



Making the Most of Commodities: Developing linkages to promote industrial development in Africa

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David Kaplan

(University of Cape Town;)

david.kaplan@uct.ac.za;

MMCP Programme

- Joint University of Cape Town and Open University research/policy programme
- Project leaders: Profs Morris, Kaplan, Kaplinsky
- Began Jan 2009, ends November 2011
- Aims:
 - Focus on industrialisation challenge for Africa
 - Research industrial linkages to commodities
 - Address underdeveloped policy dialogue
 - Capacity building – 17 researchers mostly from SSA
 - 14 Discussion Papers – final 3 Synthesis Papers
- <http://commodities.open.ac.uk/discussionpapers> or www.cssr.uct.ac.za/prism/publications

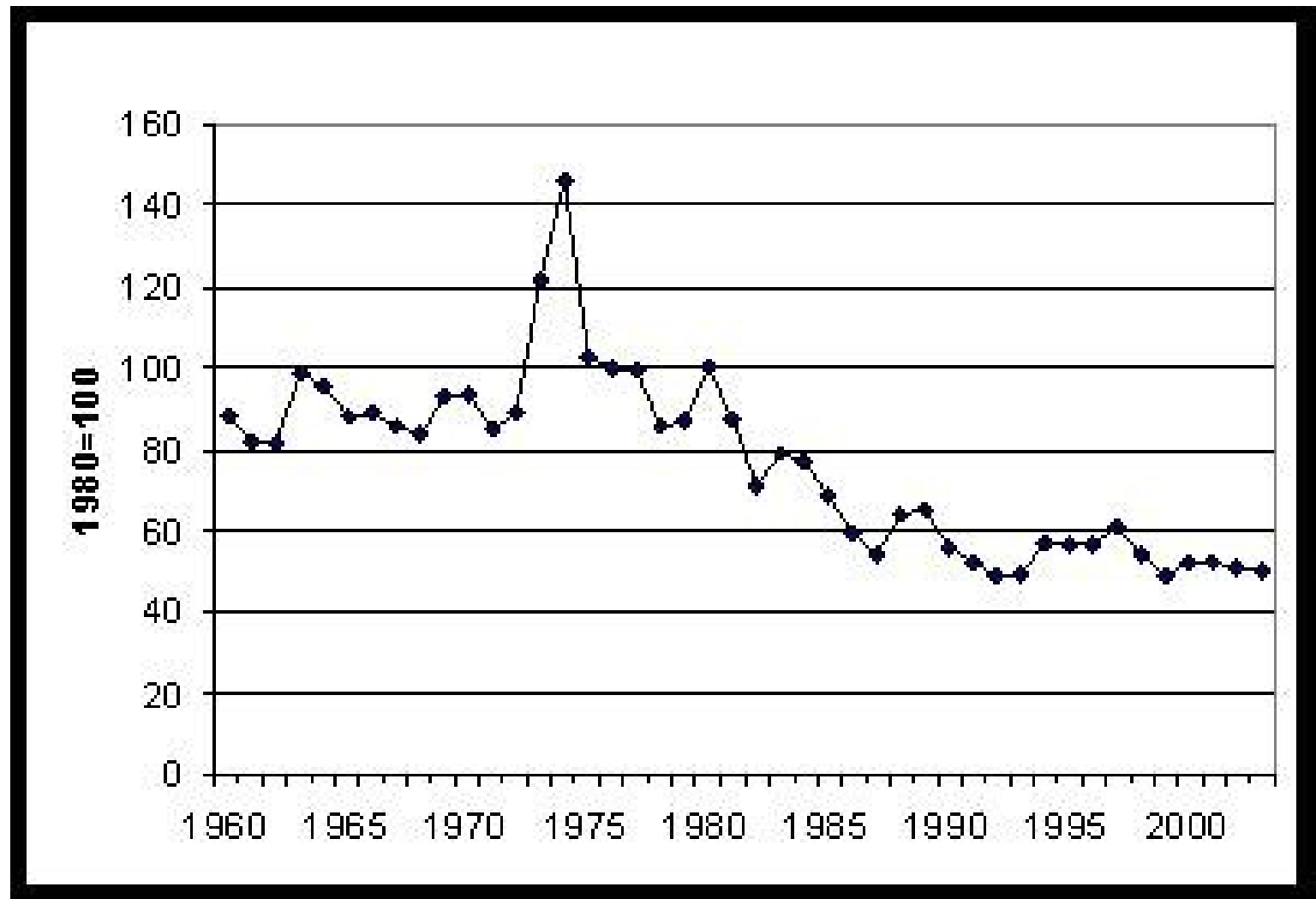
