

# Article

## The constraints and institutional challenges facing industrial policy in South Africa: a way forward

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### **Abstract**

Industrial policy is a central plank of ASGISA. However, industrial policy in South Africa faces two key constraints – internally, a macroeconomic framework focused on inflation; and, externally, international agreements that limit the scope of industrial policy generally and of export support in particular. In addition, there are a number of institutional and governance concerns. Currently industrial policy lacks coherence with no clear locus of coordination in government; governmental capacities are very limited; distributional conflicts lead to multiple objectives with poorly specified trade-offs; a severe shortage of skills and simultaneously limited training restrain productivity increases; and, finally, strategic collaboration between government and business is largely absent. Two conclusions result. First, industrial policy should not, in the current context, be too ambitious. Second, given limited governmental capacities, a more prominent role should be accorded to the business sector. Institutional mechanisms need to be established so as to allow business to play the leading role in identifying the constraints and opportunities facing a sector and the policies designed to address these. Government then must support those policies that accord with its social and economic objectives. By way of example, the Western Cape Microeconomic Development Strategy (MEDS) is outlined. The central feature of the MEDS is the Special Purpose Vehicles (SPVs) – an effective institutional form that allows for such a strategic collaboration between government and business.

### **Introduction**

In the current discussions and deliberations as to how South Africa could significantly raise its rate of growth, industrial policy has moved to centre stage. The Accelerated and Shared Growth Initiative for South Africa (ASGISA) outlines a number of key targeted sectors that will receive

government support and the National Industrial Strategy (NIS) (at the time of writing still before the Cabinet) proposes a new approach and a considerable expansion of industrial policy supports. An external team of foreign experts engaged by the Treasury to review South Africa's growth policies concurs with the central place accorded industrial policy.

However, industrial policy is currently confronted by a number of constraints. Furthermore, the institutional requirements for designing and implementing an effective industrial policy are very demanding. This paper reviews these constraints and institutional requirements. The paper then goes on briefly to propose a way forward for industrial policy that takes account of, and works within, these constraints and institutional limitations.

## **Industrial policy and manufacturing**

### ***South Africa's manufacturing and export performance***

A number of recent assessments have found evidence of poor performance of South African manufacturing:

- *Output.* Manufacturing output per capita has been stagnant since 1985 (Hausman and Klinger 2006:7). Over the last two decades, South Africa's share of global manufacturing value add and regional (Sub-Saharan Africa) manufacturing value has declined persistently (Kaplan 2004:623-4).
- *Exports.* Over the decade 1992-2002, South Africa's manufactured export growth has been somewhat slower than global growth, slower than Latin American and significantly slower than developing-country growth (Alves and Kaplan 2004:3-5). Post-1960, South Africa performed poorly when compared to all countries with a population of over 4 million and a GDP of at least 25 per cent of South Africa's. South Africa is an outlier in terms of export performance, ranking 50<sup>th</sup> out of 56 countries (Hausman and Klinger 2006: 4). In terms of exports per capita, South Africa also compares very poorly with other resource exporters – Argentina, Australia, Canada and Malaysia. Even if the apartheid years are omitted and only the period 1991-2004 when South Africa's performance improved significantly is considered, '...South Africa still remains among the poor performers internationally in terms of export growth' (Hausman and Klinger 2006:6).<sup>1</sup>
- *Composition of Exports.* South Africa has very low participation in global trade in the most dynamic products and its share is declining (Gibson and Van Seventer 2004, Zalk 2004). None of the manufacturing sectors are significant net exporters – only in minerals is there any significant net

export (Hausman and Klinger 2006:8). Categorised by technological level, South Africa has a very weak presence in high technology products with very little indication of any significant change (Alves and Kaplan 2004). In comparison with its income level, South African exports tend to be unsophisticated, ie proportionately more of its exports are in the less sophisticated products that tend to be exported by countries with lower levels of income. There is evidence that the level of sophistication of a country's exports has an effect on its growth (Hausman et al 2006). Thus, Hausman and Klinger (2006:11) conclude that '...for much of South Africa's history, GDP has been pulled down by low level of sophistication of its export basket'.<sup>2</sup>

### *A focus on manufacturing?*

There is a long tradition in development economics that sees manufacturing as the engine of economic growth and central to technological change.<sup>3</sup> Within this tradition, manufacturing is generally conceived of as possessing three sector-specific characteristics that are not shared by other sectors. It is these sector specific characteristics which are deemed to give manufacturing a particular privileged role in the development process. They are:

- Manufacturing development improves profitability throughout the economy. Strong backward and forward linkages allow for manufacturing growth to substantially and positively 'pull' growth elsewhere in the economy;<sup>4</sup>
- Manufacturing enjoys stronger dynamic economies of scale. Combined with learning by doing, this allows for higher productivity change in manufacturing than elsewhere;
- Manufacturing is the site of major technological innovation. This then diffuses to other sectors raising their technological capacities and their returns.

