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# Discussion Paper: An Industrial Policy for Mozambique

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# Executive Summary

Industrial development is vitally important to Mozambique. Industrialization could help create new businesses and industries, providing opportunities for the hundreds of thousands of new entrants to the job market and the rural poor who move to cities each year seeking work. This paper examines the policy choices for Mozambique by discussing other countries' experience with industrial policy and current efforts in Mozambique to aid industries as well as the economy as a whole.

Industrial policy encompasses a range of government actions and collections of policies to encourage development and production of sectors with potential for growth. Although ideas of what constitutes industrial policy can vary widely, industrial policy typically is vertical, targeting specific sectors and aiding them with subsidies, trade barriers, and other forms of support, even state ownership. But industrial policy can also be horizontal, including infrastructure spending and actions to create a fiscal, legal, and regulatory environment that is conducive to investment and entrepreneurship.

Horizontal policies tend to have the greatest chance of achieving broad-based growth in industrial sectors and generating employment. Developing key infrastructure, creating a business-friendly policy environment, and facilitating the free flow of capital, labor, and other resources would seem to make the most sense in Mozambique, especially at the country's current level of development. These policies would also aid promising new industries.

In contrast, sector-specific policy is risky. Most protection and subsidization of industry worldwide has failed to create internationally competitive firms. Too often, state resources have been wasted in creating uncompetitive monopolies or oligopolies that turn out poor-quality goods for protected domestic markets, with consumers paying the price. Also, sector-specific policies can run contrary to international trade rules. Moreover, such policies must be preceded by robust economic analysis. Developing countries like Mozambique often lack the capacity and financial resources for such studies.

As Mozambique works to develop an overall industrial policy and evaluate the economic impact of current industry-focused initiatives (e.g., purchase of fishing boats and opening of rice mills), policymakers should take into account the work embedded in the draft National Development Plan (*ENDE*) as well as the Strategy for Improvement of the Business Environment (*EMAN II*), which provide numerous horizontal policies that, if implemented, would help industries to develop competitively in Mozambique. It is possible to find a balance that addresses the needs of specific industries and encourages economic growth as a whole.





# Industrial Policy for Mozambique

The worldwide economic downturn that started in 2007 fueled a resurgence of interest among governments in industrial policy. This includes Mozambique, which already was seeking to industrialize. Industrialization could help create new businesses and industries, which in turn could absorb some of the estimated 300,000–350,000 people who enter the job market each year and the 100,000 or so rural poor who move to cities from the countryside in search of jobs (African Development Bank 2013). Without industries and jobs to absorb rural populations into cities, social unrest could increase in Mozambique. The debate centers on the best way to foster industrialization.

One school of thought holds that, at Mozambique's current state of development, industrial policy should focus on improving the business environment, which might encourage more private sector development and investment in various industries, especially manufacturing. Improvements in policies that make the business environment friendlier to the private sector, coupled with policies, spending, or both to encourage infrastructure development, education, and health—benefiting all of Mozambique's economy—may be more worthwhile than investments in specific sectors.

On the other side are those who advocate targeted policies aimed at supporting or even subsidizing specific industries. Without such policies and investment, advocates argue, Mozambique will never be able to develop a competitive industrial and manufacturing base. Only public investments that kick-start an industry, or policies designed to protect or even subsidize a sector, will enable Mozambique to boost growth, create jobs, compete internationally, and develop its industrial base.

To contribute to the discussion of what constitutes an appropriate industrial policy for Mozambique, this paper explores definitions of industrial policy, examines other countries' experiences with industrial policy, reviews current industrial policy work in Mozambique, and outlines considerations for defining an industrial policy for Mozambique. Even though the viewpoints discussed here vary drastically, it is possible to strike a balance that addresses the need to support specific industries and promote economic development in general.

## **1. DEFINING INDUSTRIAL POLICY**

Embodying a government's strategy for promoting growth in manufacturing and processing sectors, industrial policy has long been understood to encompass interventions or measures that focus on promising industries. Interventions and measures, however, can also be less targeted. Dani Rodrik, a Princeton University professor, is among the contemporary advocates of industrial policy (2004).

An industrial policy intervention usually aims to enable, support, or improve the competitiveness of domestic industries. Such interventions can be targeted (vertical) or economy-wide (horizontal).

The premise underlying horizontal interventions is that *neutrality* should be the essential feature of government action in the economy. Governments should provide public support for economic development in *all* sectors: that is, provide economic infrastructure, create incentives for investment and development of human capital, and tailor the legal, institutional, and regulatory setting to generally promote economic growth. The identification of specific areas or activities to which resources should flow should be left to the market (Ciuriak 2011). Horizontal interventions focus on the general business environment and include financial support of research and development (R&D), credit availability (or the creation of development banks), tax incentives that promote certain activities (e.g., R&D or capital investment), other incentives to encourage development of transport and energy infrastructure, and activities that can benefit all manufacturers. Mozambique, for example, encourages the production of natural gas to meet the energy needs of industries (although exporting gas may hold wider economic benefit).

Many believe, however, that certain industries and companies would not exist or, where they exist, would not grow without targeted policies. This strategy of “picking winners” through vertical interventions is essentially an effort to correct market failures that keep industries from growing. Vertical interventions focus on particular industries or sectors and include financial support in the form of subsidies, loans from domestic banks, or equity participation through the establishment of public corporations or nationalization of firms or entire industries (temporarily or indefinitely); and trade measures, such as import or export restraints, antidumping or countervailing duties, nontariff measures, and regulatory exemptions (e.g., Canada does not require work permits for the film industry).