MMCP Sectors and Countries

- Mining services in South Africa
- Diamond polishing and cutting in Botswana
- Oil offshore umbilicals maintenance in Angola
- Copper upstream linkages in Zambia
- Gold upstream linkages in Tanzania
- Gold upstream linkages in Ghana
- Timber downstream processing in Gabon
- Manufacturing/Services linkages to Oil in Nigeria
- Development corridors in South/East Africa
- Chinese companies in infrastructure in Angola

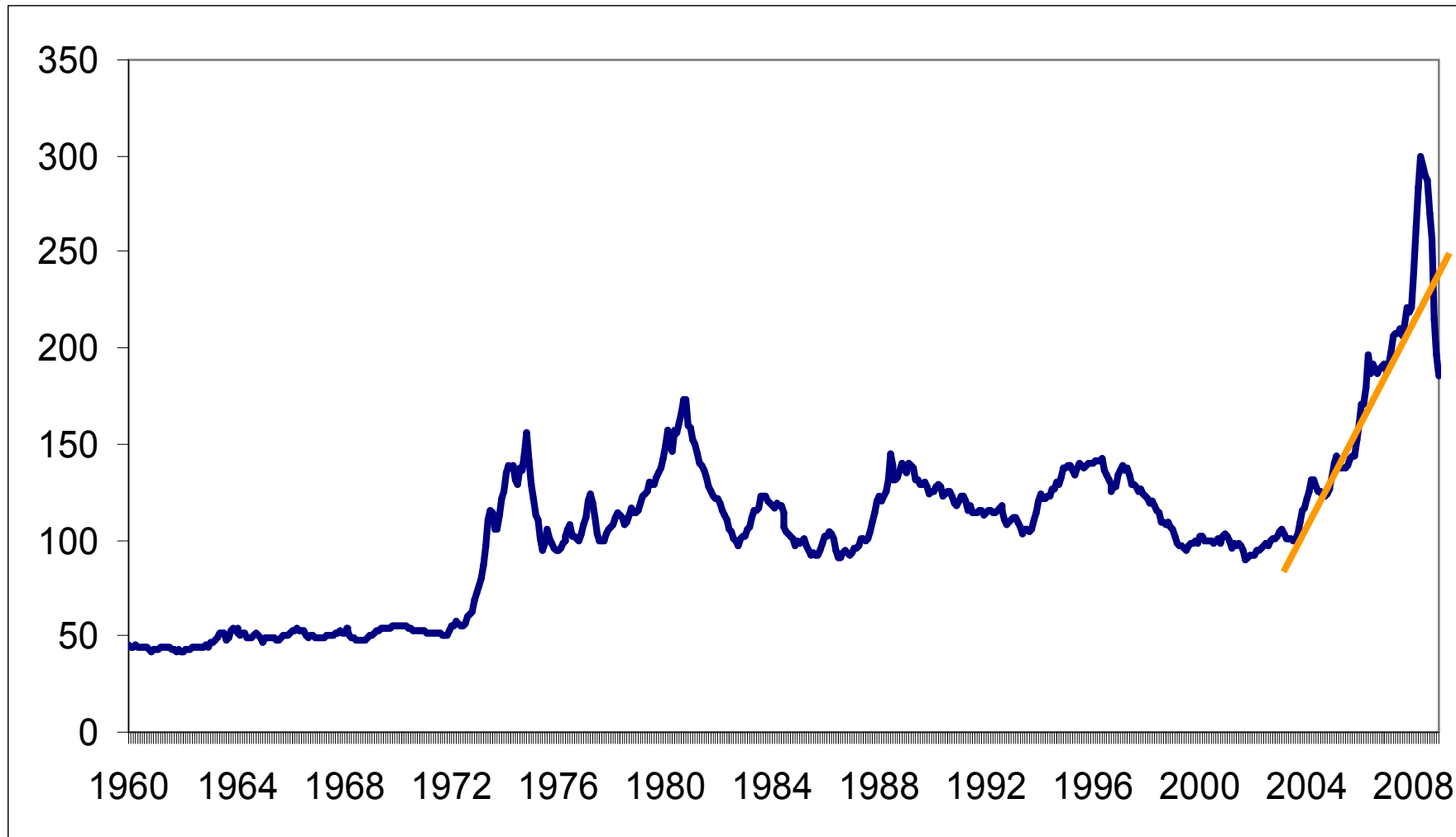
Africa's Industrialisation Challenge

- Close association between incomes, employment and industrialisation
- Manufactures are (relative to agriculture) income elastic and price inelastic
- Terms of trade in favour of manufactures
- Hence industrialisation equated to development of labour intensive manufacturing

