substantially lower than Kenya, apparently greater local competitive rivalry and an openness to imports
  - reductions in local currency cement prices in Tanzania after 2007 (not observed in either Zambia or Kenya)
- South African prices have been the lowest apart from at the height of the cartel in 2005
- Botswana and Namibia prices have tracked above South African prices; entry of Ohorongo in Namibia led to a sharp reduction
Comparison of ex-factory prices
(US$ per 50kg)
Anti-competitive conduct? Cartel in Southern African Customs Union (SACU)

- Three main companies – PPC, Lafarge, Holcim/Afrisam
  - Jointly owned a fourth producer and two input suppliers
- Had been legal cartel until exemption removed in 1996
- Was competition for a few years, then ‘stabilized’
- Investigation revealed:
  - Agreed market shares for the whole of SACU
  - Sales data submitted monthly to Cement & Concrete Institute, and total sales compiled by range of geographic areas and customer categories
  - Pricing is transparent – key issue is whether there is discounting
  - Sales data and market division undermines price discounting – discounts are to win market share, but if shares are maintained then no incentive to discount
Comparison of ex-factory prices

• Using the post-cartel ex-factory prices in South Africa in 2010-2012 of around $6.50 per 50kg as a base we find this compares to:
  – prices in Zambia of $10
  – in Kenya around $8.50
  – Tanzania prices comparable to South Africa
  – Botswana prices between $8 and $9
  – Namibian prices falling to $7.50 in 2011 and 2012

• Profit margins, where company results are available, are consistent with apparently low levels of competitive intensity in Zambia, Kenya (at least until 2012) and SACU under the cartel from 2003 to 2009.
South Africa Producer Price Index for Ordinary & Extended Cement

Index, 2000 = 100

2005 2006 2007 2008 2009 2010 2011 2012
Kenya cement producer prices (KSh/tonne)
Kenyan cement

- Prices have been substantially above those in apparently more competitive markets (South Africa, post cartel; Tanzania)
- Explanatory factors? Cost differences (imported clinker, energy)? Main markets inland?
  - Competition does not protect higher cost producers
- Profit margins have been relatively high
- Note: in recent years has been some new entry
- Tanzania responded to higher prices by opening up to deep sea imports, which disciplined local prices
Sugar

- Kenya, Tanzania: net importers, historically protected their industries
- Zambia and South Africa are low cost net exporters
  - Zambia is the most productive, with 106 tonnes of cane per hectare
  - compares with the other countries where 40 to 60 tonnes/hectare
- sugar industries concentrated in all the countries, with the highest level of concentration by far in Zambia, in 2011/2012:
  - Zambia Sugar (Illovo, now Associated British Foods) having a share in excess of 90% of production
  - South Africa: three companies (Illovo, TSB and Tongaat Hulett) account for over 80% share.
  - Tanzania: two companies account for 70% of production (largest, Kilombero, is 75% owned by Illovo; second company TPC majority owned by Sukari of Mauritius that also has interests in Kenya)
  - Kenya has a large number of producers, but the four largest still account for 78% of production (not taking account of imports)
Sugar prices (US$/t, est ex-factory bulk)

- World Sugar Prices (London)
- Kenya
- Tanzania
- South Africa
- Zambia
Sugar – competition and development issues

- Prices vary considerably across countries
  - Kenya & Tanzania net importers - prices depend on openness to imports
  - Kenya higher prices than Tanzania reflect choice to protect local industry
  - Zambia is low cost producer and substantial net exporter, but amongst highest prices; exports to EU (historic ACP preferences, but v high transport costs); local market protected by regulatory barriers to imports
  - South Africa with lowest prices notwithstanding regulation
- Zambia exports to EU and countries in region without significant sugar industries; not exerting competitive pressure in other sugar countries
- Kenya industry has been dominated by state-owned companies, poor performance, low yields and efficiencies; poor regulatory outcomes; private sector participation improved performance somewhat
- Countries reflect different choices about regulations and trade barriers, and influential interests
- Questions of development? Appropriate agriculture and industry policy important to grow production and improve efficiencies
Conclusions

• Many of the same companies operating in different countries (including through associated entities)
• Low levels of effective competition have substantial negative impacts for countries’ economies
  – increasing the costs of investment and infrastructure and raising prices to consumers
• Simple comparisons suggest prices in some countries substantially above prices in more competitive markets, without obvious differences in production costs
• Trade barriers tend to reinforce the market power of large firms in individual countries
• Incumbents with strong interest and ability to lobby to protect position – undermines benefits of regional integration
Conclusions cont.

- Competition gains from integration are substantial in terms of increased discipline on market power.
- Building capabilities means rewarding effort and creativity; incumbents ‘handicap’ rivals & undermine this;
  - Indicates important interaction of competition and development of diversified productive capabilities.
- Requires complementary policies (including industrial and agricultural policies) to:
  - Support entrants in national economies,
  - Lower production costs and improve efficiencies,
  operating alongside effective competition enforcement at national and regional level.
- However, policies to support local industry may in practice serve narrow interest groups.