## **2. ARGUMENTS FOR AND AGAINST INDUSTRIAL POLICY**

Proponents of industrial policy, particularly vertical policy, tend to believe the government can intervene in markets to good effect. The chief opponents can be described as *laissez-faire*, or free market, advocates. The latter might support and favor horizontal policies, such as reform of the business environment and promotion of private sector-led development as a means of economic development and job creation. In that regard, industrial policy and reform of the business environment overlap to support common goals. Focusing on those complementary areas and objectives may be a good way of moving the dialogue forward on industrial policy in Mozambique.

### **Supporters of Industrial Policy: Interventionists**

“Economic interventionists” argue that government can contravene free market principles by instituting policies or otherwise taking action to promote economic growth, create jobs, increase wages, control prices, address market failures, and a variety of other laudable political or economic objectives. Interventionists, for example, might urge the government to provide financial support to a firm on the verge of bankruptcy, especially if the economic disruption caused by bankruptcy outweighs the cost of support.

They might also advocate for high import tariffs or import bans in some sectors to give domestic industries room to upgrade and become more competitive against foreign suppliers, a practice known as import-substituting industrialization. Here, the rationale is that domestic industry might be capable of keeping production costs below those of foreign rivals if given sufficient protection, at least initially.

In arguing for industrial policies, interventionists often cite market “coordination failures.” The premise is that a range of complementary inputs and services from the public and private sectors, as well as simultaneous public sector investments, are necessary for an industry to be viable. The development of copper processing, for example, requires construction of smelters, sufficient electricity to power the smelters, and adequate roads to transport processed items. Without public investment in energy and transport infrastructure—or targeted industrial policies—private sector investment in the industry is unlikely. Likewise, a start-up in one industry might require simultaneous investment in other industries in the supply chain if it is to remain viable. A multinational firm developing a megaproject will likely have its own supply chain or be capable of developing related industries necessary to make the megaproject viable.

Interventionists, such as Rodrik, might also argue that government support is necessary to facilitate the establishment or expansion of industries that benefit people other than those in the industry and that improve general welfare, depending on the cost of the policy versus the intended benefit. Therefore, it is argued, the governments need targeted industrial policies to spur the necessary investment in any given industrial sector.

Picking winners—deciding which sectors or industries a government should support—is challenging. Governments must undertake and consider original research and economic cost-benefit analysis before developing such policies. Collaborative discussions between the public and private sectors, through high-level “competitiveness councils,” could aid Mozambique's government in setting policies aimed at help firms increase their competitiveness and enhancing Mozambique’s competitive advantages. Effective policies can be designed only after through research and a robust public-private sector dialogue.

But are industrial policies the best route for promoting economic growth and job creation?

### **Opponents of Industrial Policy: Laissez-Faire Adherents**

Opponents of industrial policy generally favor a laissez-faire economy in which “comparative advantage” operates freely. They believe in an economic environment in which transactions between private parties occur without undue government restrictions, tariffs, and subsidies.

The private sector and market-based economic mechanisms, they believe, do the best job of creating employment, stimulating private sector development, and increasing economic growth. If market failures occur, or if industries don’t materialize, it is because poorly designed policies keep the private sector from undertaking the desired economic activity. Improving these poorly designed policies will help to encourage investment, job creation, industrialization, and ultimately economic growth.

They believe that if these horizontal or economy-wide policies are not corrected, even industrial policies or public investments in industries will not help them be internationally competitive. Any supported industries will still be subject to the economy-wide legislation and other barriers that will add costs and keep the industry perpetually uncompetitive. The uncompetitive industries will continue to require subsidies or protection from the government, and this situation will lead to overall welfare losses to the economy.

In addition, those opposed to industrial policy argue that government officials tend to be naturally disposed to seek more power and authority and use economic interventionism to obtain these. This then leads to governments playing a direct role by establishing state-owned or subsidized enterprises, funding existing businesses to ensure their survival, or imposing restructuring.

Opponents of industrial policy believe that government can limit sector-specific industrial policies and instead set economy-wide ground rules for general business regulation as well as for labor and capital markets, and set broad national priorities and roadmaps. These enablers would help support private sector investment and promote industrial development, especially in manufacturing.

Opponents disagree with Rodrik's view that strategic collaboration between the public and private sectors can help governments design industrial policy to encourage the 'right' industries. The opponents believe that even an optimally designed industrial policy can lead a country to specialize in sectors in which it does not have comparative advantage. By specializing where comparative advantage is absent, a country diverts investment, labor, and other resources that could have been used to produce something better or more competitively in another sector. Perhaps in the case of Mozambique, the resources are diverted from activities, such as developing infrastructure, which lay the groundwork for benefiting the entire economy. Furthermore, one begins to wonder why "losers" (e.g., the industries that were not picked by government and received no support) were left out. In those cases, were the losers not politically connected enough or did not have resources to bribe or lobby officials?

In Mozambique, the constraints on a firm are typically horizontal, such as red tape, insufficient infrastructure, and limited human capacity.

## **A Middle Ground**

John Weiss, in his 2013 paper for the Donor Committee for Enterprise Development (DCED), argues that horizontal policy interventions have strong complementarities with business environment reform. In fact, we can consider business environment reforms to be a subset of industrial policy interventions. We can see this through Mr. Weiss's argument:

[Business environment reforms aim] to reduce or remove, as much as is practical or desirable, barriers to the free functioning of markets, whether they be price controls, minimum wage legislation, restrictive regulations, administrative delays or lack of legal protection for property rights. The theoretical model behind these ideas implies that if markets are decontrolled, this will create a level playing field and allow the more efficient private firms to expand relative to the less efficient ones...Horizontal IP [industrial policy] interventions have the same goal as regulatory and legal reforms, as they are designed to make markets work more effectively by

compensating for "market failures" such as lack of information and external effects, or by removing monopoly or monopsony structures. They offer incentives or public goods equally to all firms with the intention of improving the functioning of markets. Their rationale is thus directly complementary to the logic behind [business environment reforms] BER.