Commodities-Manufactures terms of trade



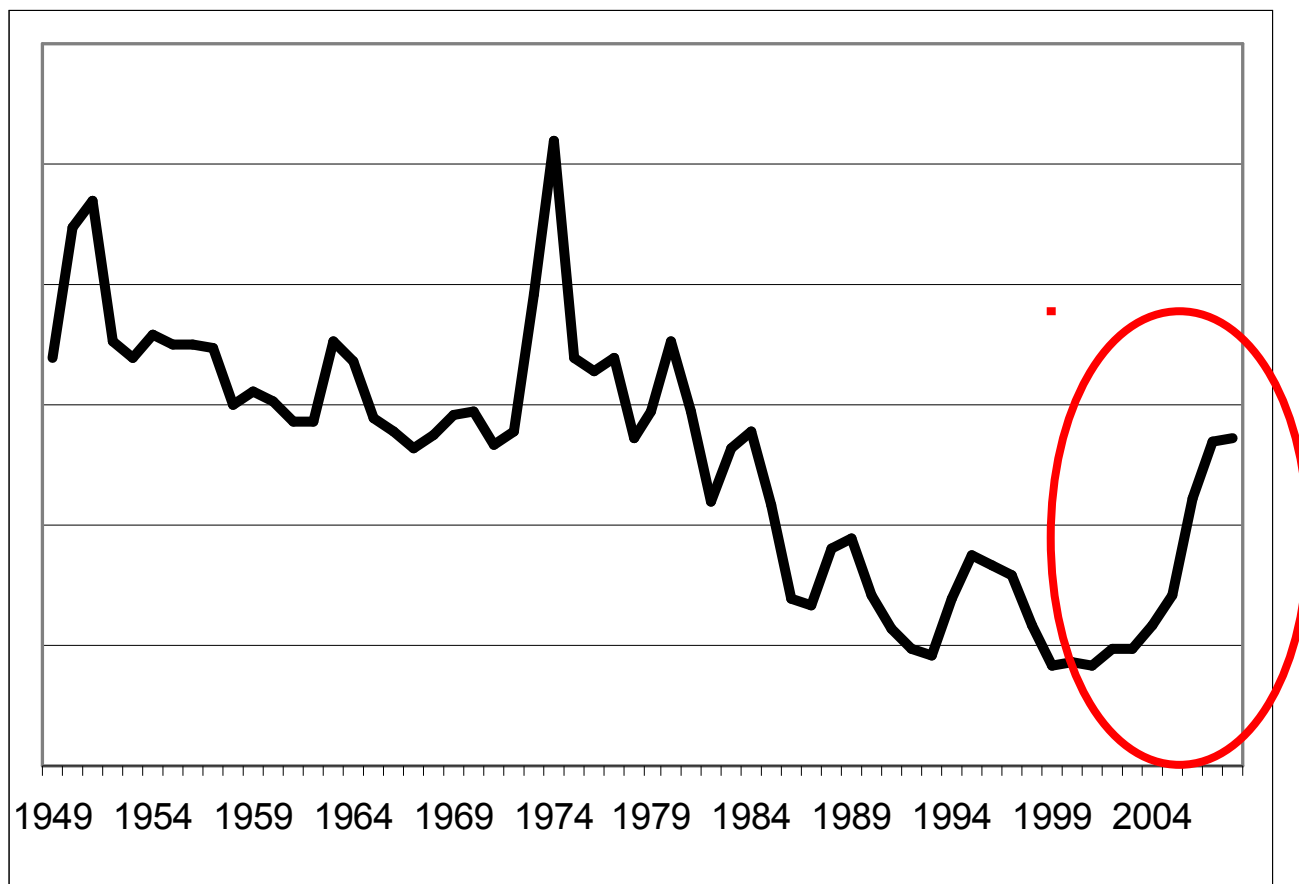
Commodity Price Movements 1960-2008



Source: UNCTAD All Commodity Price Index, 2000=100

Commodities-Manufactures terms of trade

The commodities-manufactures terms of trade, 1949-2008



Source: S.Pfaffenzeller et.al. (2007) "A Short Note on Updating the Grilli and Yang Commodity Price index."

