



CHAPTER 5
**TOWARDS A NEW
INDUSTRIAL POLICY IN AFRICA:
TAKING ACCOUNT OF THE
NEW GLOBAL ENVIRONMENT**

Over the past two decades, the global environment has changed significantly in many respects. International trade is increasingly under regulation in ways that limit the policy space available to governments (UNCTAD, 2004). Developing countries are beginning to play important roles in the global market for manufactured goods, with consequences for the ability of African countries to penetrate export markets. In addition, concern for climate change is generating interest in the use of environmentally friendly technologies and methods of production. Furthermore, production is increasingly being fragmented and located across national borders, thereby intensifying competition.

The global financial and economic crisis has also raised serious concerns about the viability of unregulated markets as determinants of economic development. The strategic design and implementation of Africa's industrial development programmes will have to take into account these new realities because they have implications for the choice and feasibility of policies to promote industrialization.

This chapter examines the challenges and opportunities facing African countries stemming from current and emerging international trade rules, the rise of industrial powers from the South, concerns about climate change and the phenomenon of global value chains. Suggestions are also made on how African countries could either overcome the challenges or seize opportunities created by the changing global environment to push their industrialization agendas forward.

A. INTERNATIONAL TRADE RULES

Since the establishment of WTO in 1995, the scope of the rules-based-trading system has shifted from a narrow focus on trade in goods, under the General Agreement on Tariffs and Trade, to broader issues, such as trade in services, intellectual property rights and trade facilitation. Furthermore, unlike in the Agreement, there has been greater enforcement of compliance with trade regulations under WTO (DiCaprio and Gallager, 2006). There are concerns that the widening scope and enforcement of trade agreements and rules have limited the set of instruments and policies that non-LDC developing countries could possibly use to promote industrialization (Njinkeu and Soludo, 2001). With respect to Africa, the shrinking of industrial policy space under emerging and current trade rules is evident in the following areas: the imposition of tariff cuts under the emerging, but not yet finalized, non-agricultural market access (NAMA) negotiations; the replacement of preferential trade agreements with reciprocal economic partnership agreements in

conformity with WTO rules, regulations on subsidies imposed under the Subsidies and Countervailing Measures Agreement, the Uruguay Round Agreement on Trade-Related Investment Measures (TRIMs) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

1. Emerging rules

Tariff liberalization under the non-agricultural market access negotiations

Under the emerging NAMA rules in the Doha Round negotiations, developing countries, with the exception of LDCs, have to reduce their import tariffs on industrial products and bind tariff rates below a certain ceiling. Developing countries have the option, however, of applying deeper cuts in tariff lines in exchange for greater flexibilities, and vice versa. Flexibilities are in the form of exempting a certain percentage of sensitive product lines from tariff cuts as long as their import shares in total NAMA imports do not exceed a certain threshold.¹⁷ However, the exemption of a whole sector from tariff cuts will not be possible. This implies that non-LDC African countries will have less room for pursuing import-substitution strategies behind high tariff barriers or through gradual and selective tariff liberalization. This is further compounded by the insertion of the national treatment principle in WTO laws, whereby foreign firms and foreign goods are to be granted the same treatment as local firms and locally produced goods in the country.

Proponents of NAMA reforms argue that, in a low-tariff world, developing countries will benefit in the form of increased market access for their industrial products to other countries, especially developed countries. For instance, in developed countries the proportion of industrial imports entering on a duty-free basis has jumped over the last 15 years from 20 per cent to 44 per cent. However, critics of NAMA reforms argue that the emerging rules will lead to de-industrialization in countries that are in their early stages of industrialization (Shafaeddin, 2006). Furthermore, they argue that the parameter of interest for developing countries should not be the average industrial tariff rate imposed by developed countries on imports but the actual rates imposed by the latter on the exports of interest to developing countries. It is not clear that such rates have been considerably lowered in return for increased market access. There is also the fear that NAMA liberalization will lock poor developing countries into their current or existing patterns of export specialization. In order to build dynamic comparative advantage in higher value-added activities, entrepreneurs need to be rewarded with higher expected returns in exchange for the higher risks involved in undertaking strategic investments in

new industries and new technologies. However, the emerging trade rules will make it harder for developing countries to turn to selective tariffs and subsidies to provide such returns to their entrepreneurs (Shafaeddin, 2006).

