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DISCUSSION PAPER

THE SCOPE FOR DOMESTIC VALUE ADDITION IN A MINING ECONOMY: THE SOUTH AFRICAN CASE

by Ben Turok

ABSTRACT

South Africa has the profile of a modern economy with well-developed financial, commercial and industrial sectors, yet mining remains an important base of the economy. Mining is dependent on physical infrastructure, such as rail, energy and water, that is provided by the state. Ideally, this is where the idea of a “joined-up economy” functions optimally, since it includes all the relevant state institutions and the private sector. It must also be sensitive to the interests of labour and the views of civil society.

However, the mining companies assert that administrative prices set by state entities and the uncertainties of supply have a heavy impact on their pricing. While they cannot influence prices in the global markets, they can do so in the domestic market, due to their monopoly power. Hence they choose to sell to local customers at international prices, to raise their profit margins. This has a serious impact on the viability of downstream manufacturing industry.

If South Africa is to industrialise further, this impasse has to be resolved. It requires a negotiated compromise on domestic prices, perhaps for a fixed period, with suitable provisions for improved infrastructure services, and step-by-step measures to enhance local value addition and beneficiation by local manufacturers and suppliers. This stimulus to industrialisation will also open up opportunities to enhance capabilities throughout the economy and build the much stronger institutional framework needed in a modern, developed economy.

If a compromise on prices cannot be achieved, an alternative is for government to ensure the supply of affordable industrial inputs by establishing parallel competitive enterprises, resorting to export taxes and similar interventions used in many countries to defend domestic industries.

PROBLEM STATEMENT

Beneficiation and value addition in the interface between mining and manufacturing in South Africa is now a central concern in government and the private sector. The issues are not merely technical or institutional. They require consideration of the whole value chain, from exploration to extraction, processing, beneficiation, fabrication and marketing. This paper will examine the arguments in the context of the total architecture of the political economy. The key questions are:

1. Where is beneficiation and value addition happening presently? In which part of the value chain? At what scale?
2. Can the scale and scope be increased? If so, how and where?
3. Is local procurement of feedstocks and finished products the answer?
4. Do we have the necessary resources and capabilities: capital, skills, physical infrastructure, political will?
5. Can import parity prices be justified? Is a price discount to local manufacturers feasible?
6. Are there vested interests opposed to beneficiation? If so, why?
7. Should we beneficiate for export or domestic markets, or both?
8. If companies do not cooperate, do we have the necessary enforcement legislation? Is this a wise course?
9. Do we have a strategic plan for beneficiation?
10. Has the state identified the national interest in this area clearly? Are all state institutions working together on this?

THE DISCUSSION

- 1) Value addition from primary resources: ArcelorMittal and SASOL
- 2) The policies of the Chamber of Mines
- 3) The policies of the department of mineral resources
- 4) The policies of the department of trade and industry
- 5) Domestically based mining companies
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- 8) The availability of energy, physical infrastructure and the role of state owned enterprises
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- 10) The way forward
- 11) Implementation

1) VALUE ADDITION FROM PRIMARY RESOURCES: ArcelorMittal (AMSA) AND SASOL

We open our discussion with two large companies, ArcelorMittal South Africa and SASOL, as they seem to exemplify how natural resources are made into intermediate products, thereby adding value upstream. They apply technological knowhow to the raw material so that other enterprises may benefit from it and produce final products for the market. Both companies are major players in the economy, foundations upon which many other enterprises are established.

ArcelorMittal SOUTH AFRICA (AMSA)

AMSA has its origins in a company established in 1910 that became the parastatal Iscor in 1928, and subsequently received substantial state funding as a state-owned enterprise to become the major producer of iron and steel in South Africa. In 2001, Iscor was “unbundled” with the establishment of Kumba Resources, which took the iron-ore mining components. Iscor retained the steel plants and accepted obligations to ensure the viability and cost-competitiveness of local steel production, and to pricing that supported value-added manufactured products in downstream industries. In 2006, following a few acquisition and merger deals, it became an independent structure in ArcelorMittal, the world’s largest steel company.