So what do we conclude thus far ...

- China's manufacturing strength closing off an industrialisation path based on manufacturing
- The traditional path to industrialisation through manufacturing is **blocked**
- Commodities abundance means it is Africa's only real industrialisation option
- It all depends on developing **linkages**

Three types of linkages from commodities sectors (Hirschman)

- Fiscal linkages
- Consumption linkages
- Production linkages
 - Forward
 - Backward
 - Horizontal

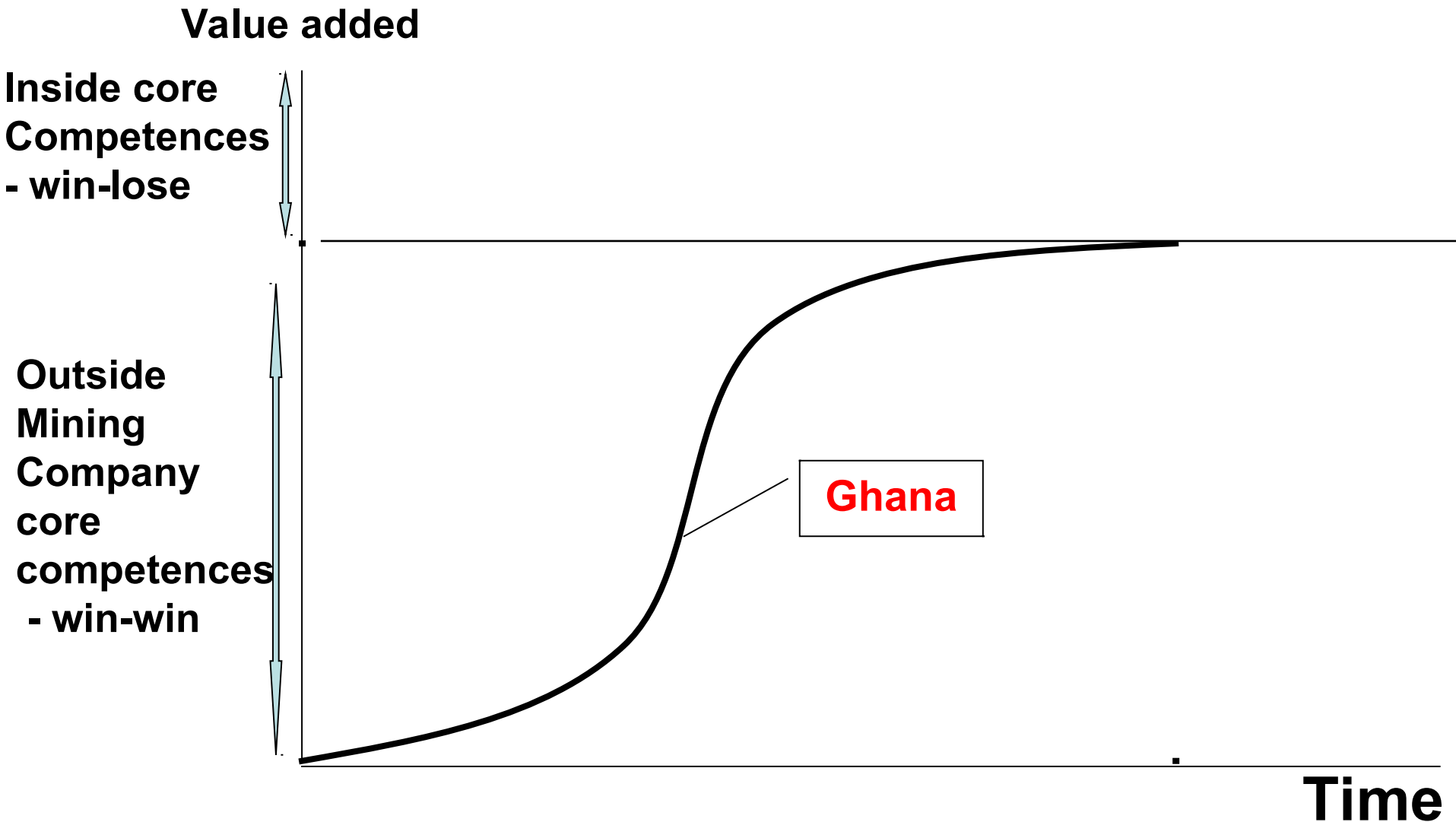
Production Linkages – Core Competences and Outsourcing