Economic partnership agreements and compatibility with the World Trade Organization

The preferential trading arrangements that existed between the EU and Africa under the Cotonou and Lomé accords must be replaced by the so-called economic partnership agreements in order to make them compatible with WTO rules. Although full economic partnership agreements are yet to be finalized between the EU and most African countries, decisions reached in the negotiations will have important repercussions on the future industrial policy space of African countries. For example, while some proposed economic partnership agreements allow the use of export taxes in special circumstances such as the protection of infant industries, they also specify that export taxes cannot be allowed to increase or that their use is subject to periodic review. In addition, the agreements contain standstill clauses that do not allow countries to increase or re-impose tariffs that had been eliminated and to introduce new tariffs once they have been signed. These two instances represent an important loss of policy flexibility for countries in the course of implementing their industrial strategies and adapting such strategies to changing circumstances. Export taxes have historically been used as a means to support local infant industries, generate value-added by promoting the local processing of raw materials into industrial goods and raise government revenues. Successful examples include support to the plywood industry in Indonesia in the 1980s and support to the textiles industry in England in the period 1275–1660 (Third World Network, 2009). Furthermore, the economic partnership agreements contain a “most favoured nation” clause obliging African countries to extend to the EU any concessions granted to other development partners, whether on tariffs or non-tariffs issues. This may compromise the ability of African countries to grant preferential treatment to developing country partners such as China, India and Brazil that could play an important strategic role in Africa’s industrialization.

2. Current rules

Subsidies

With respect to the use of subsidies as a tool for promoting industrial development, subsidies linked to either export performance (export subsidies) or the use of

domestic over imported goods (local content subsidies) are prohibited under WTO rules, except for LDCs and countries with less than \$1,000 gross national income per capita. When linked to export performance, export subsidies can provide appropriate incentives to domestic firms to invest in building their competitiveness rather than to remain complacent. However, this type of subsidies can no longer be used. Other types of subsidies, for example production subsidies, are allowed, but are now actionable which means that their use can be challenged if deemed to damage the interests of other parties. In import-competing industries with high sunk costs, there may be a case for subsidizing production by domestic infant firms, albeit temporarily, in order to promote greater entry and more competition in the long run. As a result of WTO rules, it is now more difficult to nurture local infant industries through subsidies. However, it is still permissible to use subsidies to promote innovation and regional development and to achieve environmental goals.

Investment measures

The WTO TRIMs Agreement prohibits countries from using local content or trade-balancing requirements. In addition, as discussed in the preceding section, countries cannot subsidize firms to favour the use of domestic inputs over imported ones. This means that these industrial policy instruments used by currently advanced and emerging economies are no longer available to the non-industrialized countries. While Brazil, for instance, was able to use local content requirements to establish a local auto manufacturing industry, Indonesia had to review the local content provisions of its national car programme in 1999 under WTO (DiCaprio and Gallagher, 2006). Under the TRIMs Agreement, countries can no longer use local procurement programmes to minimize import leakage rates, optimize the domestic value chain or promote the building of production linkages across sectors in their industrial policy programmes (UNCTAD, 2007a). The Agreement also prohibits the use of performance requirements in FDI policies to maximize benefits from FDI, such as promoting use of local industrial products, inserting local enterprises in the production chain of transnational corporations and facilitating technology transfer to local suppliers.

Intellectual property rights

The TRIPS Agreement, through its strict intellectual property protection regime, makes it harder for developing countries to access and adapt foreign technology for local industrial development purposes. India was able to take advantage of

a weaker intellectual property regime under the General Agreement on Tariffs and Trade to develop a local pharmaceutical industry based on generic drugs. Such a scenario would not have been possible under the TRIPS Agreement. It has been pointed out that countries such as Japan, Korea, Taiwan Province of China or even the United States, would not have been able to achieve their current levels of technological sophistication had they faced intellectual property protection regimes of the strength required by TRIPs in their early stages of industrialization. Furthermore, there is the concern that such regimes can prevent developing countries from engaging in technological learning through imitation and reverse engineering of mature foreign products in the early stages of industrialization (Lall and Albaladejo, 2003; Kim, 2003).