AMSA has five plants, located in Vanderbijlpark, Vereeniging, Saldanha, Pretoria, and Newcastle. Total value-added amounts to about R20 billion per annum and it employs 15,000 people. AMSA uses iron ore and coal and its output consists of flat and rolled steel which is sold to merchants like Macsteel, with 70% sold within South Africa and 30% elsewhere in Africa. None of the output is exported beyond the continent.

The supply of affordable electricity is vital for AMSA, as is low-priced and reliable domestic transportation costs, especially for the supply of iron ore and coal to its plants. AMSA admits that its productivity is half that of other ArcelorMittal plants abroad, and concedes that this and general inefficiency require serious attention by management. Labour costs have increased by 55% since 2006. Vanderbijlpark is a large plant with old machinery that is not well integrated. The production system is labour-intensive and costly; the company claims that it has been loss-making for some years. As a result of the above problems, AMSA is uncompetitive.

It is now well established that the government is critical of AMSA’s pricing policy and insists that it supply steel to local manufacturers at a discount price. AMSA’s response is threefold. First, since the company is loss-making, it cannot afford to do so. Second, the steel merchants are creaming off too much profit. Third, steel comprises only 20% of the end users’ (i.e. manufacturers’) input for production, so a modest reduction of price would not be significant. Nevertheless, it concedes that a significant reduction in price would tend to encourage downstream enterprises.

The issue of price is highly controversial. Previously, AMSA targeted international domestic price parity (IDPP), but more recently it has used import parity pricing (IPP). Government argues that a discount is possible. For a developmental outcome to be achieved, this issue has to be resolved in a new dialogue between the parties. It should include the administrative pricing policies of government agencies and state-owned enterprises such as Transnet and Eskom.

AMSA is an important component of South Africa's industrial power. It procures a large amount of iron ore and coal and R1.5 billion in equipment – of which only 20% is imported, with the rest made in South Africa – and it employs a large workforce. It also implements a government-funded export incentive scheme for fabricated products and offers rebates to firms facing cheap import competition. It claims to contribute R329 million to downstream manufacturing. It has not yet benefitted from the state infrastructure programme that is overseen by the Presidential Infrastructure Coordinating Commission (PICC).

Plans by the Industrial Development Corporation (IDC) and China's Hebei Iron and Steel Group to build a new iron and steel plant for R4.5 billion could bring an element of competition to AMSA in the future.

SASOL

SASOL is undeniably one of South Africa's success stories. Established in 1950 as a parastatal coal-to-liquid fuel enterprise, supposedly to overcome the partial blockade of the apartheid regime, it steadily expanded its scope from synthetic fuels and chemicals to gas, oil refining, fertilisers and other by-products. In 1979, it was privatised and listed on the JSE. It continued to expand its interests to 37 countries while yet remaining a South African-domiciled company. It was listed on the New York Stock Exchange in 2003.

It is particularly interesting that SASOL converts low-grade coal, which has few other uses, into high quality fuels by means of advanced technology, thereby adding value to a natural resource. It is now the world's largest producer of synthetic fuels, with 34,000 direct employees and many more thousands employed in related industries, R800 million invested in infrastructure, and a R95 billion capital spend over the last 5 years. It produces 69% of its own energy needs with a gas energy power plant. It has recently undertaken a study to build a major gas-to-liquid fuel plant in Mozambique.

SASOL's annual petrol and diesel production of about 8 billion litres allows for substantial savings in foreign exchange. Other fuels and chemicals are used in a large variety of commercial products. Of particular relevance here are the polymers that are used in the manufacture of bottles, domestic disinfectants, footwear and packaging.

However, controversy has dogged the company for some time due to its policy of charging import parity prices for the supply of polypropylene to the domestic market. The Competition Tribunal recently imposed a R534 million fine on SASOL Chemical Industries (SCI) and, perhaps of equal significance, demanded that the company charge lower prices to "enhance local production, thereby enabling them to compete more effectively with imported final plastic products, manufacture locally rather than overseas" (Competition Tribunal 2014). It must also sell polypropylene on an ex-works basis without discriminating in price between any of its customers, no matter where they are located.