- Core competences
 - Unique to firm
 - Has value in market
 - Difficult to copy
 - Yields greatest rents
- Rest outsourced to low cost suppliers
- Near sourcing better than far sourcing
- Hence the dominance of value chains

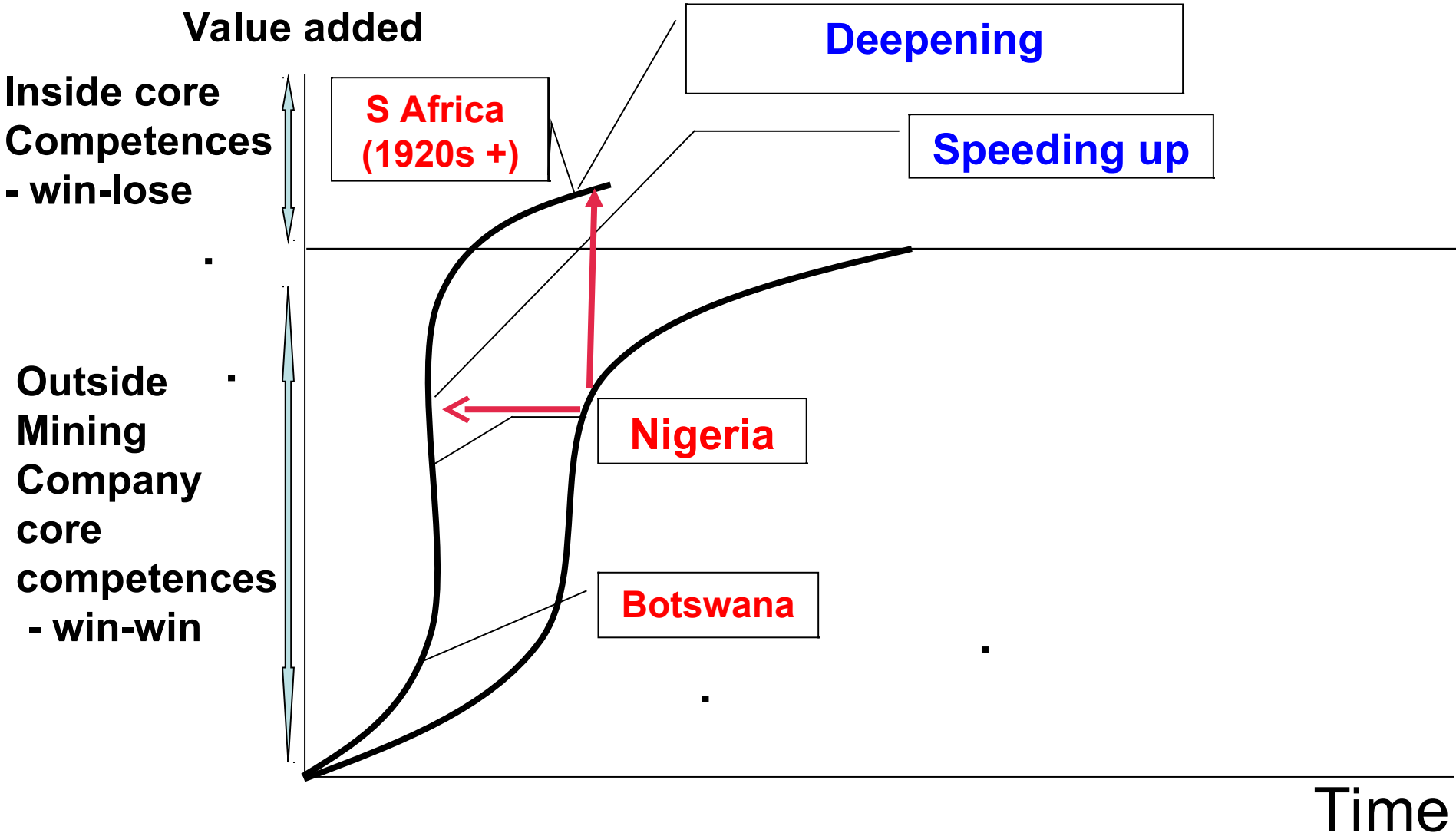
The increasing globalisation of VCs

- VC drivers (autos, clothing, furniture etc) maintain areas of core competency/high rents
- Move out of peripheral production & services
- Outsource rest (manufacturing & services) managing through value chain organisation