The above characteristics of manufacturing are combined with the historical observation that all the development 'successes' have been strongly associated with manufacturing growth. Hence, a growing manufacturing sector and growing manufacturing exports is seen as indispensable to economic development.<sup>5</sup>

Poor manufacturing growth and poor manufacturing export performance are seen by Rodrik (2006) and Hausman and Klinger (2006) as having been the central factor retarding economic growth in South Africa. Thus, Rodrik compares the growth performance of Malaysia with South Africa and

attributes Malaysia's higher growth to its superior manufacturing performance (Rodrik 2006:5-7). This conception of slow growth being a consequence of a poor performance of the manufacturing sector is also evident in ASGISA. Thus, ASGISA identifies as a major imbalance a 'hollowing out' whereby non-commodity exporters are unable to compete effectively in global markets (ASGISA 2006:4). Rodrik, Hausman and Klinger and ASGISA therefore share a common perspective that leads them to a policy focus on manufacturing sectors and especially on manufacturing exports.

Moreover, the slow growth of manufacturing is seen as the primary explanation for a low rate of growth in employment. 'The relative shrinkage of manufacturing (along with economy wide skill upgrading) has entailed a collapse in demand for relatively unskilled workers' (Rodrik 2006:3). Since manufacturing is more labour intensive (and especially more unskilled labour intensive) than other sectors an enhanced performance of manufacturing will also enhance employment growth. Enhanced manufacturing growth will accordingly simultaneously meet both growth and equity objectives (Rodrik 2006:4).

However appealing the association between growing manufacturing and manufacturing exports and the ASGISA objectives of raising output and employment appear to be, the empirical basis for such a standpoint in South Africa is not yet established. Output and employment have been increasing most rapidly in the service sector. Moreover, while in general manufacturing tends to have a higher (unskilled) labour intensity than services, there are very significant variations within both the manufacturing and service sectors. Similarly, downstream and upstream linkages vary considerably within the manufacturing and service sectors and while manufacturing as a whole tends to have a higher export ratio, there is again significant variation both between and within the manufacturing and service sectors.

Indeed, some recent, albeit preliminary, work suggests that economy-wide output, employment and income multipliers may be higher for at least some of the services sectors than for a number of the manufacturing sectors (Tregenna 2006:46). Thus, if South Africa's industrial policy is to prioritise particular economic activities, these should not be confined solely to manufactures but should also include service activities. ASGISA prioritises some non-manufacturing services, such as Call Centre and Back Office Operations and the National Industrial Strategy similarly targets a number of non-manufacturing services. However, in their identification of sectors

that may warrant particular support, Haussman and Klinger rely on export data and export data are confined to industrial exports and exclude services. Thus, as Haussman and Klinger state, four of the 14 targeted sectors in the NIS, ‘...do not enter our international trade data and therefore can’t be evaluated’ (Haussman and Klinger 2006:34).

Further empirical work will need to be undertaken to assess employment and output multipliers and the contribution to net exports and hence the prioritising of the different manufacturing and particularly the service sub-sectors.

### **Key constraints on industrial policy**

Industrial policy currently faces two systemic exogenous constraints. The first relates to the domestic macroeconomic framework and the second to international agreements. The discussion here is limited to a consideration of how these constraints impact concretely on current industrial policy in South Africa.<sup>6</sup>

#### ***The macroeconomic framework***

South Africa, in company with a number of other developing countries, particularly in Latin America, has adopted orthodox macroeconomic policies that are focused on ensuring low domestic inflation. These policies have had a considerable measure of success – domestic inflation has declined and there is growing confidence that inflation will remain within the chosen band. However, macroeconomic policies have not brought stability in key prices that matter for investors and particularly for exporters – the interest rate and especially the exchange rate.