To illustrate the pricing issue, assume that the factory gate price of polypropylene is x . If the cost of transportation to a foreign customer is y , the price to that foreign customer should be $x + y$. However, due to international competition, the global price is z , and SASOL must adjust its global price accordingly. This has a backward effect on the price in South Africa as domestic customers are also charged z (the "import parity" price) instead of the factory gate price of x . This is grossly unfair

and makes domestic firms uncompetitive against similar imported goods. We end up with the ridiculous example of a South African-owned company operating in Wuhan, China, that converts South African polypropylene into plastic buckets that are then exported back into South Africa (Crotty 2014).

The department of trade and industry (DTI) argues that the substantial potential for growth in downstream manufacturing is thereby stifled, its employment potential not realised, and the prospects of black enterprises frustrated. Such an expansion of manufacturing would also lead to substantial increases in the service industries.

SASOL disagrees, arguing that there is no evidence that a lower price would lead to an expanded market – i.e. that the market is inelastic. DTI Minister Rob Davies' vigorous response is discussed below.

2) THE POLICIES OF THE CHAMBER OF MINES

In the cases above, primary raw materials – coal and iron ore – were converted into intermediate products that were then sold on to merchants or manufacturers for fabrication into final products. In the mining industry, value addition takes place below that level: the minerals that are sold have undergone some processing, but further processing (“beneficiation”, in my terms) is necessary before fabrication can take place.

Commercial mining began in South Africa with the discovery of diamonds in 1867 and gold in 1884. Skilled miners were brought in from Britain and the United States, while cheap, coerced migrant labour was sourced within southern Africa. This workforce was subsequently supplemented by semi-skilled Afrikaners who abandoned farming for more secure incomes on the mines. Mining grew rapidly and became the foundation for the modern economy, spawning many small engineering works and support services in the Witwatersrand. Since this was largely deep level mining, suitable technologies were developed and South Africa became the world leader in deep level mining. Much of the essential equipment was manufactured locally, giving further impetus to industrialisation.

However, the largest company of all, Anglo American, moved its advanced design departments to the UK and subsequently listed on the London Stock Exchange, in 1999, as a global corporation with mining operations in several countries. This seems to have been the precursor for the current moves by several mining companies to separate their South African assets from those abroad, thereby ring-fencing their assets from contagion.

Considerable controversy surrounds the activities of South African companies (which are now largely foreign-owned) and the limited amount of value addition that takes place in the form of smelting and refining. Mining products are generally exported in relatively unbeneficiated form, although some of these minerals are also supplied to the local market.

Most mining companies are represented by the Chamber of Mines of South Africa, which has often defended their practices. The Chamber claims to support beneficiation, but it insists on differentiating between “mining beneficiation” and “manufacturing beneficiation”. It argues that the former requires special capabilities such as heavy engineering, power, transport and financial

services, and the latter requires quite different capabilities, such as product development, design, market knowhow, distribution chains, etc.

Although formerly insisting that the mining industry is, to some degree, a standalone industry that should not be interfered with (Baxter 2009), the Chamber is now anxious to demonstrate that it is the “essential core of the South African economy”, in the words of its chief economist, Roger Baxter. The figures are impressive: 520,000 direct and 830,000 indirect jobs; contribution to GDP 9% direct, 10% indirect; responsible for about 50% of total foreign exchange and 20% of private investment; R5.6 billion in royalties in 2012; local procurement of R389 billion; wages and salaries of R93.6 billion; with an annual footprint of R250 billion.

However, in real GDP figures, mining was smaller in 2013 than in 1994. And, given labour turbulence, loss-making in some deep level mines, considerable uncertainty about government intentions around the Mining and Petroleum Resources Development Act (MPRDA), it is not surprising that the Chamber stresses that the sector is “struggling” and has fears about the future.

To support their case against manufacturing beneficiation, the Chamber falls back on the argument that a country with the natural resources to constitute a “comparative advantage” over other countries that do not have those resources may not be able to develop a “competitive advantage” by means of beneficiation to final product. Such a country has to compete globally at internationally determined prices with countries that are more efficient, have lower labour costs and hidden subsidies. Economies such as Singapore, that have no minerals but are able to manufacture sophisticated machinery, are offered as evidence that what matters for value addition is not so much the natural resources but the capabilities. It is also argued that manufacturing generally takes place near the market rather than near the mines. The Chamber notes that manufacturing is now 15% of GDP compared to 22% in the 1980s, and that manufacturing value-added in South Africa is only about 2.9% compared to China at 8.8%, Turkey at 5.5%, and India at 5.8%.