- Applies to commodity producers VCs **also**
- Mines have added incentive to source **locally** because of poor transport, logistics etc.
- Creates possibility for **linkage** industrialisation

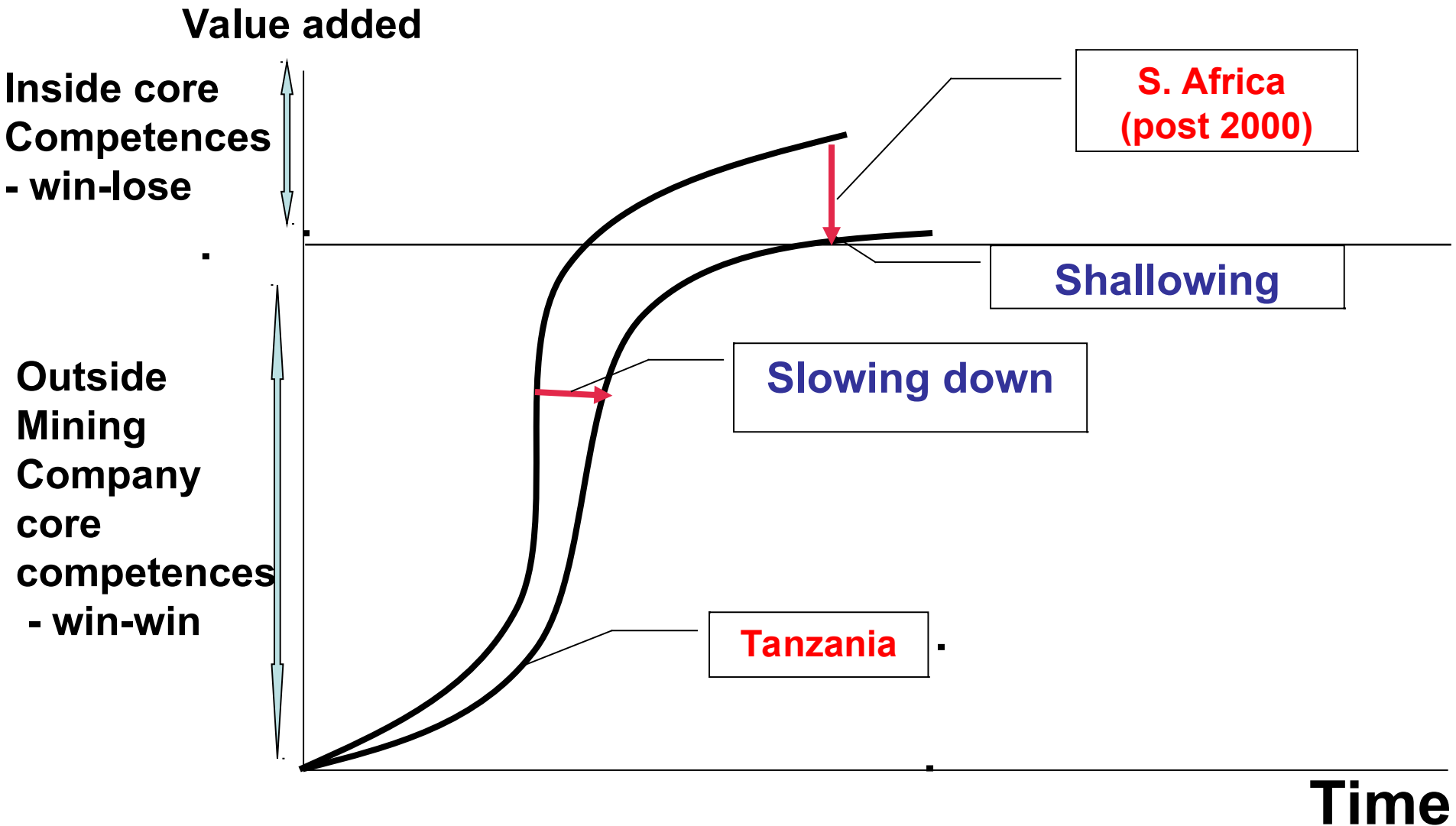
Linkages in the commodities sector



Policy Impact: Speeding & deepening linkages in commodities sector



Policy Impact: Shallowing & slowing down linkages in commodities sector



What determines the shape of the linkage curve?