South Africa has experienced high real interest rates and significant interest rate movements. This has stifled investment – more particularly on the part of new entrants who tend to rely more heavily on borrowing.<sup>7</sup> With respect to the exchange rate, South Africa has experienced high levels of volatility<sup>8</sup> and (arguably) significant periods in which the currency has been over-valued. There is evidence that the level and especially the volatility of the exchange rate have stifled investments. In a World Bank survey, 76 per cent of firms exporting to the US regarded exchange rate instability as a serious problem, as did 57 per cent of exporters to the other OECD countries (World Bank 2005:97). The exchange rate has been particularly non-conducive to new entrants who have to incur large sunk costs in order to enter export markets.<sup>9</sup>

Taking a different approach, Rodrik has argued that the poor performance of South African manufacturing since 1994 is explained by a decline in its relative profitability. In turn, Rodrik has demonstrated econometrically a negative and statistically significant relationship as between the real exchange rate and the relative price and profitability prevailing in the manufacturing sector. He, therefore, concludes that ‘without a relatively stable and competitive exchange rate, it will be extremely difficult to coax entrepreneurs to make sizable investments in manufacturing’ (Rodrik 2006:23). He has accordingly, proposed a significant change to the current monetary and fiscal regime – namely, that the South African Reserve Bank should seek an ‘equilibrium’ exchange rate that produces a ‘satisfactory outcome’ in terms of tradable output and employment (Rodrik 2006:23).

### **Restriction imposed on industrial policy by international agreements**

New rules and regulations governing global trade and intellectual property embodied both at the multilateral level, and in many regional and bilateral arrangements, have significantly reduced the freedom of developing countries with respect to industrial policy. There are three major areas where restrictions occur – Trade-related Investment Measures (TRIMS); the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Trade-related Aspects of Intellectual Property (TRIPS) (Gallagher 2005). The most immediate impact on current South African industrial policy results from the SCM.

Currently, South African industrial policy has only two explicit targeted sectors – clothing and textiles and autos and auto components. In both sectors, exporters receive support through earning rebates on imports that are proportional to their exports – the Import Rebate Credit Certificates (IRCCs) in respect of autos and auto components and the Duty Credit Certificate Scheme (DCCs) in respect of clothing and textiles. These are almost certainly open to successful challenge in the WTO.

This concern has led to a reformulation of the Motor Industries Development Programme (MIDP). An explicit requirement is that the MIDP be replaced by industry support that is WTO compatible. The SCM prohibits granting subsidies based on export performance. Policies that make state support dependent on export performance, such as were applied in Korea or Taiwan, are now prohibited. Subsidies that are conditional on the usage of locally produced goods are also prohibited. Existent policy for the auto and

auto components sector in South Africa has centered on export support. While exports have risen, the main concern in regard to autos and components is the low levels of local content, particularly in relation to exports. It is not at all clear how a policy can be designed so as to continue to support exports and to enhance local content. More general subsidies such as some form of production allowance are possible. However, these have two major drawbacks.

First, since they now must apply to all output, if the same level of effective support is to continue to be accorded to exporters, this will entail a very significant increase in expenditures. This will almost certainly incur the opposition of a Treasury that is seeking fiscal policies that are non-inflationary. Second, the disciplining and monitoring standard that link the extent of support to the degree of successful engagement in the export market has been removed. This renders such policies both less effective and much more difficult to monitor and control.

The replacement of the MIDP, for example, as a policy of support not for production for export alone but for production in general, will entail very significant increases in expenditures from the fiscus. At the same time, a policy of support for all production whether it occurs in the highly competitive export market or in the protected domestic market, will be likely to result in less efficiency gains and make it much more difficult to reward growing efficiency and competitiveness.

### **Institutional and governance requirements for effective industrial policy**

The institutional arrangements to direct and manage industrial policy effectively are very demanding. Where the institutional basis is weak, the risks of government failure and the squandering of public resources are significantly enhanced.

#### ***Coherence***

Effective industrial policy requires coherence in at least two respects. The first requirement is that there is coherence in terms of the goals and objectives of industrial policy. If industrial policy is defined in terms as favouring or targeting certain economic sectors or activities, as Chang (1996)<sup>10</sup> or Pack and Saggi (2006)<sup>11</sup> do, then it is important that clear criteria are consistently applied to the identification and selection of the economic sectors or activities to be favoured or targeted. Unclear criteria and inconsistent application will result in confusion and dissipate effort. The second requirement is that there is coherence in terms of responsibility

within government such that industrial policy is effectively overseen and directed. If there are multiple ‘sites’ directing and implementing policy, both the design and the implementation of industrial policy will be sub-optimal.

In South Africa currently there are a number of governmental policies that selectively favour certain sectors and activities. In effect, there is much that occurs that is indeed industrial policy, albeit that it is not currently recognised as such. This ‘hidden industrial policy’ includes the following:

- Direct state support for armaments production – especially subsidies to Denel;<sup>12</sup>
- Support to mineral processing – especially subsidised infrastructure and energy to Coega;<sup>13</sup>
- Support to the development and production of nuclear energy plants – direct subsidies to the Pebble Bed Modular Reactor (PBMR);<sup>14</sup>
- Intervention in Upstream Fuel and Chemicals production – the proposed ‘windfall’ tax on SASOL selectively disfavours investment and production in this area.