The Chamber seeks to cooperate with downstream industries while, at the same time, paying much more attention to upstream (procurement) activity. It is, however, totally opposed to discount prices for domestic firms and to the principle of “subsidising manufacturing”. It insists that “the activity of mining and refining should be seen as very different businesses” from manufacturing; that “the availability of a mineral resource does not necessarily translate into the development of manufacturing beneficiating industries”; that “the mining industry should not be called on to subsidise manufacturing beneficiators”; and that what is needed is “an overarching comprehensive and coordinated approach involving all stakeholders and multiple government departments is required” (Baxter 2009).

This is where we find serious differences between the mining companies and the government, along with issues around participation in ownership, black economic empowerment (BEE), etc.

3) THE POLICIES OF THE DEPARTMENT OF MINERAL RESOURCES

Tensions between the mining industry and the department of mineral resources (DMR, then known as the department of minerals and energy) led to the adoption of the Mining Charter in October 2002, which was based on the provision of Section 100(2) of the MPRDA for the minister to develop a broad-based socio-economic empowerment charter for the industry. A 2009 assessment showed that benefits had not reached the levels prescribed. Among many other deficiencies, only 37% of

mining companies had employment equity plans; 26% of companies had achieved 40% of HDSA (historically disadvantaged South Africans) participation at management level; procurement from HDSA companies was 37%; and BEE ownership was 9% (DMR 2009). New targets were then set.

In June 2011, the department published *A Beneficiation Strategy for the Minerals Industry of South Africa*. This stated that “South Africa’s trade with most parts of the world is characterised by the export of raw materials and the import of manufactured goods” (DMR 2011, 20). Further, although the country is “the wealthiest mining jurisdiction... a considerable amount of mineral resources are exported as raw ores of only partially processed” (ibid., iii). The government’s industrialisation policy thus calls for a “paradigm shift in mineral development... to accelerate manufacturing (for local consumption and export)” (ibid.). The document defined beneficiation as “the transformation of a mineral (or combination of minerals) to a higher value product, which can be consumed locally or exported.” ibid., ii)

The document examines prevailing constraints to beneficiation that require an “integrated approach” (ibid., iv), such as developmental prices, infrastructure, limited innovation, research and development (R&D), and shortages of skills. It proposes a few production value chains as examples, including energy, steel, pigment and jewellery. Areas of state intervention include a regulatory incentive, R&D investment, commitment by mineral producers to support beneficiation, skills development, secure energy supply, and access to international markets.

The MPRDA Amendment Bill (Bill 15B, 2013) contains major provisions that could change the shape of the mining industry. Among these is a definition of “mine gate price” as the price (excluding VAT) of a product when it leaves the premises, excluding any transportation costs to the local beneficiator. The Bill also gives the state the right to a 20% free carried interest “in all new petroleum exploration and production rights, and a further participation interest at an agreed price”. Other critical amendments include:

- a production sharing agreement between the state and a petroleum company
- the right of the state to participate in petroleum development
- that the minister must
 - regulate the mining industry to meet national development imperatives... and promote and secure the supply for beneficiation of minerals
 - designate any mineral for local beneficiation
 - take industrialisation into consideration
- that a producer must offer a prescribed percentage of minerals for beneficiation
- that persons may not export designated minerals without the minister’s prior written approval.

The Department defines beneficiation as “the transformation, value addition, or downstream beneficiation of a mineral or mineral product or a combination of minerals to a higher value product over base lines to be determined by the minister which can be consumed locally or exported.” MPRD Amendment Bill B15B-2013.