The emerging rules guiding trade and investment under WTO and the economic partnership agreement will no doubt constrain the industrial policy space of African countries. However, the following points should be noted. First, the negotiations under WTO and the economic partnership agreement are still ongoing and have not yet been cast in stone. Therefore, African countries still have an opportunity to influence the final outcomes of these negotiations to ensure sufficient flexibility in designing and implementing their industrial policies. Second, despite the limits imposed by current and emerging trade rules, there remains some scope for African countries, particularly the LDCs, to engage in industrial policymaking. Third, a few WTO rules, such as the provision of the TRIPS Agreement related to technology transfer from developed countries to LDCs, offer opportunities for African countries to engage in industrialization, as long as they are creative enough in harnessing such opportunities to their own benefits.

There are various ways that African countries can shape their industrialization strategies in response to the challenges posed and the opportunities presented by the current and emerging trade rules.

Make better use of instruments allowed under existing rules. While the scope for pursuing vertical industrial policies has been reduced under WTO, the scope for horizontal and functional interventions has not been significantly squeezed. Consequently, African countries should be more creative in the choice of policy instruments by combining the few vertical industrial policy instruments that are allowed with horizontal and functional policies. Such pragmatism is important for the purpose of achieving economic diversification and building intersectoral linkages that in turn will contribute to industrial development.

Seize opportunities created by the special treatment of LDCs. African LDCs benefit from certain exemptions and special treatment at WTO. For example, under the Everything But Arms initiative, exports of African LDCs benefit from duty-free, quota-free market access to the EU. There are several schemes under the generalized system of preferences that give preferential market access to products from LDCs. However, in order for such unlimited market access to translate into real economic gains for African LDCs, they must be in a position to competitively produce and supply goods on world export markets. Research has shown that such schemes tend to be underutilized or utilized for a narrow range of products (UNCTAD, 2003). As part of their regional industrial policies, African countries should aim at promoting investment and production in African LDCs in order to take advantage of the preferential market access and preferential treatment granted to LDCs under WTO.

Use WTO provisions to further economic development objectives. A few WTO provisions could actually create opportunities for African countries in the course of their industrialization. For example, under the TRIPS Agreement, African countries could secure patents over certain types of natural raw materials that could be transformed into niche industrial products (e.g. endemic plants for pharmaceuticals). Governments can then attract investors to locate industrial activities in their countries in exchange for licensed, exclusive use of the raw materials. Doing so will allow these countries to create a comparative advantage in the production of niche products. The possibility of applying for trademarks, copyrights and geographical indications for certain products could also provide an incentive for African entrepreneurs to invest in the so-called creative industries (e.g. African crafts, African music, African foods) and so generate niche export markets based on culturally derived products that are unique and not subject to intense competition. The TRIPS Agreement could also give African entrepreneurs and governments grounds to fight against imports of pirated goods that are affecting the survival of their local infant industries.

Article 66.2 of the TRIPS Agreement calls for technology transfer from developed countries to LDCs, in exchange for the latter enforcing protection of intellectual property. According to this article, governments of developed countries have obligations to provide incentives to enterprises and institutions for facilitating the transfer of technologies to LDCs. However, compliance by developed countries with the provisions of the article has been limited (Moon, 2008). There is scope for African LDCs to push for a more stringent enforcement of the provisions of the article, as part of securing access to technology for their industrialization.

B. RISING INDUSTRIAL POWERS FROM THE SOUTH

The growing role of large developing countries such as Brazil, China and India presents opportunities as well as challenges for industrialization in Africa. Through the attraction of FDI and non-equity modes of investment such as alliances, partnerships and subcontracting, Africa can benefit from its developing-country partners' expertise, skills and technology in designing industrial programmes adapted to its specificities and endowments. Furthermore, through partnership with developing-country transnational corporations, Africa could develop technologies that are adapted to its industrial needs and produce industrial products adapted to the requirements of its low- and middle-income consumers. However, amid the opportunities also lie the challenges. For example, there is concern that the rise of the large developing country partners in the global market for light manufactured goods may have a harmful effect on sub-Saharan Africa's manufacturing exports (Giovannetti and Sanfilippo, 2009; Kaplinsky and Morris, 2007; Jenkins and Edwards, 2005).