All of these policies are highly selective. Collectively, they entail very significant and very direct commitments of state resources towards or away from particular economic activities, significantly impacting on the trajectory of growth and investment. They are, in effect, industrial policies.

Each of these selected economic activities embodies different economic characteristics – one’s different from each other and different from the objectives set out in ASGISA and the NIS. To take just two examples:

- The PBMR is very research and high-technology intensive. This project absorbs a very large number of South Africa’s scientists and engineers. The question arises as to whether government should be supporting activities that are highly intensive of the factors that are in most scarce supply? None of the other sectors that are proposed for support in ASGISA or the NIS are near as skill-intensive as the PBMR;
- The mineral processing activities, specifically aluminum, that government is attempting to attract to Coega to anchor the project and justify the significant expenditures on infrastructure, are very capital intensive. Employment creation is minimal. This choice does not accord with one of the explicit objectives of ASGISA and the NIS, namely, that a central objective of industrial policy should be an increase in employment.

This is not to argue that any of these selective interventions will not eventually succeed in their own terms. While ‘the jury is still out’, the PBMR

may result in significant exports, while Coega may attract significant new investments. However, as a consequence of their absorption of significant scarce skills and capital, the economy-wide impact of the PBMR and Coega are likely to be distinctly negative. If government is to favour certain activities, it would do better to favour those that are saving of the factors that are in most scarce supply – namely, skills and capital.

It is noteworthy that many selective interventions are not driven by the Department of Trade and Industry (DTI). For example, support for armaments, the PBMR and Coega are driven by Public Enterprises, while the windfall tax on SASOL is driven by the Treasury. This is not to say that the DTI has no ‘presence’ in these areas. But, while the DTI may be ‘consulted’, in effect policy is initiated and managed by other departments with their own agendas and with little perceived reference to the DTI or the NIS. The conclusions are stark. First, inconsistent criteria are applied to the selection of activities that are favoured by government. Second, institutionally, there is no clear centre in government to coordinate the design and implementation of industrial policy. No ministry has oversight of or provides direction to the totality of industrial policy presently. Lack of coherency in desired policy goals and criteria are complemented and reinforced by a lack of organizational coherency within government.

### ***Strategic collaboration***

Information problems beset investors in developing countries. In particular, the cost functions of new ‘non-traditional’ activities cannot be determined ex ante, but only after the investment has actually been made. Information failures result in economies staying the same course and not diversifying into new activities with associated spillover effects. Rather than conceiving of industrial policy as a set of outcomes, principally altering the sectoral composition of the economy, industrial policy can be seen as a process that entails discovering the underlying cost structure of an economy. This discovery process requires strategic collaboration between government and business. From this perspective, government engages in ongoing discussion particularly with businesses and also other players, such as research institutions. The purpose of this discussion is for government to understand the opportunities and constraints that face investment and simultaneously for businesses to understand government’s objectives in economic development and the restructuring of production and the constraints under which government operates. Structured information exchange between government and business therefore aims at identifying

the barriers to diversification and to the determination of policies that are / likely best to overcome those barriers (Rodrik 2004:3). In this conception, the determination of government policy flows from a process of strategic engagement with business, rather than resulting from a process of autonomous decision making on the part of government.

Developing a well-functioning structured engagement is not a straightforward matter. Strategic collaboration between government and business can take many forms that will necessarily differ as between different national contexts. In South Africa, there have been few examples of a structured engagement. At a national level, the Motor Industry Development Council is perhaps the best example of an ongoing and effective engagement. The Customised Sector Programme (CSP) aimed to set up such mechanisms for each of the sectors. But, only a few CSPs have been completed and accepted by Cabinet. In at least one of these sectors, clothing and textiles, this engagement has effectively been stillborn (*Business Day* January 3, 2007).

At national level therefore, there is currently a very limited institutional basis for collaboration as between business and government. A considerable degree of mutual ‘suspicion’ exists. This manifests in distance and even distrust that is inimical to an effective strategic collaboration. The prevailing model is accordingly one essentially of government making policy albeit often supported by research. Consultation with business generally takes place once government has largely decided on its policy position.