The MPRD Amendment Bill still to be passed defines beneficiation as:

“beneficiation” [in relation to any mineral resource,] means the [following]-

a) **primary stage**, which includes any process of the winning, recovering, extracting, concentrating, refining, calcining, classifying, crushing, screening, washing, reduction, smelting or gasification thereof;

- b) **secondary stage**, which includes any action of converting a concentrate or mineral resource into an intermediate product;
- c) **tertiary stage**, which includes any action of further converting that product into a refined product suitable for purchase by minerals-based industries and enterprises; and
- d) final stage, which is the action of producing properly processed, cut, polished or manufactured products or articles from minerals accepted in the industry and trade as fully and finally processed or manufactured and value added products or articles.

4) THE POLICIES OF DEPARTMENT OF TRADE AND INDUSTRY

The DTI has long argued for the further industrialisation of the country. Although this objective has had the formal support of the democratic government, in practice the prudent fiscal and monetary policies have meant that the financial commitments were not forthcoming to the extent required. This has had a depressing effect on the department and suffocated the full development of industrial policy and strategy.

Nevertheless, the DTI launched an Industrial Policy Action Plan (IPAP) in 2007/8, followed annually by three-year rolling plans with a 10-year outlook, advocating the growth and diversification of the manufacturing sector.

IPAP Five (2013/14–2015/16) highlighted mineral beneficiation and indicated research in key value chains. It argued for greater attention to downstream beneficiation opportunities as well as deepening the upstream value chains. The proposed research would focus on the following minerals: ferrous (iron ore, ferro-alloys, steel); platinum group metals (PGMs); titanium and pigments; polymers (from coal, gas and oil); mining inputs.

It was anticipated that the research would be done in close liaison with the DMR and the department of science and technology (DST) and would identify industrial infrastructure constraints in realising value chains and ways to overcome them. Energy and transport were among the constraints identified.

IPAP Six (2014/15–2016/17) developed the research on key potential projects in the iron-ore/steel, polymers and titanium value chains. It also examined how Transnet's National Ports Authority, Transnet Rail and Eskom could lower their tariffs to facilitate beneficiation of final products. Several detailed reports have been produced, but the DTI remains frustrated at the lack of progress. Indeed, in the wake of the 2008/9 recession, manufacturing has failed to recover in South Africa –unlike many other developing countries (and the rest of Africa), where growth rates have been restored. Currently growth per capita in South Africa is close to zero and manufacturing is losing jobs.

Frustration is now particularly focused on the major steel and polymer producers and the import parity prices charged to domestic manufacturers. Trade and Industry Minister Rob Davies argued at parliament's recent colloquium on beneficiation that minerals were a depleting resource and that the window of new intervention was closing. He said that we have the capability to establish a competitive advantage and that the government was setting up special economic zones (SEZs). He called for a "new conversation" with these companies, to ensure that

- minerals (e.g. platinum) were available to downstream industries at a discount of about 15%
- pricing should be at the bottom of world prices

- scrap metal should be available at a discount for local users
- some steel products now being imported could be manufactured locally.

Pointing to the competition authorities' negative findings against AMSA and SASOL, Davies suggested that, if the conversation failed to produce solutions, matters would be referred to the Competition Commission for action.

There can be no doubt about the seriousness with which DTI views these matters. It is less clear that there is sufficient will and coherence across the relevant departments to jointly solve the problem and realise government hopes. Silos predominate everywhere. Meetings of high-level cabinet and department cluster committees are used to hear reports rather than develop crosscutting strategies for implementation. Even where legislation enables action to be taken, as with mineral licensing, it seems that little is done in practice.

Paul Jourdan has written at length on mineral value chains, arguing that little headway has been made, principally due to widespread monopoly pricing of mineral feedstocks and the decline of upstream industries and R&D following the offshoring of the old mining houses. He proposes that a structure similar to the PICC be established. But while a silo mentality prevails, no structure can replace the political will to pursue a common purpose that is clearly lacking.

5) DOMESTICALLY BASED MINING COMPANIES

Since many of the large companies have become international in ownership or investment, domestic mining companies, especially black-owned companies, have felt marginalised. The South African Mining Development Association (SAMDA) was set up in 2000, initially to present a united response to the Minerals Bill. Its objectives are to lobby government, encourage investment, promote beneficiation, build alliances and transform the mining industry. A great deal of effort has gone into promoting the interests of historically disadvantaged South Africans.

