



# AID-FOR-TRADE CASE STORIES

## INDUSTRY-SPECIFIC POLICIES



**UNDERTAKING INDUSTRY-SPECIFIC PRO-ACTIVE POLICIES**



One of the hot controversies in development economics is the topic of industrial policy – that is, government policies targeted at promoting the growth of particular sectors. The purported purpose is to foment development in sectors in which countries have a latent comparative advantage, where there are positive spillovers in terms of technological advancement, employment, or other social purposes (e.g. poverty reduction or gender), and where policy can offset the costs of “discovery” of new products. As Harrison and Rodriguez-Clare (2009) argue, however, the argument for protection only carries weight when the country adopting the protection has a latent comparative advantage, such that the protection can later be removed.<sup>1</sup> Instruments typically used are tax breaks, credit and budget subsidies, reservation policies in government procurement, and trade protection. In trade policy, instruments have included trade-related investment measures, sectoral restrictions on foreign and/or private investment, and subsidies to technology policy.

Dani Rodrik, among others, has been a leading proponent of industrial policies to promote competitiveness. Much of his view is predicated on offsetting the “discovery” costs essential to diversification, and to the desirability of certain product portfolios that lend themselves to inter-industry spillovers, an argument elaborated by Hausmann and Rodrik (2003). One justification for industrial policy generally is that it can help countries move into higher technology products that are more likely to lead to faster growth rates. Hausmann and Klinger (2006), extending work by Hausmann and Rodrik (2007), argued that certain types of products lend themselves to more rapid movement into other newer products or otherwise produced externalities, which were more amenable to rapid structural transformation and productivity growth.

Others, such as Pack and Saggi (2006), have taken a more critical stance, arguing that failures have been as common as successes, and that other variables, besides industrial policy, could as likely explain positive outcomes in regions such as East Asia.<sup>2</sup> Harrison and Rodriguez-Clare (2009), in one of the most comprehensive review of the empirical literature, conclude that the evidence is inconclusive. In reaching this conclusion, they draw a distinction between “hard” and “soft” industrial policy. “Hard industrial policy” in their formulation includes tariffs and nontariff barriers, exports subsidies, and tax-breaks for foreign and domestic corporations. They find little evidence that these policies can be predicted to lead to more rapid growth or diversification. They contend that these policies are too easily entrenched and are more easily subject to manipulation by interest

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<sup>1</sup> To be efficient and enhance incomes, the industry has to be able to survive without the protection (the Mill test) and the discounted present value of the gains compensate for the losses to consumers from the temporary protection (the Bastable test). Harrison and Rodriguez-Clare (2009) note that rarely in practice are these tests actually performed. The absence of these tests explains why “infant industries” benefitted from decades of protection until the 1990s.

<sup>2</sup> See Rodrik, Dani (2004) “Industrial Policy for the 21<sup>st</sup> Century” CEPR Discussion Paper 4767 London, and Rodrik, Dani (2008), “Normalizing Industrial Policy” Commission on Growth and Development Working Paper 3, Washington for the economic arguments; Robert Wade (2003) for the political economy arguments; Nolan and Pack (2003) and Pack and Saggi (2006) for critical reviews of the empirical underpinnings of Rodrik’s interpretation of East Asia; Harrison and Rodriguez-Clare (2009) for a detailed review of the economics and empirical literature; and Lederman and Maloney (2010) for a more trade-focused review, and by implication Easterly and Reshef (2010) for Africa.

groups. On the other hand, their formulation of “soft industrial policy” -- namely “programs and grants to, for example, help particular clusters by increasing the supply of skilled workers, encouraging technology adoption, and improving regulation and infrastructure” (2009:76) – is often effective. A key characteristic is that these policies tend to expose supported activities to import and export competition rather than protect them from it.

Focusing on exports, Lederman and Maloney (2010) probe in detail whether “what you export matters” and whether that would justify more aggressive industrial policies. Their conclusion is that: *“First, what you export probably does matter. Externalities exist...and there is no reason to believe that they are associated with all goods equally... Second, the literature still offers us no confident policy guidance on what those goods might be. ...Our bottom line is that “How you export matters more.”* (2010:85) That is, the way a country deploys its resources to raise productivity is more important than the basket of goods they produce.