To the extent that Mozambique can find complementarities between their industrial policy efforts and reform of the business environment, the Mozambican economy might benefit. Most of the focus of industrial policy, as Weiss points out, should be horizontal—or policies that could potentially benefit all industries.

By promoting horizontal policies, governments may do more for encouraging industrial development than focusing on specific sectors and picking winners. For example, developing key infrastructure, creating a business-friendly policy environment, and facilitating the free flow of capital, labor, and other resources into the promising new industries, and the corresponding flow out from the declining or industries that are not industrializing (in the case of Mozambique, perhaps subsistence agriculture) may seem to make sense in Mozambique. The rationale of industrial policy under the middle-road scenario would therefore be not to protect, subsidize, and guarantee the survival of all the present firms and jobs; nor would it be to pre-select all the firms and jobs that will get government's financial favors, while expressing polite regrets to those not so favored. It is, rather, to promote a flexible, dynamic, and full-employment economy.

The Mozambique Ministry of Planning's next draft National Development Plan (*ENDE*) seems to do a good job at aligning these two objectives. However, other experience in Mozambique (e.g., the recent purchase of fishing boats, channeling domestic supplies of natural gas—a potentially valuable export commodity—to develop a fertilizer industry or as direct inputs into industry, and the government directly entering into rice milling in Chokwe) seems to contradict what is written in the government's official development plan.

### 3. INSTITUTING INDUSTRIAL POLICY

Deciding when to institute industrial policies is important. The level of economic development of a country, along with the political environment, often can help determine the success of industrial policy. Most countries that have had successful industrial policies normally have the precursors (e.g., a business-enabling environment with policies that promote private sector competitiveness; macroeconomic stability; an open trade policy; welcoming attitude to foreign investors; functioning judicial system; developed infrastructure) to ensuring their industrial policies result in globally competitive industries. In those countries, the industrial policy was indeed a jump-start for an industry and occasionally succeeded but more often failed. Countries that lack the precursors have often wasted considerable time and financial resources trying to develop industries. This is also true of countries with the precursors.

Rodrik (2004) partially illustrates the point:

Imagine an economy with a well-behaved government that has done its Washington Consensus homework. Macroeconomic instability is not a problem, market interventions are minimal, trade restrictions are few and far in between, property rights are protected, and contracts are enforced. Will the type of entrepreneurship that

is required to build up non-traditional activities be amply supplied? There are good reasons to believe that the answer is no.

Rodrik makes the case for a dialogue between government and the private sector to collaboratively design industrial policies—but only when all the correct precursors are in place. In developing countries like Mozambique that lack some of the necessary precursors (infrastructure, business-friendly policies, etc.), sector-specific industrial policies most likely will not work as intended. This strongly argues for the development, at least initially, of horizontal or economy-wide policies (e.g., policies that focus on the business environment, infrastructure) rather than sector-specific policies (e.g., supporting rice mills, fertilizer plants, fishing boats).

## Thorough Analysis and Study Needed

Countries that choose to develop vertical industrial policies must conduct robust economic analyses. In developing countries, including Mozambique, the capacity and financial resources to adequately carry out such studies may be lacking, or better used for other development activities.

Should Mozambique wish to pursue vertical industrial policies, any proposals should be accompanied by an economic impact analysis and analysis of commercial viability that comprises

- A list of the industries (winners) that are selected for aid, and an indication of why these industries were selected. This analysis should include commercial viability studies as well as realistic impact assessments of whether the current business environment, infrastructure, and human capacity requirements are available to ensure the sustainability of these industries in Mozambique.
- A list of the industries that will be harmed by the policy—for example, in the case of limiting natural gas exports, the economic consequences of receiving a lower price for natural gas used in domestic industries compared with the higher price for gas on world markets.
- Estimates of economy-wide welfare gains or losses from supporting protected industries.
- Estimates of the number of jobs saved or created in the selected industries and destroyed or jeopardized in other identified industries.
- A statement of purpose and an affirmation of the national and public interests that are sought both by saving and creating jobs in the winning industries and destroying or jeopardizing jobs in the losing industries.

The major challenge is having governments properly evaluate the costs and benefits of various industrial policy initiatives. This evaluation should be done in close cooperation with the private sector and development partners. In many cases, setting up competitiveness councils and applying agreed-upon frameworks for assessing industrial potential and using government resources to unlock that potential is necessary.

## 4. CASE STUDIES

In the previous two sections, we saw how horizontal or economy-wide policies can benefit all potential industrial sectors. We also saw the importance of getting the precursors of a modern

economy in place should a government decide to undertake sector-specific policies. In this section, we will look at some vertical or sector-specific industrial policies.

Sector-specific industrial policy remains controversial worldwide. There have been successes, but also, as the *Economist* magazine pointed out in 2010, many expensive failures. Industrial policies have been designed to support or restructure old, struggling sectors, such as agriculture or textiles, or to try to construct new industries, such as robotics or nanotechnology (or in the case of Mozambique, fertilizer plants and rice mills).