SAMDA has repeatedly criticised the industry's lack of compliance with the Mining Charter and the MPRDA, particularly the failure to comply with the requirement of 26% equity participation and the lack of ownership in general.

Transfer pricing is seen as a major obstacle to beneficiation. In this practice, a company operating in South Africa sells raw minerals at a lower price to an associated business abroad, where taxes are lower, who sell it on at an international price. SAMDA has lobbied for the examination of transfer-pricing conduct of companies with primary listing offshore since this acts as a disincentive to promote value addition domestically and constitutes a loss of tax revenue to the government. SAMDA also calls for the Mining Charter to be aligned with the DTI's BBBEE Codes of Good Practice.

6) THE CAPACITY OF THE MANUFACTURING SECTOR

Manufacturing contributes 15% to GDP in South Africa, having fallen from 22% in 1980. This compares with China's 34%, South Korea's 28% and Malaysia's 27%. Its value added was 2.9% in 2010–12, compared to China at 8.8%, Turkey at 5.5% and India at 5.8%. Its workforce has fallen from over 2 million in 2008 to about 1.75 million in 2014. The Purchasing Managers Index shows that

South Africa's manufacturing conditions deteriorated in relative terms compared to major trading partners, including China, the US and Germany.

The Manufacturing Circle, an association of medium to large manufacturers in a range of industries, was formed in 2008 to interact with government and attempt to introduce coherence in the industry. Its voice is somewhat subdued, partly due to the general decline in manufacturing, but perceptions of future prospects are not encouraging. Among the problems identified are labour market instability, high wages and input costs, competition from imported goods, low labour productivity, lack of skills, and subdued consumer demand. In some instances, labour instability has led to increased automation or the importation of substitutes. High administrative prices indicate a lack of joined-up government and failure to take crucial decisions. Port charges are wrongly biased against manufactured goods and in favour of raw materials. Law enforcement is weak.

The Circle believes that incentives for beneficiation would promote manufacturing competitiveness and innovation with a culture of entrepreneurship. It argues that numerous domestically based manufacturing firms are located both upstream (conveying and processing equipment) and downstream (fabricated final products) in the mining value chain. It also speaks of the beneficiation of recyclable materials and that a start should be made with scrap metals.

The interventions it wants from government include the protection of intellectual property, the promotion of investment in infrastructure and services to facilitate beneficiation, preferential procurement of locally beneficiated products, and social dialogue.

More generally, manufacturing is facing a lack of technical skills; competition from cheap imports, especially from China (arguably due to government subsidies for inputs); inadequate local procurement; unaffordable wages in small enterprises due to national wage agreements; high municipal electricity rates, etc.

The slow emergence of black entrepreneurs in manufacturing is a major issue that demands research and explanation.

7) SKILLS, TECHNOLOGY AND INNOVATION

Some economists, like Ricardo Hausmann (2014; Hausmann et al 2008), argue that raw material resources are not sufficient for development and that capabilities are decisive, while Amartya Sen and Peter Evans argue for capability and institution-led development. Evans recommends making "national priorities the driving force in economic development" (2014, 234).

The key issue for us is whether South Africa has sufficient capabilities now, or can grow these capabilities in time. Common sense would suggest that, since we possess enormous natural resources, we should develop the necessary capabilities by massively expanding the scope of activities and employment across the industrial value chain.

If ever a country was crying out to expand its capabilities – a process blocked by apartheid – South Africa is that country. Indeed we dare not fail to do so, at the risk of enormous social frustration. The good society we aspire to cannot be built on the foundation of exported ores, with which other countries grow their own value chains through research and higher level production.

We need to substantially expand our R&D spending, create design studios in South Africa and generate capabilities by learning through doing. Our universities must also play a much larger role in expanding our expertise and encouraging innovation. Perhaps this is where our aspiration to build a “knowledge economy” should start.

8) THE AVAILABILITY OF ENERGY, PHYSICAL INFRASTRUCTURE AND THE ROLE OF STATE-OWNED ENTERPRISES

These issues need to be developed by experts in these areas.