What is at issue here is a radically different model. If industrial policy is to be effective in South Africa, the role of business in the formulation and development of industrial policy must be considerably expanded and this will need to be embodied in new well-defined institutional arrangements. Moreover, where governmental capacities are weak, the optimal role of business in this strategic collaboration will in consequence be enhanced. In South Africa, governmental capacities in relation to industrial policy are indeed very limited.

This is elaborated on below.

### ***Governmental capacities***

The design and implementation of effective industrial policy is heavily dependent on a strong and competent state bureaucracy (UNCTAD 2006:215). Ideally, this bureaucracy should be closely connected with the business community and have a good understanding of their situation. This will allow

for the interchange of information and facilitate the structured engagement outlined above. At the same time, the government bureaucracy should retain a degree of independence and autonomy such that it does not serve narrow sectoral or other interests. This is best encapsulated in the term ‘embedded autonomy’ (Evans 1995).

Currently most of those responsible for government industrial policies are new recruits to their positions. They have a limited understanding of their sectors. So-called sector specialists have very limited, if any, direct work experience in the sector to which they have been appointed. Indeed, very few personnel have experience of working anywhere in the private sector. In South Africa, there is no ‘revolving door’ as between business and government that, for example, has characterised the Japanese MITI.

It is accordingly critical that government seeks to build and enhance its industrial policy capacities, particularly the capacities of sector specialists. This could be done by requiring governmental personnel to acquire experience working in the sector and/or recruiting into government those with such experience directly from the sector. But, this will take some time to effect. In the interim, governmental capacities to develop and implement industrial policies will necessarily be distinctly limited.

In the context of its own very limited competencies, government will be particularly reliant on business for information and market intelligence and accordingly in the formulation and design of effective industrial policies. Moreover, limited governmental capacities will constrain the scope and the depth of industrial policy. Whereas in Japan for example, high levels of competency and in-depth knowledge allowed for the government bureaucrats to engage directly in proposing a large number of significant large-scale interventions and supports for business, such an approach would be currently far from optimal in South Africa.

### ***Distributional conflicts***

Industrial policy entails support to firms. The profitability of those firms enjoying support rises above the market level. Thus, at the heart of industrial policy is the creation of rents. Such rents allow these ‘favoured’ firms to grow at rates that exceed what would have been possible in the absence of industrial policy. The management of those rents is central to the effectiveness of industrial policy.

In South Africa, distributional concerns challenge this perspective. Thus, there is opposition to ‘white’ or ‘well-established’ businesses

benefiting at the perceived expense of 'black' or 'emergent' business. Many policy programmes to support firms therefore provide enhanced support for black-owned and small firms. Industrial policy in South Africa does not therefore only aim to enhance growth of particular sectors or activities; it also aims to enhance growth of those firms in the designated sector or undertaking the designated activity that are black-owned or small. This can dilute the impact on growth. Export support is a case in point. Smaller firms and black-owned firms currently enjoy privileged access to export support. However, since exporting frequently entails economies of scale and a minimal scale of entry, larger well-established firms will tend to have a higher export potential than smaller firms and newer entrants.

Nor are distributional concerns confined to supporting black or emergent businesses. Industrial policies in South Africa are also configured with the intention of raising employment. This concern for employment is not confined to selecting sectors and activities that are held to be more labour intensive, it often impacts on the determination of the policy instruments themselves. To take one example, the Strategic Investment Projects (SIP), was developed to encourage large scale so-called 'propulsive investments'. Government's concern was that South Africa needed to be able to offer incentives to large investors, more particularly large foreign investors, who were being lured to other countries, at least in part, by attractive investment incentives. The incentives were refashioned such that support was conditional on and proportional to employment criteria.<sup>15</sup> Requiring that firms receiving the SIP, in addition to investment criteria, also met employment criteria, reduced its effectiveness as a support to investment and output.<sup>16</sup>

This is not to question the validity of equity/distributional goals entailed in South Africa's industrial policy. But, these goals do have consequences for output growth, rendering industrial policy, at least as presently applied, more problematic in South Africa than elsewhere where distributional issues are of less concern and where the focus can be exclusively (or almost exclusively) on enhancing output.

### ***Skills and training***

The central objective of industrial policy is to enhance the productivity and efficiency of firms. Where protection is resorted to, this should only be a temporary measure whereby 'space' is given to the protected firms to advance their productivity such that they can, within a defined period, compete without government support.

A number of factors will impact on firm-level productivity. Of particular importance in a knowledge-driven economy are human resources – the level of skills. The DTI's industrial strategy lays stress on the central role of knowledge and knowledge-driven activities in securing a competitive edge (DTI 2002). All sectors of the economy, including manufacturing, are becoming increasingly skill intensive, but the supply of skills is severely constrained.