## Successes

### ***U.S.: The Internet***

The United States government funded the Defense Advanced Research Projects Agency, or DARPA, an agency that created ARPANET, the predecessor of the Internet. Though widely cited as the product of a successful industrial policy, DARPA does not maintain its own labs and much of its budget is contracted out in search of high-potential new concepts—DARPA works with private companies, universities, and laboratories to bring concepts to fruition. DARPA's annual budget (2013) of over US\$2.8 billion supports more than 2,000 contracts with companies, universities, and laboratories throughout the United States. DARPA's role may be seen as horizontal because of the agency's focus on research and development and on pursuit of innovations—advanced materials, biology, weapons, and various other technology—that benefit all sectors of the economy.

### ***Mexico: Automobile Industry***

Mexico's experience with the automobile industry illustrates how foreign direct investment can contribute to industrial development in the host country. Mexico took advantage of horizontal improvements in the trade and business environment through reforms pushed through by the North American Free Trade Agreement (NAFTA). NAFTA required Mexico to improve its trade and business environment and provide guarantees to foreign investors, and created a certainty and predictability in the business environment that prompted massive direct investment in Mexico by U.S. car manufacturers. European and Japanese auto manufacturers followed suit, and many domestic investors started firms that made automobile parts and components.

### ***Taiwan: Orchids***

Taiwan has traditionally grown and exported sugar, an industry that has been depressed by low international prices and for other reasons. To replace sugar crops on farmland, the Taiwanese government decided on a \$65 million government investment program to develop a world-class orchid industry. The government pays for a genetics laboratory, quarantine sites, shipping and packing areas, new roads, water and electrical hookups for privately-owned greenhouses, and an exposition hall—everything except the cost of the greenhouses. It also provides low-interest credit to farmers to help them build the greenhouses (Bradsher 2004). This investment has resulted in Taiwan becoming a preeminent orchid producer and host of an annual orchid fair.

### ***Chile: Wood***

Chile, principally during the military regime of the 1970s, intervened to create industrial policies in forestry. To help develop its pine timber industry, the Chilean government approved legal changes that protected land purchased under the scheme from subsequent expropriation. It also approved cash payments to the pine timber developers covering 75 percent of the initial cost of planting. And the government offered subsidized credit lines to forestry companies. Wood remains one of the country's major exports as seen in Chile's export data and, thus, an example of successful industrial policy.

### ***India: Software***

The Indian software industry has become internationally competitive due to selective policies by the Indian government. To help build the human capacity base, India supported five technological institutes and two management institutes. This, coupled with the introduction of trade-related industrialization policies, which allowed for duty-free imports of computer systems if importers used those computer systems to export software and services worth twice the value of the imported computers, helped the software industry off the ground. In the 1980s, the government formed a public-private software export-promotion council that looked carefully at policies necessary to continue to develop the software industry. As a result of some of the council's recommendations, India liberalized import rules for materials needed for the software industry, and software was explicitly targeted as a key sector for export promotion. India also created software technology parks (STPs), which helped provide the necessary basic infrastructure for private companies to export software. Tax breaks were given on company profits and income for entities in any free-trade zone, any software-technology park, or any special economic zone; the breaks amounted to 100 percent of the profits derived from the business. (Lin 2012). These various policies combined to help India develop an internationally competitive industry.

## **Expensive mistakes**

The number of unsuccessful and costly examples of industrial policy appears to exceed the number of successful cases. Many governments that nationalized industries abandoned that costly approach and shifted to deregulation and privatization. Some of the best-documented cases of forays into industrial policy come from Sub-Saharan Africa, including Ghana and Mozambique. After independence, many African countries attempted industrial policy; no Sub-Saharan African nation generated internationally competitive industries.

### ***Ghana: Footwear***

Tony Killick provides a good overview of industrial policy's failure in Ghana (2010). He discusses in great detail examples of industrial projects from the early 1960s and illustrates in one case after another how inefficient and costly they were. He shows that cost-benefit calculations were ignored and inefficient investment projects undertaken for the sole purpose of attempting to industrialize Ghana. One example was a cattle-based industrial complex:

The footwear factory ... would have linked the meat factory in the North through transportation of the hides to the South (for a distance of over 500 miles) to a tannery (now abandoned); the leather was to have been backhauled to the footwear factory in Kumasi, in the centre of the country and about 200 miles north of the tannery. Since



the major footwear market is in the Accra metropolitan area, the shoes would then have to be transported an additional 200 miles back to the South.

### ***Indonesia: Automobiles***

Automobile production in Indonesia dates to 1927, when General Motors began assembling and selling automobiles in the Indonesian market. With the growth, popularity, and utility of these automobiles, the Indonesian government began to recognize a strategic value in developing a national automobile industry. GM's production facilities were nationalized in 1950, but production stopped due to a shortage of foreign exchange. Then in 1968, consistent with the views of leading economists and the advice of international donor agencies, the Government strove to develop an independent industrial sector through import substitution (ISI) policies, with the automotive industry at center stage. Recognizing that automotive parts were central to the manufacture and production of automobiles, the government created trade policies that blocked imports of automotive parts in order to encourage production in Indonesia. The effort resulted in the domestic production of only a few of the items, for example tires and headlamps, scheduled for use in the assembly of automobiles.

In 1993 the Government introduced incentives, which aimed to encourage local automobile manufactures to produce automobile parts locally. The incentives came in the form of lower import duties on components, subcomponents, semifinished materials, and raw materials. Again, these efforts had minimal impact on development of a domestic automotive industry.