There are also concerns that Africa's growing trade relations with the large developing country partners is reinforcing the region's dependence on commodity exports, thereby inhibiting and delaying structural transformation. Further, the growing demand for commodities has led to a declining trend in the manufactures-commodities terms of trade in favour of commodities (Kaplinsky, 2008). Given the growing need for commodities by emerging economies, it is likely that the current terms of trade reversal may be more than a transient phenomenon. This implies that Africa's industrial development will need to ride against the market tide. Its industrial development will need to proceed, despite rising global prices for its primary commodities and lowering prices for its manufactures. State intervention will be necessary to defy the market from pulling private-sector activity towards low value-added commodities and away from high value-added industry. Industrial policy in Africa is hence necessary to effect a structural transformation that the free market on its own may not command.

A relevant question at this stage is whether African countries can industrialize successfully, given the challenges posed by the rise of more dynamic developing countries in Asia and Latin America. The answer is yes, Africa can, provided it is strategic in designing its industrial development. A few elements of such a strategic design are sketched out below.

African countries should compete on both price and non-price factors. Newly industrializing African economies may find it hard to engage in the traditional industrial growth trajectories based on developing first stepping-stone industries such as clothing, textiles, furniture and shoes and other low-cost segments because of intense competition from emerging economies in those basic industrial sectors (Kaplinsky and Morris, 2007). African countries should aim at adopting, as far as possible, industrialization strategies that from the start are based on product differentiated, innovation-intensive, or technology-intensive niche products. Priority should be given to products that offer continuous upgrading opportunities, and marketing strategies should emphasize quality and branding rather than price competitiveness alone.

Over time, countries such as China and India are likely to aim at moving up in the product value chain, graduating away from producing low value-added labour-intensive products towards manufacturing high-technology, high-capital-intensive goods, if not even move to other global value chains. China's announcement at the end of 2009 of a shift in its manufacturing labelling strategy, away from "Made in China" toward "Created and designed in China" is a clear signal that, in anticipation of wage and cost increases on the Chinese mainland, it is searching for production and assembly locations in other parts of the world. This also fits in with China's "go global" policy. Such an upgrading by China and India will open up opportunities for Africa to fill the manufacturing gap left behind by these two Asian giants in certain segments and categories of global value chains (e.g. manufacturing and assembly segment for labour-intensive or medium-technology products).

Africa can position itself to supply growing consumer markets in the South. Africa needs to stand ready to exploit the large industrial markets that, for example, China and India will generate as its urban middle classes expand in years ahead. It is estimated that by 2030, 59 per cent of the global middle class will originate from Asia, compared with 23 per cent in 2009, because of burgeoning emerging middle classes from China and India (Kharas, 2010). Buyer-driven global value chains will gravitate from Northern markets to the South (Kaplinsky and Farooki, 2010) with implications on the nature of industrial import demand. Demand from these Asian economies for soft commodities such as food and inputs into infrastructure are likely to increase. In developing its relations further with China and India, Africa should aim at forging strategic partnerships with these two countries with a view to positioning itself as a potential supplier in the long run for Chinese and Indian markets in targeted areas such as agro-industry.

Africa needs to develop a strategy in relation to its Southern development partners. Africa must set its own development agenda, with industrial development at its core and let this agenda drive its relationships with its development partners rather than the other way around. As stated in UNCTAD (2010b), African countries must harness and use their partnerships with developing countries to further their long-term development goals. Doing so requires African countries to take a proactive approach to the partnership process. This implies that they should ensure that trade, investment and financial flows from developing countries serve to accelerate their structural industrial transformation as well as to contribute to industrial growth. In particular, South–South cooperation is more likely to contribute to industrialization in the region if African countries mainstream it into their national development plans and gear it more towards the development of productive capacities. A strategic approach to engaging non-African developing country partners could involve African countries granting them access to their natural resources in exchange for the provision of investment, or technology and skill development, in specific manufacturing sectors. It could also involve demanding that a certain proportion of natural resources, for which they are granted access, be processed domestically, perhaps through joint ventures with local firms.

The region could also adopt the strategy of positioning itself as a subcontractor for or as a co-production partner with Southern manufacturing firms either to service directly the African market or to use Africa as an entry point to indirectly export high-quality niche products to Africa's other major developing partners such as the EU and the United States. This may be especially relevant for African countries that do not have natural resources to attract Southern investors. The preferential market access of African LDCs to such markets through schemes under the generalized system of preferences could prove to be an attraction to Southern investors. The acceleration of regional integration could create the large potential markets that can also attract Southern manufacturing investors to African shores. African countries can also offer targeted incentives to their Southern partners to set up special economic or industrial regional zones in Africa. In this regard, African countries will need to coordinate their incentive packages under their regional platforms, such as the Southern African Development Community, the Common Market for Eastern and Southern Africa, ECOWAS or under the African Union to avoid wars of incentives. African countries can use their regional platforms to create regional business corridors driven by Southern industrial investments.