In the World Bank's recent survey of the investment climate, more enterprise managers said that worker skills were a serious obstacle to their enterprises' operations and growth than any other area of the investment climate. Consistent with this, per worker labour costs are very high in South Africa – over three and half times higher than in the most productive areas of China, over two and half times higher than in Brazil and Lithuania and over 75 per cent higher than in Malaysia or Poland. Although wages are relatively high for all types of workers in South Africa, they are particularly high for highly-skilled workers and managers. An additional year of education is associated with an 11-12 per cent increase in wages in South Africa – compared to about 5-7 per cent in developed economies. The high premium paid for education results in salaries for skilled workers and managers that are high by international standards. Despite this skill shortage, South African firms invest less in training and were less likely to have training programmes than in most comparator countries (World Bank 2005:64-66).

Where skills are in short supply, and where in addition training is very limited, industrial policies designed to raise productivity, however well designed and formulated, are likely to have only a very restricted impact.

## **Conclusion**

The two key institutional requirements for an effective industrial policy are the professionalism and capacities of the government and the effectiveness of the strategic collaboration as between government and business. As outlined above, both are currently very limited in South Africa. Moreover, the limited capacities of the government are currently exacerbated by a lack of focus and cohesion around the objectives, content and conduct of industrial policy. In addition, distributional conflicts make it difficult to develop institutions and practices that manage the rents that are a constituent feature of active industrial policies. Finally, the principal objective of industrial policy, namely to raise firm-level productivity, is severely constrained by the current scarcity of skills and the limited training being undertaken.

Two broad conclusions emerge from this analysis. The first is that government should not expect too much of industrial policy. Under current conditions, industrial policy is likely to have only a limited impact on GDP growth. The second conclusion is that the design of industrial policy needs to be fundamentally re-examined. The constraints and institutional limitations outlined above should be factored into a consideration of the scope and the content of industrial policy.

### *A way forward*

What are the implications of the above analysis for the further development of industrial policy?

Industrial-support policies should not be confined to manufacturing sectors. Further work needs to be done to determine the likely output and employment gains consequent upon any expansion of sectors and sub-sectors in manufacturing but also in services.

As regards the constraints, first, a macroeconomic policy that results in both high real interest rates and an exchange rate regime that is (arguably) overvalued and (definitely) highly variable will severely curtail the impact of any industrial policy. This is currently the situation in South Africa and it will need to be addressed.

Second, the constraints imposed by the WTO will require that South Africa's two current sector-specific policies – namely, those for autos and auto components and for textiles and clothing – will have to be fundamentally re-designed. The MIDP has been widely held as a highly successful policy, although this perspective has been strongly challenged by Flatters (2005). Whatever perspective is adopted in regard to the MIDP, it is clear is that the MIDP is no 'model' to be followed in other sectors. Export-import complementation schemes, such as are currently operative in the autos and auto components and the clothing and textiles sectors, are likely to be successfully challenged in the WTO. What has worked in the past (arguably) provides little guide for the future. Moreover, since it will be difficult to confine support programmes solely to exports, any new programmes are likely to require considerable resources. Assessments of the economy-wide implications will need careful consideration – something that has been largely absent from the design of the existent support programmes.

As regards institutional and governance requirements, custodianship and system-wide responsibility for industrial policy should be clearly demarcated within government. The overriding objective of industrial policy is to raise the productivity and efficiency of firms. This is consonant with

the objectives of the DTI. Public Enterprises, Treasury and other government departments have different objectives. Overall responsibility for industrial policy should therefore rest with the DTI. While there may be real or perceived weaknesses in the DTI currently, this should not be a reason for allowing other departments effectively to develop and implement their own industrial policies. Attention should rather be given to enhancing the DTI's capacities to manage and direct industrial policy. The current proliferation of interventionist industrial policies, albeit under other guises, needs to be carefully reconsidered. The desirability of such policies cannot be assessed solely on their own terms. They should also be assessed in terms of how they contribute systemically to the structural transformations being sought for the South African economy as a whole.

To reiterate, industrial policies are essentially best conceived of as primarily growth policies. They should be centrally directed at raising firm-level productivity and efficiency. There is a danger that requiring industrial support measures, in addition, to make a substantial contribution to other equity objectives – notably employment creation and the development of black- and female-owned firms – may serve to blunt the central purpose and efficacy of industrial policy.