P
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I
C
Y

Nature of the sector

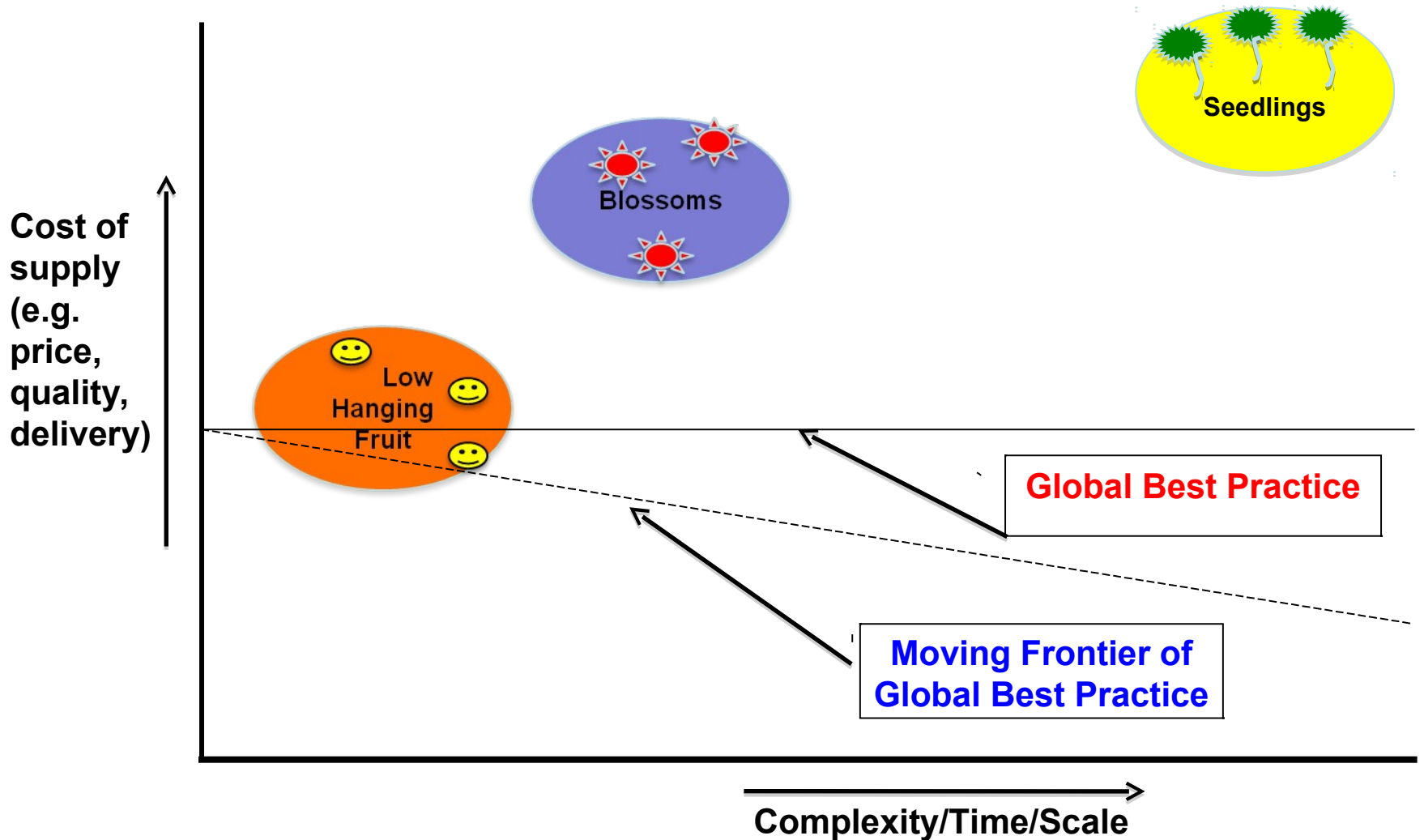
Ownership

Infrastructure

Skills and capabilities (linked to NSI)

Policy towards commodity sector and linkages

The trajectory of local supply



How do we influence local supply?