C. CLIMATE CHANGE

The growing concern about climate change and environmental issues in general presents several challenges for African countries in their quest for industrial development. First, African countries have obligations under the United Nations Framework Convention on Climate Change (UNFCCC) to contribute to the global mitigation and adaptation agenda. While there are currently no binding mitigation obligations per se on developing countries, this may change in the future as greenhouse gas emissions rise faster, especially in developing countries. African countries will have to take these future potential developments in climate change negotiations into account when framing their industrial strategies. There is mounting pressure on large developing countries such as South Africa to deviate from business-as-usual practices in order to contribute to mitigation targets. Current and future international obligations on climate change mitigation and adaptation impose constraints on how Africa should industrialize.

Second, as the international community accelerates plans for cutting greenhouse gas emissions in the twenty-first century, industries may face the obligation of monitoring their own emissions, reporting on their emission cuts and complying with environmental standards and legislation. If they fail to do so, penalties may be faced in the form of carbon taxes, withdrawal of subsidies or production cuts. Companies are already building green business models to comply with future outcomes at the international climate change negotiations (OECD, 2010). In the future, environmental friendliness can become another dimension of industrial competitiveness, even more so if climate policies are linked to trade policies. Industries that fail to “go green” may be at a competitive disadvantage in the global marketplace. As the momentum to transit to low-carbon economies gathers pace, African industries may have no choice but to “go green” in the future in order to be competitive on world markets.

But climate change also presents opportunities for Africa. In particular, obligations to mitigate and adapt to climate change and to “go green”, though costly, can actually represent an opportunity for African countries. As a latecomer in the industrial game, Africa has indeed an opportunity to be at the forefront of the green industrial revolution by implementing green industrial development based on low energy-intensity, low-carbon emissions and clean technologies. While industrially advanced economies will have to bear the costs of transiting towards a low carbon economy in the medium to long run, Africa has an opportunity to avoid

such adjustment costs by leapfrogging directly into a clean industrial development right from the start. Doing so will allow the region to develop first-mover advantages over other industrialized economies, while waiting for investment and trade to be integrated in climate-friendly global policies. Future global policy developments for instance may link trade preferences accorded to developing countries to their mitigation and adaptation efforts.¹⁸ A greater number of developed countries may in the future impose environmental standards on imports and favour developing countries that are climate-friendlier production and investment locations. By building a green industrial economy, Africa can place itself ahead of other developing countries in terms of ensuring compatibility between its industrial strategy and its obligations under global climate policies.

African countries should also seize the opportunity presented by concerns about climate change to power industrial production with clean, renewable energy sources. Africa's rich endowment in sunlight, deserts and land positions it as a potential competitive worldwide supplier of renewable energy such as solar power, wind power and biofuels. The development of the renewable energy sector in Africa needs to go hand in hand with industrial development. In particular, renewable energy is needed to fuel the region's industrial growth and can also be a significant component of Africa's industry. African policymakers should redouble their efforts to promote the development and use of renewable energy. In this regard, initiatives such as the one led by DESERTEC, which aims to produce clean solar and wind energy in Northern African deserts to supply Europe, the Middle East and North Africa, should be multiplied.

African countries should also position their domestic industries as suppliers of environmental industrial products. In particular, in response to the increasing competition in global export markets, they should aim at developing a high value-added niche export strategy based on the production of price inelastic and income elastic goods. In this context, the manufacture of low-carbon and environmental technology products targeted at environmentally aware customers – both households and industry – in developed and emerging countries can constitute a lucrative export niche for African countries. The size of this customer base is likely to increase in the future as climate change policies gain momentum and more and more countries switch to low-carbon economies. Examples of such manufactured products may include environmental products that satisfy eco-labels such as organic cotton-based products; hybrid, "eco" and electric cars; power-saving light bulbs; biodegradable cleaning products; renewable energy-powered

batteries; natural paints and certified products from sustainable forests such as paper, furniture and building materials. Another niche segment to be explored is the supply of manufacturing equipment for renewable energy such as wind turbines and solar panels. The manufacturing of clean equipment and clean technology to facilitate environmentally sound industrial processes and low-carbon emissions in other economies such as products for waste management, recycling, carbon capture and storage and biotechnological products is another potential niche.