Finally, in 1995, the Government made a fundamental policy shift away from protectionism and toward a market-oriented approach to encourage sector-specific industrial development through technology transfer, best-management techniques, and capital inflows through foreign direct investment. This policy was soon abandoned, when on February 19, 1996, the Indonesian Ministry of Trade and Industry announced a new "National Car Project" to foster development of an indigenous automotive industry. Under the Project, automobiles produced locally by an Indonesian company using an Indonesian brand name and using only locally produced parts would be considered a national car. Companies given the national car status by the Indonesian Government were exempted for three years from paying import duties on imported parts used to produce the national car. Consumers did not have to pay a luxury-goods tax when purchasing the national car. Immediately after the new policy was announced, the Government awarded the national car status to *PT Timor National (TPN)*, a company owned by Tommy Suharto, the youngest son of President Suharto, who had no experience in the automotive industry and also did not have a manufacturing plant to produce the national car. *TPN* received a US\$690 million loan from the Indonesian government to build a production facility. None of these efforts resulted in a national car or even a domestic automobile industry.

After the 1997 Asian financial crisis, Indonesia was forced to move toward a free market-focused economic policy, opening the door for foreign capital into the auto industry in Indonesia. None of these industrial policies helped Indonesia to develop an automotive industry. Only when Indonesia began to improve its business environment and pursue market-oriented policies to entice foreign investors to establish an industry did Indonesia begin to industrialize the automotive sector (Institute for Trade & Commercial Diplomacy).

### ***Mozambique: Textiles***

Mozambique has made numerous attempts at intervention in industry. A case in point is Mozambique's costly attempt at developing a textile industry in the 1980s through Textil de Mocuba, Texmanta, and Textafrika. (Cockroft 2004)

Textil de Mocuba, a huge complex of buildings in the city of Mocuba, was conceived as becoming the largest producer of fabric on the African continent, but never became operational. It now sits dormant, with 148 brand new and never-used Sulzer looms, considered the best looms in the world and now costing more than \$20 million *each*.

Texmanta in Pemba is another example. Twenty-four wide Somet Master looms sit rusting outside the *Texmanta* factory. Wiring suggests that there were originally 48 looms.

Textafrika was the largest functioning mill in Mozambique, a vertically integrated cotton mill with an installed capacity of 12 million linear meters a year. The mill spun up to 30,000 tons of lint annually using local cotton from concessions, which it held, and employed 3,000 or more workers.

Today, none of these mills are operational. In addition, Belita, a garment producer with investment from Mauritius, closed its doors in 2009 because it was unable to remain competitive due to red tape, including labor issues and customs delays for importing material used in garment production. Belita, which had been producing garments for name brands like Gap in the U.S., had taken advantage of preferences under the US Africa Growth and Opportunity Act (AGOA), and had been provided industrial free zone (IFZ) status in Mozambique.

It would be easy to present many pages of similar examples from developed countries as well as from developing countries and Sub-Saharan Africa. In France, the discontinued Concorde supersonic passenger jet (developed with the British) was a technical success but economic failure, and France's nuclear energy program has been marred by costly mistakes which likely could have been avoided through increased international private sector involvement. The U.S. bailout of Chrysler in 1979 was costly to taxpayers. Requirements to protect U.S. shipping interests were found in 1999 to cost the U.S. economy far in excess of the benefit to U.S. shipbuilders (U.S. International Trade Commission). Yet developed economies can better absorb the failures than less-developed ones. What can be said is that most government protection and subsidization of industry did not create internationally competitive firms. On the contrary: those forms of intervention have led to uncompetitive monopolies or oligopolies producing poor-quality goods for protected domestic markets. Consumers typically pay the price for these distortions.

## **5. IMPLICATIONS FOR TRADE**

Sector-specific industrial policies can run contrary to many current international trade rules and commitments Mozambique has made in the World Trade Organization (WTO), the Southern African Development Community (SADC), and other bilateral agreements. Mozambique should take account of these commitments when deciding on industrial policies. To avoid negative economic consequences, policymakers should analyze the possible implications of government subsidies or investment in commercial activities before committing to either.

For example, Chile offered subsidies for new exports then had to eliminate the subsidies after the WTO (1997) found them to be noncompliant. Similarly, export bans have recently been in vogue, such as on minerals (Indonesia), and wheat (Russia and Argentina), but these run contrary to the free trade principles in the WTO. Mozambique banned exports of cashews and considered banning exports of cotton to promote local value-added industries. Many times, these policies can lead to negative value added and lower income to those needing it most—farmers.

State-owned Enterprises (SOEs) and subsidies have also been receiving considerable attention from the WTO. SOEs may receive different kinds of subsidies, and government ownership may make it easier to obtain benefits. Government provision of equity capital can result in an enterprise owned or partly owned by government being considered as an SOE according to WTO rules. The equity infusion can be considered as a form of subsidy, triggering countervailing under WTO. Government purchase of stock in a company can also be treated as a subsidy, especially if payment for that stock exceeds market prices. Any subsidies received, either by SOEs or any private enterprise, fall under general WTO subsidy rules as outlined in the WTO Agreement on Subsidies and Countervailing Measures (SCM).

Under the SCM, a subsidy can be categorized in one of three categories: prohibited, actionable or non-actionable. If a country is suspected of providing subsidies, a second country may request that a Dispute Settlement Body (DSB) panel be established to investigate. If a member country is found to be providing a subsidy, the WTO may recommend that the country withdraw the subsidy without delay. If an actionable subsidy is found to have harmed another member, the subsidizing member must take steps to remove the adverse effects or must withdraw the subsidy (Xie 2002). The implications of this rule for SOE commercial transactions could be profound. In the case of the Chokwe rice mills, or a much larger investment in the commercial fishing boats, a WTO decision could require Mozambique to alter its contract, for example, with the French supplier of the fishing boats.