- This takes us into realm of Industrial Policy to
 - Grab low hanging fruit,
 - Existing and new firms more competitive and produce different products so they blossom,
 - Build long term capabilities to seed new industrial structure – firms, products, technologies
- Requires government support
- Process of cooperation with commodity firms to encourage local linkages

Policy Implications - Government and Lead Corporate Firms

- Is there a vision for the sector?
- Is there a strategy for extending and deepening local linkages?
- Do government/lead firms possess political will and capabilities to execute this?
- Are there sanctions and incentives?
- Do the public and private sector policies/strategies align and reinforce each other?

But reality is

- Government suspicious of commodity producers
- No country has a coherent industrial/commodity policy to build linkages with commodity sector
- Most corporates don't have policies to engage with government to build local linkages
- Some corporates have declared policies BUT don't know how to go about operationalising, or
- Corporates don't implement them properly

Summary Conclusions: Extent of breadth and depth of linkages

- Extent varies due to:
 - Passage of time
 - Complexity of sector
 - Level of capabilities
- Nature and pace of development depend on
 - Nature of ownership of lead firms & suppliers
 - Nature/quality of hard and soft infrastructure
 - **Capabilities, Availability of skills, and NSI**
 - Policy development, management, implementation

THE PRIME CONTEXTUAL FACTORS THAT ACCOUNT FOR LIMITED LINKAGES

1. SKILLS

**2. INADEQUATE SUPPORT FOR
ENHANCING TECHNOLOGICAL
CAPABILITIES – THE NSI**

SKILLS

Skills

Shortage of skills is ubiquitous. Divergent but generally inadequate responses

- Nigeria: government/private sector investment in skills, Nigerian diaspora facilitated return of skilled people
- Ghana: cumulatively built skills over time
- South Africa: leaking skills
- Angola/Tanzania/Gabon/Zambia – skills constrained

TECHNOLOGICAL CAPACITIES: THE NSI

NSI

**Technological capacities limited. Different responses –
but everywhere support is weak and/or declining**

- South Africa: strong but declining
- Nigeria: developing linkages to NSI institutions
- Angola/Ghana/Tanzania/Gabon/Botswana/Zambia: weak

ADDRESSING THE SKILLS CONSTRAINT

ENHANCE TRAINING BY COMMODITY PRODUCERS

- Enhance Incentives for commodity producers (particularly Mines) to train in house
- Build linkages between commodity producers and tertiary education institutions
- Incentives and encouragement to commodity producers to “mentor” local suppliers and upgrade their skills

ENHANCE TRAINING BY COMMODITY PRODUCERS

- Provide support/incentives for first tier suppliers to train and upgrade
- Allow local firms to import scarce skills required for upgrading

ENHANCING TECHNOLOGICAL CAPACITIES – THE NSI (1)

RECOGNITION OF THE POTENTIAL

Rising technological complexity of commodity production in general

Some activities are technologically very complex

Effective application/adaptation to be done locally

LINK COMMODITY PRODUCERS TO LOCAL NSI INSTITUTIONS

- Enhance the efficiency and longevity of the natural resource
- Technological spillover effects

ENHANCING TECHNOLOGICAL CAPACITIES – THE NSI (2)

PROVIDE SUPPORT FOR TECHNOLOGICAL UPGRADING OF FIRST TIER SUPPLIERS

Support to meet standards and requirements of commodity producers

Support for effective assimilation and adaptation of imported plant and equipment

Supports to be designed and coordinated by government in consultation with local and potential local suppliers as well as commodity producers

A VISION

GOVERNMENTS RECOGNISING THE POTENTIAL IN
COMMODITY PRODUCTION

DESIGNING POLICIES WHEREBY COMMODITY
PRODUCTION IS INTEGRALLY LINKED TO A SYSTEM
OF TECHNOLOGY INSTITUTIONS AND PRACTICES
(NSI)

WORKING WITH COMMODITY PRODUCERS AND
LOCAL FIRMS DEVELOPING TECHNOLOGY AND
INDUSTRIAL POLICIES TO SECURE ENHANCED
LOCAL LINKAGE BASED ON INCREASING
TECHNOLOGICAL CAPACITIES

THANK YOU