### **What do the case stories tell us?**

Industry-specific policies surfaced frequently in the case stories. The instruments used only infrequently mention the broad instruments commonly debated in the literature – tariff and nontariff protection at the border, tax expenditures, subsidies and procurement as well as measures proscribed by the WTO, such as performance requirements and export subsidies.<sup>3</sup> More common are measures for specific industries to provide direct technical assistance on production techniques, help with meeting standards, upgrading quality, information about foreign markets, concerted government efforts to overcome specific transportation or other constraints in the value chain, and often coupled with some small amounts of subsidies. The measures in the case stories tend to conform to the “soft industrial policy” of Harrison and Rodriguez-Clare (2009) or industry-specific versions of what Newfarmer, *et al.* (2009) called “pro-active” government policies.<sup>4</sup> These policies are intended to remedy market failures (such as in information about export markets), to increase exposure to competition by actively promoting entry, and/or addressing bottlenecks in the supply chain to lower the costs of trading.

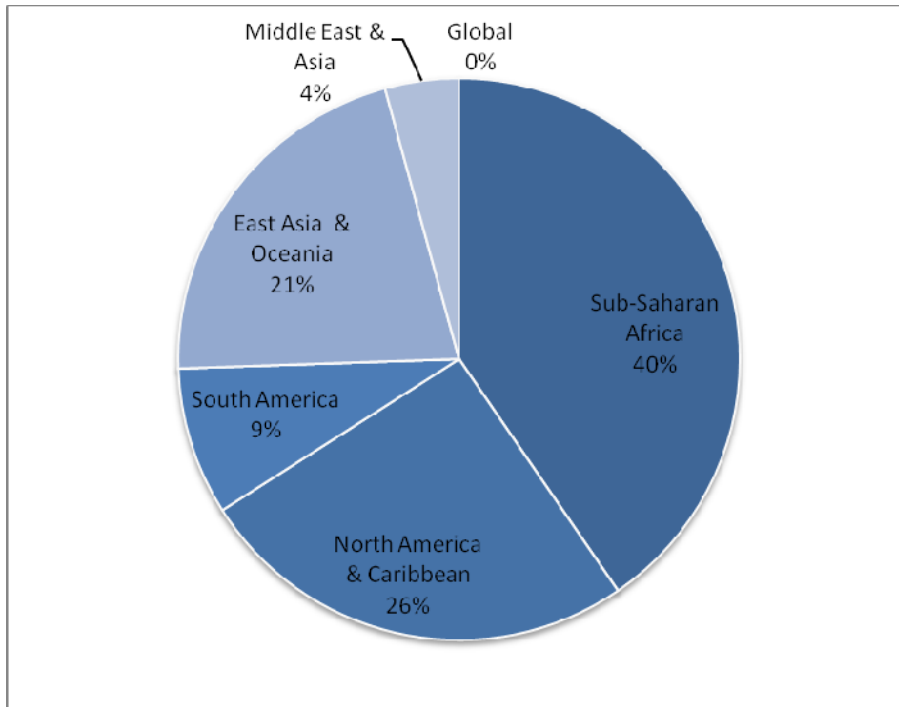
Of the 47 case stories classified under Industrial Policy, 19 from sub-Saharan Africa, 12 from North America and Caribbean and 10 from East Asia and Oceania (Figure 1):

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<sup>3</sup> Rodrik, 2004 presents an annex of WTO-illegal industrial policies that he contends could in some situations be usefully employed.