Industrial policy supports do necessarily tend to favour certain firms and hence raise returns for recipients. One consequence is that they can therefore entrench existent firms which may then impose additional barriers to entry for new firms. In designing industrial support measures, it is therefore important to attempt to ensure that these measures do not unduly serve to raise the barriers to entry for new firms. Similarly, government will want to safeguard against support measures enhancing capital intensity and resulting in employment loss. Industrial policies must therefore accord with and can make some, albeit modest, contribution to government's equity objectives. In the main, however, equity goals are best addressed through other measures that are specifically targeted to these goals.<sup>17</sup>

The efficacy of industrial policy is heavily dependent on policies implemented elsewhere in government. Of particular importance is the issue of skills. Skills have been identified as currently the key constraint on firm investment and performance. The evidence suggests that the supply of skills is not being augmented and that despite their difficulties in securing skills, firms are nevertheless undertaking very little training.

But, currently the most important constraint on an effective industrial policy lies with government and its institutions. As outlined, governmental

capacities to formulate and to implement industrial policy are currently very limited. One approach to addressing limited government capacities is to ensure a more prominent role for the business sector. Where governmental capacities are very limited, the business sector rather than government may play the leading role in the identification of constraints and opportunities for sectors and in the design of policies to address these.

This is the perspective that underpins the approach of the provincial microeconomic development strategy (MEDS) in the Western Cape. While the MEDS is a provincial strategy, it nevertheless provides some pointers as to how national government might overcome some of its own limitations in effecting an active industrial policy by engaging in a structured and ongoing dialogue with the business sector.

The institutional form for strategic collaboration between the business sector and government is a programme of Special Purpose Vehicles (SPVs). The provincial government has established a large number of SPVs for different sectors and activities, including craft, oil and gas services, IT, clothing and textiles, film, mariculture and call centres/business process outsourcing. The SPVs vary considerably, but typically they are governed by boards composed predominantly of business representatives with the balance being stakeholders from the provincial departments of economic development, labour and academia. SPVs typically employ between two and five full-time staff, with the CEOs and staff being specialists with extensive previous experience in the sector. The bulk of their financing is from government, but most SPVs also raise a significant part of their operating costs from amongst their membership.

The SPVs have two major functions. First, they act as sector or sub-sector development agencies. Towards this end, they encourage and facilitate collaboration between firms in the sector and engage and fund activities that are of potential benefit to the sector or sub-sector as a whole, such as marketing and export promotion. Second, the SPVs are the critical fora for the discussion of government support that is required for sector or sub-sector development. SPVs institutionalise the exchange of information between the private sector and government. Government obtains information as to firms' future investments and the factors that are promoting and restraining investment activity. At the same time, business is informed as to government's objectives and constraints. Business then frames its requests for support in accordance with the objectives of government and within the constraints of government resources. Thus, SPVs act as a transmission belt for information

and a first forum for the discussion between business and government as to desirable policies.

The objective is not merely to develop existing firms, but critically also to enhance opportunities for new entrants, notably small firms and particularly black- and female-owned and managed firms. The provincial government accordingly supports SPVs that are broadly representative, that have considerable legitimacy within the sector and that are supportive of policies that promote the entry of new firms.

Government can have some confidence that policy proposals that emanate from the SPVs will have broad legitimacy within the sector. Government also has the information required to evaluate the likely efficacy of the proposals. The task of government is then to support those proposals that will develop the sector in a manner that accords with governmental objectives of growth and equity.

Moreover, the role of the SPVs is not confined to discussing policy proposals. SPVs may well engage directly in implementation. The provincial government may grant funding support for a proposal that emanates from an SPV and task that organisation with ensuring that the programme is carried out and that the funding is spent effectively. Governmental capacities are not solely limited in terms of policy formulation. Arguably, an even more critical constraint lies in government's capacity to implement. SPVs can act as effective implementing agencies, and thus economise on limited governmental capacities.

As regards funding, the MEDS favours a co-funding mechanism. Many of the market failures are partial rather than total. Firms may not capture all of the benefits, but they are likely to capture some of the benefits. Where some of the benefits are indeed captured by the firms, some of the funding support can and should come from the beneficiaries themselves. Thus, in regard to training for example, since firms will gain at least some of the benefits of training expenditures, government support for training programmes can be partial. This limits the deployment of government fiscal resources. At the same time, this gives government a significant measure of security that public monies are being spent in projects to which the intended beneficiaries, who possess far more information than government as to their real development needs, are prepared to commit their own resources.