9) THE MARKET IN AFRICA

According to Paul Jourdan (2014), Africa has become the largest market for our manufactured exports. Even more important to note is that mining capital-equipment exports to Africa have grown by 400%. This needs to be factored into the discussions about mineral value chain expansion in South Africa.

We also need to take into account the vision of the African Mining Charter presented to the 2014 Mining Lekgotla by the chairperson of the African Union, Nkosazana Dlamini-Zuma (2014). She referred to the need for infrastructure highways linking African countries, for R&D and training centres, and the importance of the Inga Dam hydropower project in the DRC. She also spoke of Thabo Mbeki’s research on illicit financial flows by mining companies, inflated costs, the undervaluation of what is taken out of Africa, non-payment of taxes, and how these amounts exceed foreign aid. In the discussions that followed, it was argued that governments need a clear policy on the control of mining and rail to ensure that foreign mining companies do not neglect national interests in their activities. In particular, communities ought to benefit as well.

10) THE WAY FORWARD

Near the end of parliament’s colloquium on beneficiation, on 12 September 2014, Peter Bruce, the editor-in-chief of Business Day and Financial Mail, launched a vitriolic attack on Minister of Trade and Industry Rob Davies and Minister of Economic Development Ebrahim Patel. He compared them with “demented little animals” who should have been “fired long ago” and referred to beneficiation as a “tumour eating away at the Zuma administration’s brain”, calling it “an unattainable pipe dream”. Citing Margaret Thatcher’s view that the best industrial policy was not to have one at all, he said, “She believed government should get out of the way. She did and it worked. You should try it.”

I doubt that this intervention will be mentioned in the subsequent discussions in parliament, yet it presents an important obstacle to solving our problems. Leave it to the market! And what if the market is “littered with monopolies and oligopolies” (A List 2014 p 16) and much of it foreign owned? Do we have to accept that and allow the status quo to continue?

Curiously, the colloquium seemed to broadly accept that value addition in the interface between mining and manufacturing is desirable. Notwithstanding the argument that the mere availability of

natural resources does not require them to be beneficiated nearby, common sense would suggest that a contiguity of resource and fabrication would have some advantages. On the face of it, these would include a greater continuity of process, a better understanding between the participants, economies of convenience, sharing of skills and resources, and many other unseen benefits.

List argues that the main determinants for customers of industrial inputs are availability, price and quality and of these availability takes priority. “With the need to respond quickly to unexpected, largescale orders, the input must be at the factory gate within days, if not hours. This more modern view of availability clearly privileges local production.” (ibid p3)

This is not to argue that all natural resources have to be in a single value chain in one area or even one country; there are obviously many instances where this is not practical. But we cannot give up on the notion that a country should maximise the advantages that nature has given it, whether it be lovely beaches, good climate, clean air, excellent agricultural products, or mineral wealth. Each must be put to maximum use to benefit the local people and the country as a whole. If any portion of the natural wealth is exported – for acquiring foreign exchange, trade exchanges or other reasons – it should not be disadvantageous to the country. It should certainly not be done in such a way that the resources are depleted without leaving the country better endowed with alternative national assets.

Given the nature of our governmental system and of the private sector, it is also clear is that neither is in a position to go it alone to promote the value chain under discussion here. A joint effort is needed; indeed, a joined-up economy should be the goal. This cuts across many sets of conflicting group interests, but it will better serve the medium- and long-term interests of all. The case for a joined-up economy seems self-evident, but the argument will have to won against stubborn Thatcherite prejudices and those who pursue self-interest at any cost.

A joined-up economy requires coherence and coordination across government, willingness by the private sector to innovate and cooperate, and broad national consensus.

This perspective may not be unwelcome to the Chamber of Mines, which has stated that “greater investment into manufacturing beneficiation requires a coordinated approach across government departments and stakeholders along the value chains” (Baxter 2009). More recently, Baxter (2013) wrote, “we need a much better cooperative partnership between ourselves and government to encourage greater product development and new technologies... We have been talking past each other”.