As the next section shows, vertical or sector-specific industrial policies that use government investments could run contrary to the international trade rules to which Mozambique has committed to adhere. The result could lead to disputes under WTO.

## 6. POLICY IN MOZAMBIQUE

Mozambique's past and current industrial policies include horizontal and vertical measures, following international experience, have largely failed, not because they were poorly designed, but because they were, for the most part, not implemented. Current efforts into industrial policy are a mixed bag, as we will see below.

*Mozambique's Industrial Strategy Policy (1997).* This Industrial Strategy Policy, approved by the Council of Ministers through Resolution number 23/97 of 19 August 1997 sets out a reasonable industrial policy for Mozambique. It encompasses numerous horizontal policies designed to generate industrial development. For instance, on the role of the state, the policy states:

“The role of the State is essentially to guide, regulate and monitor the development of industry and to create the conditions that stimulate industrial

activity. The intervention of the State is achieved through: the establishment of an industrial policy; the creation of a conducive environment which facilitates investment and production; and the implementation of a system of incentives to economic activities including the construction of infrastructure, auxiliary investment especially in training, infrastructure and industry support services.”

The policy goes on to talk about a number of horizontal initiatives to aid in industrial development on industries in Mozambique, such as creation of industrial free zones, promoting quality, development of human resources, improving the legal framework for the industrial sector, and improving access to imports. It would serve the current debate well to again carefully study Mozambique’s Industrial Strategy Policy of 1997 as it provides a suitable framework for promoting horizontal policies to spur industrial development.

***Ministry of Industry and Commerce (MIC) 2007 Industrial Policy.*** Mozambique’s most recent industrial policy was developed by MIC in 2007. It targeted particular sectors (e.g., textiles and apparel) and generally focused on a range of horizontal policies designed to address the competitiveness of the chosen sectors. However, failure to make real progress on implementing the main points of the industrial policies (e.g., customs reform, inspections, labor issues) meant that the required reforms to the business environment were never carried out, resulting in the closure of some textile and apparel firms.

***MiTur’s Tourism Policy.*** Another example of horizontal policy is the Ministry of Tourism’s (MiTur) identification of key investment sites, known as anchor sites as they will provide the initial investment and serve as an anchor to attract other investors in the tourism industry. Elaborate plans were developed with support from the International Finance Corp. and USAID to create resort development companies and put in the horizontal policies (business environment, infrastructure, etc.) for investors to quickly invest in tourism in Mozambique. However, these plans ran into several obstacles, such as not being able to secure clean and clear title and an inability to adequately value the land.

***MICs current industrial policy proposals.*** MIC is developing another industrial policy. It is understood that *Fundo para Ambiente de Negócios (FAN)* project will support MIC in development of the industrial policy. The focus of the policy is as yet unclear, but two main points are certain: (1) any horizontal policies included in the new MIC industrial policy must have high-level commitment to implement—failure to do so may result in waste of resources; and (2) any vertical industrial policies included in the new MIC industrial policy have a high chance of costing the government valuable resources.

***MPDs current National Development Plan (ENDE).*** The Ministry of Planning and Development (MPD) has recently developed a draft National Development Plan (the July 2013 draft), which was being discussed and made final as this discussion was being written, and which proposes an industrial policy for Mozambique over the next 20 years. *ENDE* has the objective of economic development through diversification. The draft starts with outlining a few key horizontal “pillars” for industrialization: development of human capital and infrastructure; and organization, harmonization, and institutional coordination for implementing the policies. The

draft focuses on four priority sectors for industrialization: (1) agriculture and fisheries; (2) transformative industry; (3) mineral extractive industry; and (4) tourism.

The draft focuses on a few key horizontal policies to realize the plan: private incentives for the mobilization of investment and development of small and medium enterprises (SMEs) in the sectors; and public investment. And the unpublished draft states on page 10, point No. 36, that “to achieve these objectives, it is necessary to improve the business environment through the development of infrastructure, access to finance, increased efficiency in public administration, and macroeconomic stability of the country.”

The draft appears to be a good and positive attempt at supporting a range of horizontal measures designed to improve the overall conditions for a range industrial sectors. Even at the sectoral level, *ENDE* appears to propose reasonable policies to support the development of potentially competitive sectors for Mozambique.

**Other industrial policy initiatives.** Outside of *ENDE*, there appear to be some initiatives or proposals for industrial policies by individual government agencies. Perhaps *ENDE* aims to bring a cohesive industrial policy and strategy to Mozambique and coordinate some of these proposed disparate industrial policy measures.

- (1) **Development Bank.** The creation of a development finance institution (DFI)—or development bank—aims to overcome the difficulty in accessing finance in Mozambique. However, creation of the DFI in itself will not adequately address constraints in the financial system in Mozambique, which prevents private sector banks from taking risks, reducing interest rates, and making finance more readily accessible. Instead, efforts should focus on (a) improving the legal and regulatory environment in the finance sector and (b) encouraging market-focused tools for improving access to finance.
- (2) **Natural gas for industry.** A major issue with natural gas revolves around revenues from gas to be used as cash (e.g., royalties and taxes) or in kind (direct use of gas for industry). Proponents argue that in-kind is an easy and inexpensive way to support industrial development through the direct use of gas in various industries. It is argued that this would create a value-added industry and expand economic development. Cash, on the other hand, could support the development of a host of other horizontal industrial policies that could generate conceivably better returns. Cash could be used for infrastructure development; for human resource development; and for general activities to improve the business environment. The additional cash might be used for health and education activities. Or it might be used for general civil service reform and an improved pay structure for civil servants, which would attract and retain higher-caliber civil servants.