The performance of SPVs is closely monitored. Typical output measures are the size of the membership; numbers attending meetings; the number of industry events hosted; enquiries fielded (exports, training, funding);

SMME and BEE firms assisted; exhibits at trade shows and outward-bound missions; trade and investment delegations hosted and training provided. Outcome measures are more difficult, but include businesses established or supported; investments facilitated and jobs created or sustained.<sup>18</sup> This is not the place to enter into a detailed evaluation of the performance of the SPVs. However, very broadly, in terms of the criteria outlined, the SPV programme in the Western Cape appears to be achieving a high level of success.

But, no institutional design is unproblematic or free of risk. The capacities required of government are still far from trivial. There are major difficulties in recruiting the right staff. The larger and the more well-endowed firms will tend to dominate. The danger of governmental capture, always real, may be enhanced where a close relationship is cultivated with business associations and where, in addition, government capacities are weak. These and other risks and difficulties need to be recognised and safeguards put in place. However, despite the risks entailed, in the present context in South Africa, the design and development of effective industrial policy will necessitate a major role for business. The SPVs of the Western Cape provide some pointers as to how this might be effected.

Institutional arrangements will necessarily evolve and change over time. It is of critical importance that the institutional design of industrial policy embodies feedback mechanisms and structured monitoring and evaluation. Very few industrial policies and programmes have made provision for monitoring and evaluation. But, monitoring and evaluation is a constituent part of the strategy adopted in the Western Cape (Western Cape Economic Development and Tourism 2005: chapter 7). Monitoring and evaluation, with the objective of learning from experience, is integral to enabling governmental capacities to grow with experience – a version of learning by doing. As it learns from experience and its own capacities enhance and develop, government will then be in a position to be more effective and also more adventurous in advancing its industrial policies.

## Notes

1. Edwards and Lawrence (2006:7-8), however, see growth in South African non-commodity exports post-1990 at approximately the same level as global growth.
2. Using a different measure of the sophistication of exports, Lall et al find that South Africa's exports are significantly higher than would be predicted by its income level. But, the increase in sophistication has been slow in the period 1990-2000 (Lall et al 2005:18).

3. Broadly associated with Kaldor, others in this tradition include Rosenstein-Rodan, Hirschman, Prebisch, Chenery and Pasinetti.
4. '... the presence of complementarities in investment, production and consumption is considered to be greater in manufacturing than in other sectors because manufacturing activities give rise to more and stronger forward and backward linkages' (UNCTAD 2006:153).
5. This is exemplified by UNCTAD. 'The development of a strong manufacturing sector has been at the core of all successful catch-up experiences over the past 250 years, which suggests that achieving a lasting productivity-based increase in manufacturing is indispensable for a sustained rise in income levels and ultimately the eradication of poverty' (UNCTAD 2006:150).
6. For general discussions of the impact of macroeconomic policy on i) growth and industrial policy, and ii) of restrictions imposed by international agreement, see UNCTAD 2006: 134-46 and 166-79 respectively.
7. Established South African firms tend to rely heavily on retained earnings – not unexpectedly when real interest rates are high (World Bank 2005). But, new firms are much more reliant on borrowing from the banking system.
8. According to Gelb (2004:8), since mid-2001 the Rand has possibly been the most volatile currency openly traded in global markets.
9. For a discussion of the impact of fluctuations in the exchange rate in constraining Latin American exporters, see UNCTAD 2003: chapter VI.
10. Chang (1996:60) defines industrial policy as '... a policy aimed at *particular industries* (and firms as their components) to achieve outcomes that are *perceived* by the state to be *efficient for the economy as a whole*' (original emphases).
11. Pack and Saggi (2006:196) define industrial policy as '... basically any type of selective intervention or government policy that attempts to alter the sectoral structure of production towards sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention i.e. in the market equilibrium'.
12. Denel received an allocation of R2 billion in the 2006 budget. A further allocation of R567 million was made in October (National Treasury 2006).
13. The full extent of the subsidy will only become evident if and when the aluminium smelter project is confirmed.
14. The PBMR received an allocation of R580 million in the 2006 budget. A further allocation of R462 million was made in October (National Treasury 2006).
15. For details of the SIP see *TradeInvestSA* 2005:3-6
16. The extent of the SIP support was dependent, in part, on the perceived impact on employment. Moreover, this was monitored such that if the employment criteria were not, in fact, realised, the SIP could be withdrawn. The possibility of withdrawal further reduced the appeal of the SIP to potential investors.

17. Similarly, policies intended to secure equity objectives, employment creation or BEE, for example, will need to accord with industrial policies, but their primary thrust is equity.
18. I am very grateful to Nigel Gwynne-Evans, Director for Industry Development in the Western Cape, Department of Economic Development, for information on the SPVs.

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