11) IMPLEMENTATION

In particular, government needs to

- vastly improve the effective and affordable provision of transport, energy, water and all administrative prices to lubricate, and not obstruct, economic development
- implement existing legislation, including the necessary licencing conditionalities
- impose stronger import restrictions with time limits for local product substitutes
- scale up skills training and support for R&D and innovation
- designate certain natural resources
- consider resource rents and/or downstream taxes.

The private sector needs to

- abandon price discrimination against local manufacturers
- adopt serious planning for downstream manufacturing
- procure locally manufactured products and refrain from supplying imported substitutes
- give preference to upstream processing as a foundation for subsequent downstream manufacturing
- improve labour productivity through increased training
- promote BBBEE transformation that actually empowers, rather than enrich, historically disadvantaged South Africans
- consider differential pay scales in small-scale urban/rural enterprises
- give much more attention to SADC and the rest of the continent.

We also need a national effort to generate the necessary political will to create a joined-up economy that includes government, the private sector, labour and social movements. If we do not seek to enhance domestic value addition to our natural resources, others will do so elsewhere, and we will lose out on job creation, upskilling, technological innovation, financial returns and a much stronger GDP. Resource nationalism, now an international trend, encourages economic planning in a developmental state rather than an apathetic or authoritarian state. This is surely preferable to a mechanical reliance on the market, or on knee-jerk calls for nationalisation. It is a way to protect ourselves from the turbulence in the global market economy when the rivalry between the big players disadvantages the small countries.

In light of the above, we need further detailed analysis of specific value chains in the interface between mining and manufacturing, in order to identify interventions that will enhance domestic capabilities and bring immediate returns to business, government, labour and society as a whole. This does not require large-scale research resources. We need a step-by-step approach, one industrial sector at a time, to find practical solutions which work. As they say, you eat an elephant one bite at a time.

While this approach demands some new effort, we need to recognise that an excessive reliance on imports in the basic industries has a negative impact on the economy and is in any case not efficient. Local production under competition, to prevent cost escalation, can generate substantial spin offs all through the economy as well as social benefits.

So what to do? Many economists now argue that import substitution may work in the short term but has many hazards in the long run. A List argues that there are more judicious alternatives such as export taxes, state interventions to set prices for industrial inputs, or government incentives to new producers. He urges that whichever mechanism is used, processing and beneficiation must also be in place before limitations are imposed. (ibid p11) Also, there needs to be some competition between firms to curb price escalation, even if the firms are in the state system as in the Chinese model. For South Africa, an export tax on iron ore and platinum, phased in over time, seem to be feasible, according to List. (ibid p16)

To conclude, we need more information on how mineral value chains are working across the economy. We need decisive joined up government working together to an agreed plan with time frames. We need a joined up economy with all the stakeholders accepting that the national interest

has an overriding priority and that the present stall on investment must end. If we can achieve these goals, the economy will create new jobs and new paths to prosperity. Do we have the will?

ACRONYMS

AMSA	ArcelorMittal South Africa
BBBEE	broad-based black economic empowerment
BEE	black economic empowerment
DMR	department of mineral resources
DST	department of science and technology
DTI	department of trade and industry
HDSA	historically disadvantaged South Africans
IDC	Industrial Development Corporation
IDPP	international domestic price parity
IPAP	Industrial Policy Action Plan
IPP	import parity pricing
MPRDA	Mining and Petroleum Resources Development Act, 2002
PICC	Presidential Infrastructure Coordinating Commission
PGMs	platinum group metals
R&D	research and development

SOURCES

This paper is largely based on presentations to the colloquium on beneficiation convened by Joan Fubbs, Chairperson of the Portfolio Committee on Trade and Industry, at Parliament, 27 August– 10 September 2014.

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I have also benefited from additional insights from the following people:

- Garth Strachan, Deputy Director-General: Industrial Development: Policy Development Division, Department of Trade and Industry
- Mosa Mabuza, Deputy Director-General: Mineral Policy and Promotion, Department of Mineral Resources
- Paul O’Flaherty, CEO, ArcelorMittal South Africa

- Norbert Behrens, General Manager: Group Strategy and Planning, and Haiko Alfeld, Group General Manager: Stakeholder Relations and Community Affairs, SASOL
- Chris Griffith, CEO, Anglo American Platinum

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