In-kind use of natural gas creates a number of issues that need to be resolved, such as how the natural gas could be deployed in the economy, at what price, under what mechanisms, and to whom. One sector targeted for development using natural gas is the fertilizer industry. But without detailed economic analyses and commercial viability studies, it is as yet unclear whether fertilizer could be a competitive industrial sector for Mozambique.

Decisions on cash use involve whether revenue should be set aside in a sovereign wealth fund or development bank, or used in ongoing government operations. Either way, use of

the cash from royalties and taxes might be of more benefit to Mozambique than potentially costly mistakes at picking industrial winners and promoting potential downstream industries such as fertilizer.

- (3) *Chokwe rice mills*. The Ministry of Agriculture (MinAg) has provided a small factory capable of processing four thousand metric tons of rice a year. MinAg argued that Chokwe needs three more similar units to be able to process all the rice harvested. MinAg believes that increasing the availability of processing would encourage farmers to grow more rice, increasing the region's competitiveness. The reality, according to the individuals who run the mills, is that they really have little idea of how to run the mills.

Instead of creating the conditions for the rice mills to be internationally competitive and sell the mills to private sector investors, the government decided to buy the three additional mills. Business environment, infrastructure, and human capacity issues, to name a few, may potentially render these mills ineffective and uncompetitive, leading to more-expensive rice for Mozambique citizens and continued government subsidies and protectionist measures to keep the mills operating.

If rice production and industry are important to Mozambique, surely horizontal policies designed to attract private investment would be a better option than direct government investment in the sector.

- (4) *Fishing boats*. The government of Mozambique announced in 2013 the creation of *Ematum*, which is 61 percent owned by government interests, and the \$300 million purchase by the company of 30 boats. The idea of this industrial policy is to use commercial fishing from the boats to generate revenues to support naval operations and patrols of Mozambican waters. Again, this is an example of a vertical industrial policy, apparently unsupported by commercial viability studies or related analysis of the eventual competitiveness of the sector. The venture, should it proceed, will be potentially another costly example of an industry that will require heavy government subsidies to run and keep in operation, subsidies that could be potentially better used in other horizontal initiatives such as reform of the business environment.

## 7. CONSIDERATIONS FOR MOZAMBIQUE

So what should an industrial policy for Mozambique look like? As shown in this paper, industrial policy can be complicated. Narrowly defined, industrial policy can comprise very directed, sector-specific, or vertical, policies or initiatives that cover state support (e.g., subsidies or trade barriers) or even state ownership. Alternatively, industrial policies can include a very broad set of economy-wide, or horizontal, policies that could potentially benefit all industrial sectors (e.g., business environment reform, investments in infrastructure). MPD's *ENDE* appears to be making a good start at organizing the principals of an industrial policy. But that raises the question of why MIC also wants to pursue a vertical strategy?

A few main points outlined in this paper could be used to discuss how Mozambique should work to develop industrial policies. Key points include:

*Vertical industrial policies have often failed.* Vertical, sector-specific industrial policies have failed more often than succeeded. Should Mozambique decide to pursue industrial policies without a strong private sector involvement and support and economic and commercial viability

(and related economic analyses) in areas such as state intervention in rice mills or fishing boats, or requiring natural gas use in fertilizer production or restricting exports of natural gas, these endeavors will very likely be added to the long list of costly failures in industrial policy. And they will divert resources from putting in place the business-environment policies, infrastructure, and health and education systems necessary to help Mozambique grow economically.

***A strong business environment matters if a country wants to successfully pursue vertical industrial policies.*** Most industrial policies that have succeeded have been in developed countries, or in those with a good business-enabling environment with policies that promote private sector competitiveness, possessing macroeconomic stability; an open trade policy; a welcoming attitude to foreign investors; functioning judicial system; and developed infrastructure.

***Sound economic analyses are required to effectively pursue industrial policies.*** Economic analyses are required to help decide which sectors a country can competitively pursue and the economic and social effects of pursuing those policies. Such due diligence and economic analyses are often expensive. With limited human and financial resources, a country may be better off allocating them to other development and poverty-reducing activities.

***Vertical industrial policies often run contrary to WTO and other trade commitments.*** Export restraints, subsidies, or state control of commercial activities can often lead trading partners to raise issues in international forums, such as the WTO, and perhaps lead to retaliatory actions, such as suspension of trading preferences or implementation of countervailing duties.

***Horizontal policies designed to improve the overall business environment are preferable to vertical industrial policies at Mozambique's current stage of development.*** Improving the enabling conditions for all sectors of Mozambique's economy creates an economic environment in which all potential industrial sectors could flourish and thrive. Investments in horizontal policies can also spur additional local and foreign direct investment in industrial sectors. Without a well-functioning business environment, related infrastructure, human capacity, and other pillars of an economy, the ability of vertical policies to produce economically competitive enterprises will be limited and will usually entail costly economic losses.

***Commitment to implement horizontal policies is essential.*** Horizontal policies can be difficult to design and implement. Mozambique has devised horizontal policies in the past, which have failed to develop industries. For example, the Ministry of Industry and Trade (MIC) developed a detailed industrial policy for the textiles and apparel sector in 2007. The policy entailed a host of horizontal measures intended to spur the development of the sector. However, failure to implement the plan and reform business-environment related issues in the textile and apparel sector led textile and apparel firms (e.g., Belita) to close. The same is true for tourism-related industrial policies. Both USAID and the IFC have invested significant resources in trying to spur anchor tourism sites throughout the country, which have failed to materialize and bring international investors. The main reason for failure is that horizontal policies (e.g., the business environment and infrastructure) have not been conducive. Focusing on addressing horizontal industrial policies would be likely to have far more impact than any vertical measure.