African countries should consider forging strategic trade partnerships with countries that have committed to become low-carbon economies such as EU countries and China. These countries can offer large potential markets for Africa's green industrial products. Africa has to strategize for its enterprises to integrate into green global value chains aimed at supplying environmental retailers in developed countries. This may require forging partnerships between African enterprises and global environmental companies in the form of subcontracting, joint ventures or equity investment.

To respond effectively to the challenges posed by climate change, African countries will have to address two constraints: how to access the technology and expertise needed to manufacture environmental products and how to finance the implementation of policies needed to build a green industrial economy. Once more, the deepening of South–South cooperation with countries such as Brazil and India is critical. African countries should partner with Southern countries that can facilitate transfers of technology and know-how to Africa and assist in adapting technology to local circumstances. Domestic enterprises in Africa will need to build capacities in absorbing green technologies from its foreign partners, adapting them to its local context and innovating on their own in the area of clean technologies. The region should foster a continued engagement with international organizations such as UNIDO, the United Nations Environment Programme and development banks in order to secure the finance and technical assistance needed for developing and applying green technologies to industry. So far only 13 African countries have established national cleaner production centres that can help promote clean production methods and environmentally sound technologies.¹⁹

African policymakers should also maintain a proactive approach in climate change forums in order to capitalize on developments at UNFCCC to secure finance, technology transfers and capacity-building for implementing Africa's green industrial policy. African countries, for instance, should seek technical assistance from international organizations to tap into the various climate funds available under

the UNFCCC and World Bank umbrellas in order to fund its green industrial policy. African policymakers can also provide incentives to firms and governments from developed countries to invest in its green industry as part of their obligations under UNFCCC to help developing countries mitigate and adapt. In this context, African governments should make greater use of the clean development mechanism to encourage the set-up of clean industrial projects and programmes in Africa by developed partners. As discussed in the UNCTAD *World Investment Report 2010*, incentives for attracting low-carbon FDI should also be considered. The setting-up of low-carbon special economic zones is a case in point (UNCTAD, 2010a).

D. GLOBAL VALUE CHAINS

An important feature of the new global environment is the increased internationalization of industrial production. Production is being increasingly segmented in different stages located in different countries, according to the competitive advantages of each location. This so-called globalization of the value chain, or global value chain, allows producers to improve on competitiveness by making better strategic use of available global endowments, skills and capabilities to lower costs. It also creates opportunities for a greater number of countries to take part in the global industrialization process and in so doing spur their own national industrial development.

By segmenting production into a range of small, narrowly defined tasks, global value chains facilitate the participation of SMEs into international production networks, as it should be relatively easier for SMEs from developing countries to develop comparative advantages in a range of small, narrowly defined items by learning by doing and scale economies (Bigsten and Soderbom, 2009). Participation in global value chains also gives SMEs an opportunity to exploit large, profitable world export markets and engage in industrial and technological upgrading (UNIDO, 2004).

The participation of African enterprises in these global value chains can offer African countries an opportunity to tap into the global industrial export market. For countries that have freshly embarked on an industrialization path, the insertion of their enterprises in global value chains, by forging relationships with foreign investors, can provide an entry point into the global industrial stage. Such insertion can provide opportunities for local enterprises to access international markets, acquire information on export markets and develop technological capabilities through exporting, or learning by exporting (UNCTAD, 2007b). However, the insertion

of firms from developing countries into global value chains can be fraught with difficulties. As pointed out by Kaplinsky and Morris (2003), entry in global networks is determined more by rules set by private actors rather than by governments in trade policies. The large firms in the global value chain – be it retailers, traders or marketers – that distribute contracts to suppliers in developing countries very often set parameters or “rules”, such as environmental and labour standards, quality specifications and process standards.

Another barrier to entry for newcomers lies in whether they can forge relationships with the big buyers in these networks. Lead firms in the global value chains may already be relying on an existing network of suppliers. Their willingness to switch to new suppliers may be low if relationships with subcontractors and suppliers are governed by trust and reputation because of high transaction costs rather than on competitive considerations such as production costs alone. Transaction costs can matter more than simple direct production costs, especially in product lines where quality and timely delivery are determining market factors and buyers have to make significant investments to strengthen capabilities of their suppliers and to monitor them.

Global value chains are often driven by multinational enterprises that are themselves involved in several global value chains. A strategic option for breaking into global value chains consists in African countries positioning themselves as reliable suppliers or subcontractors for global producers such as multinational enterprises in the manufacture of intermediate, semi-finished and/or finished goods. Trade in intermediate goods, for instance, has become the dominant type of trade flows and accounts for around 60 per cent of world exports (WTO, 2010). There is evidence that its increased dominance is due to increased international production, especially the growing importance of the network of multinational enterprises (Kleinert, 2003). African countries can take advantage of the expanding trade in intermediate goods by positioning themselves as reliable suppliers of intermediate industrial inputs for global industrial networks.

Specific measures should also be taken to facilitate the integration of African SMEs into global value chains. UNCTAD (2010c) highlights a series of policy recommendations that are relevant for African industries. It notes that promoting an enabling business environment is a prerequisite for SME’s to integrate into global value chains. This can range from stable macroeconomic policies; streamlining and efficiently applying business procedures, laws and regulations; setting up complementary policies in competition, trade and investment to supporting

human resource development and improving access to finance. Public policy interventions to support SMEs, should, according to UNCTAD (2010c), focus on skills development and training, investments in appropriate technologies for continuous technological upgrading, enhanced compliance with international standards and linkages between SMEs and multinational enterprises via specific promotion measures especially targeting multinational enterprises that are known to establish linkages with SMEs. Other public policy measures would include setting up business development services, promoting clusters such as science and technology parks or industry villages, enhancing intellectual property protection and developing productive capacities.

Despite the advantages of participation in global value chains, there is the danger that, once enterprises start out as low-cost suppliers in a low value-added end of a global value chain where entry is easier, they may remain trapped there. In this context, whether African countries gain in the long run from participation in global value chains depends on several factors. One factor relates to how proactive firms and national governments are at fostering continuous upgrading opportunities for domestic firms in global value chains, building linkages across firms supplying global value chains in different sectors and forging closer relationships with foreign buyers/lead firms in the global value chains. Government-assisted measures such as human resource training, investing in science and technology and fostering linkages between business and scientific and educational institutes may prove indispensable, for instance, to facilitate learning by local firms so that these firms can engage in upgrading over time.

Another factor is the ability of local firms to increase the costs for its foreign buyers to switch to alternative suppliers elsewhere. That is the ability of the local firm to lock in its buyers. This in turn may depend on the type of hierarchical relationships within the chain between the foreign buyer and its suppliers; the degree of support provided by the lead firms to its suppliers for complying with standards; investments on the part of local firms to meet buyers' requirements and how easy it may be for foreign buyers to access same supplies elsewhere. African countries that are commodity rich, for example, are in a better position to lock in their buyers if they have access to a critical raw material, such as gold, diamonds or metals, that is in short supply somewhere else. Resource-rich African countries can market their exclusive supplies of critical commodities to enter as a supplier in commodity-driven global value chains.

E. SUMMARY

To conclude, there are opportunities and challenges presented by the new global environment that African countries will need to take into account in designing and implementing their industrial policies. While current and emerging trade rules have narrowed the policy space available to governments, there is still some room to effectively use trade instruments to promote industrial development in Africa. The analysis of the growing role of large developing countries in global markets, suggests that it may pose a challenge for the expansion of Africa's labour-intensive manufacturing exports. Nevertheless, African countries can overcome the challenge by learning to compete on both price and non-price factors, positioning themselves to supply growing consumer markets in other developing countries and developing a coherent strategy for dealing with their developing country partners.

With respect to climate change, it is becoming clear that African countries will have to take environmental issues into account in the design of their industrial strategies. However, they should also take advantage of the increasing demand for environmental goods to adopt the first truly green industrial development model, power industrial production with clean and renewable energy sources and position themselves as future suppliers of environmental industrial products. Finally, global value chains offer opportunities for African producers to participate in global export markets for manufactured goods but government action is needed to enable firms seize this opportunity. In addition, it is important for African policymakers to recognize that the insertion and progression of enterprises from developing countries in global value chains can be very challenging because of the governance of global value chains.