*Setting up a high-level competitiveness council can help address issues of sectoral competitiveness.* We've seen that in many countries with successful industrial policies, such as Chile, high-level competitiveness councils have been established, with support from the president and key economic ministers, combined with domestic and international private sector representatives, and that these are often a necessary first step in looking at both horizontal and vertical policies.

*Integrating into global value chains or production linkages to multinationals already operating in Mozambique may be a good option for encouraging industrial development.* If Mozambique tries to target pieces of global value chains or link to multinationals already operating in Mozambique, industries will start to develop. Furthermore, if the Mozambican private sector cannot make these linkages, it points to the simple fact that more effort needs to be spent on addressing factors that prevent these, which are typically issues surrounding the business environment. Mozambique needs to address various constraints on the business environment and foreign investment that keep the private sector from tapping into value chains. Positive steps include: (a) diversification of the product mix into a wider array of new and more sophisticated goods and services, as well as diversification of export destinations; (b) moving up the quality ladder in existing export products (adding to demand); (c) improving productivity in existing export sectors (reducing costs); and (d) upgrading to higher-level tasks within existing production networks.

## **Possible Next Steps**

As Mozambique works to develop an overall development policy as well as evaluate the economic impacts of various current industrial policy initiatives (fishing boats, rice mills, etc.), policymakers should take into account the draft National Development Plan (*ENDE*) as well as the Strategy for Improvement of the Business Environment (*EMAN II*), which provide numerous horizontal measures that, if implemented, would help industries to develop competitively in Mozambique. Policymakers can also consider setting up a high-level competitiveness council, made up of ministers, key private sector representatives, and donors, to engage in dialogue and help identify and implement policies that could help to develop competitive industries in Mozambique. At the same time, policymakers should again carefully consider the economic impacts of some of the current industrial policy initiatives currently underway to ensure that scarce financial resources are directed to activities that can generate meaningful returns to the citizens of Mozambique.





# References

- African Development Bank. 2013. African Economic Outlook 2013.  
<http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2013/PDF/Mozambique%20-%20African%20Economic%20Outlook.pdf>.
- Bulletin of the Republic 1<sup>st</sup> Series, No. 32, 2<sup>nd</sup> Supplement, *Industrial Strategy Policy, Approved by the Council of Ministers, Resolution No. 23/97 of 19 August, 1997*.
- Bradsher, Keith. 2004. Once Elusive, Orchids Flourish On Taiwanese Production Line. *New York Times*, August 24, A1.
- Cockroft, John. 2004. *Textile and Garment Sector in Mozambique*. Washington: USAID.
- Ciuriak, Dan. 2011. *The Return of Industrial Policy*. Ottawa: Ciuriak Consulting Inc,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1929564](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1929564).
- DARPA. 2013. Anual budget. <http://www.darpa.mil/NewsEvents/Budget.aspx2013>.
- Economist*. 2010. Picking winners, saving losers. August 5.  
<http://www.economist.com/node/16741043>.
- Institute for Trade & Commercial Diplomacy. n.a. Case Studies. The Dispute Over the Indonesian National Car Program.  
[http://www.commercialdiplomacy.org/case\\_study/case\\_carA.htm](http://www.commercialdiplomacy.org/case_study/case_carA.htm).
- Killick, Tony. 2010. *Development Economics in Action: A Study of Economic Policies in Ghana. (2nd edition)*. Oxford: Routledge.
- Lin, Justin Yifu. 2012. India's IT industry and industrial policy. *blogs.worldbank.org*, May 5.  
<http://blogs.worldbank.org/developmenttalk/india-s-it-industry-and-industrial-policy>.
- Rodrik, Dani. 2004. *Industrial Policy for the 21st Century*. Cambridge: Harvard University, John F. Kennedy School of Government.  
<http://www.hks.harvard.edu/fs/drodrik/Research%20papers/UNIDOSep.pdf>.
- U.S. International Trade Commission. 1999. *The Economic Effects of Significant U.S. Import Restraints (Second Update 1999)*. Investigation No. 332–325.  
<http://www.usitc.gov/publications/332/pub3201.pdf>

Weiss, John. 2013. *Strategic Industrial Policy and Business Environment Reform: Are they Compatible?* Donor Committee for Enterprise Development (DCED). [http://www.businessenvironment.org/dyn/be/docs/256/Strategic\\_Industrial\\_Policy\\_and\\_Business\\_Environm.pdf](http://www.businessenvironment.org/dyn/be/docs/256/Strategic_Industrial_Policy_and_Business_Environm.pdf).

WTO. 1997. Chile's trade regime leads to strong economic growth, but increasing emphasis on regional agreements complicates trade policy (Press release). [http://www.wto.org/english/tratop\\_e/tpr\\_e/tp60\\_e.htm](http://www.wto.org/english/tratop_e/tpr_e/tp60_e.htm).

Xie, Xuejun. 2002. WTO Rules on State-Owned Enterprises and Implications for Chinese SOE Reforms. *Perspectives*. Vol. 3, No. 6. [http://www.oycf.org/oycfold/httpdocs/Perspectives/18\\_093002/WTO\\_Rules.htm](http://www.oycf.org/oycfold/httpdocs/Perspectives/18_093002/WTO_Rules.htm).