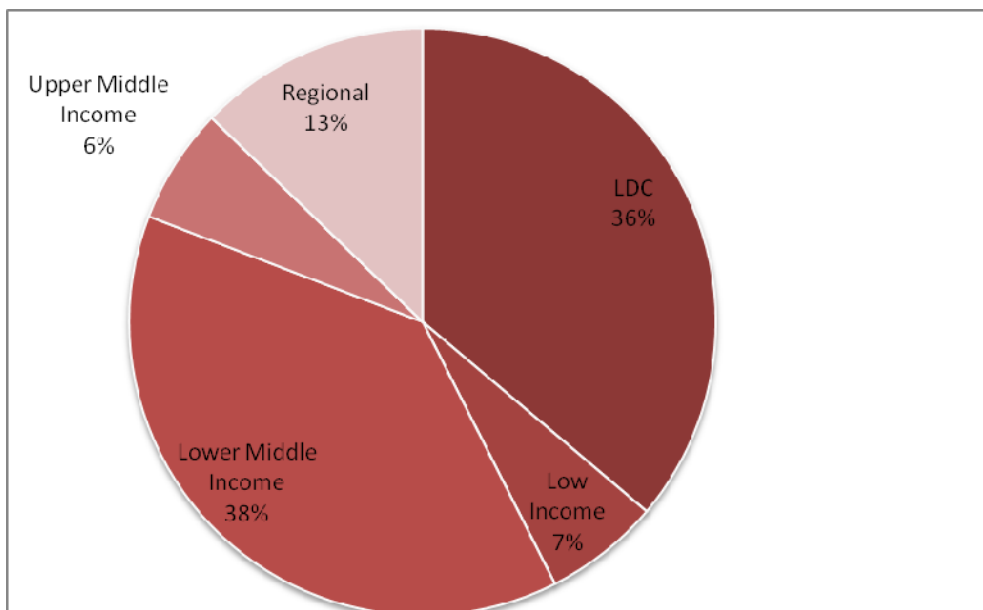
<sup>4</sup> See Richard Newfarmer, William Shaw and Peter Walkenhorst (eds.) 2009, *Breaking into New Markets: Emerging Lessons for Export Diversification* Washington: World Bank.

Figure 1 Industrial Policy by Region of Implementation



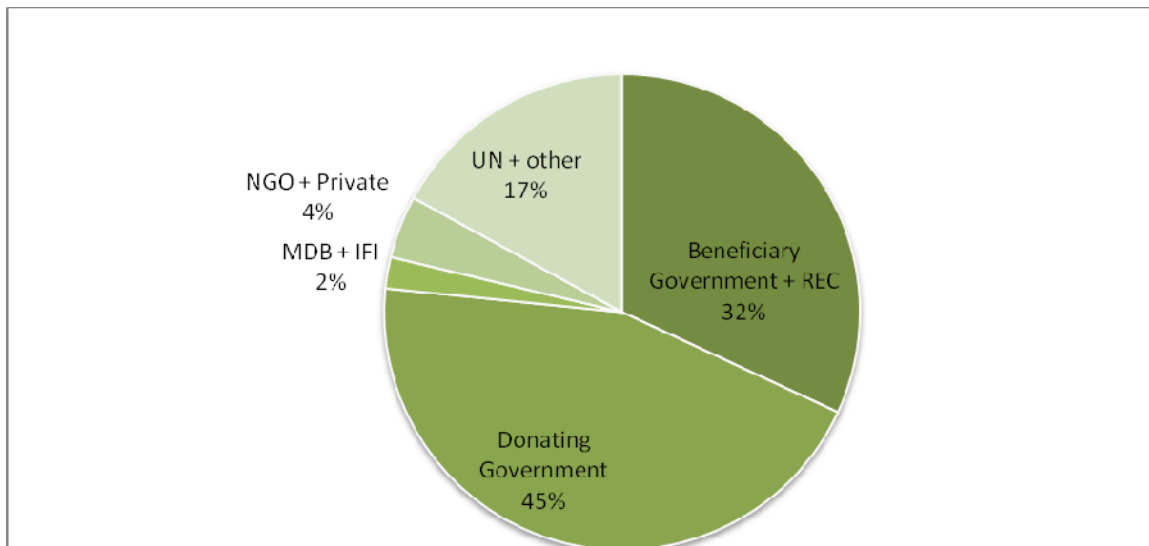
In terms of income distribution, this theme is particular compared to the other five since it accounts with the largest share of stories recounting experiences in middle income countries (44% of them came from upper and lower middle income countries) and the total distribution can be seen in Figure 2 below:

Figure 2 Industrial Policy by Income Group



Furthermore, also with regard to the authors of the case stories this theme stands out for the 45% of the stories having been submitted by donating governments as can be seen in Figure 3:

Figure 3 Industrial Policy by Author



### ***Expanding exports at the intensive margin: Upgrading quality***

Many of the projects were intended to up-grade quality – working at the “intensive margin” with traditional exports. Many of these exports exhibited substandard performance, but had considerable potential if supply-side obstacles could be overcome. Providing technical assistance to improve quality or to reduce specific costs in the value chain of delivery to foreign markets was common objectives that, once achieved, had high pay-offs. Among these figured projects in Cameroon to improve bananas and plantain [Cameroon, 19], in West Africa to improve cotton [Africa, 30], EU efforts in Rwanda to improve the quality of tea [Rwanda, 194], in West Africa to improve rice [Benin, 13], in Ethiopia to improve coffee [Ethiopia, 75], UNIDO’s work with Bangladesh to up-grade quality in the readymade garment sector [Bangladesh, 216], in Guatemala to improve organic crops [53], in Honduras to improve oriental vegetables [Honduras, 68], in Grenada to improve fisheries [Grenada, 67], in Peru to improve milk quality [Peru, 198], in Mozambique to revive processed cashew exports [Mozambique, 184], in Tanzania to improve coffee [212], and in Tonga to control fruit flies [99], as well as in Indonesia to improve dairy livestock [70], and in East Africa, to improve trade in organic agricultural projects [East Africa, 102], to mention a few.

Several projects were financed by donors to aid producers in meeting *quality standards* in their home and other export markets. Examples include EU assistance for fish production in Fiji [196], in Honduras [178], and in Mozambique [141], as well as assistance to palm oil producers in Ghana [215].

One example of South-South aid for trade is the Cotton 4 project initiated by the Brazilian government in 2008 in Benin, Burkina Faso, Chad and Mali [Africa, 30]. Activities included refurbishing an experimental station in Mali and implementing an evaluation unit and technology showcase in Cotton 4 countries. The project also prepared a manual for best-practice farming techniques for Africa. Perhaps of more direct impact, the project introduced in Mali nine Brazilian cotton varieties. These efforts were complemented with a focus on sustainable soil use and biological plague control. The project had dramatic results: yields increased threefold to 3,000 kg/ha. Overall the project was forecasting a 10% increase in the 2010 harvest. This project marked

the expansion of Brazilian technical assistance to Africa to some 300 initiatives, with a budget of some USD 60 million.

Sometimes it was donors' trade policies that drove industries to change – and improve. Such was the case for Caribbean rum producers who faced the prospect of losing their privileged access to the EU rum market with the phase out of quota preferences. Taking advantage of EU assistance, rum producers banded together, advocated a slower timetable for preference phase-outs, invested in improving quality and product differentiation, and have actually expanded their exports [Caribbean, 200]. The results of a similar effort on the part of Fiji to adjust to EU reductions in prices and quotas are much less certain – in part because of the withdrawal of EU assistance in the face of “perceived noncompliance with the pre-requisites” of that assistance [Fiji, 243].

### ***Diversification at the extensive margin: Spurring new products***

Soft industrial policies to promote diversification into non-traditional products – at the extensive margin – were also common in the stories. Grenada's effort to improve the quality of fishery products for exports offers an interesting example. To counter its environmental vulnerability, Grenada decided to try to change its trade structure by diversifying into highly exportable sectors, and the fishery industry is one of them. This sector, however, faced nontrivial challenges, including strict international standards and norms for fishing, and local difficulties in storing and transporting fish. In 2003 Grenada was accepted into the EU's “Strengthening Fishery Products Health Condition Program” which started (in 2002) as a support mechanism to help third countries meet EU regulations in this sector. The project trained national inspectors in quality and gave advice to the fishing industry on improving its internal quality systems. It also provided a vast array of services in this area: institutional strengthening in the form of establishing Produce Chemical Laboratory, training for officers of the competent authority, EU study tours for inspectors and managers, support for testing laboratories and technical institutes, renovation of laboratory structures, technical assistance for the development of quality assurance manuals and guidelines, technical assistance for the production of value-added products, product development, packaging, support for small business, funding public infrastructure, among other things. The limited technical capacity in Grenada was a constraint on the project, as were environmental setbacks (*i.e.* rising water temperature). Nevertheless, Grenada was included in the EU's List 1 of countries that can export fishery products into the EU as a result of the great strides it had made: the sector has a modern legislation, capacity was built at all levels of stakeholders (from auditors to individual fishermen and vendors) and equipped testing laboratories are readily available. The project was successful in increasing exports from this sector and improving the quality and variety of products [Grenada, 67]. However, other case stories underscore that this can be a hard area to get right. Only through the reported extraordinary commitment of staff looking for creative solutions to problems ranging from lack of finance to testing facilities were Fiji authorities able to successfully implement new SPS standards for fish [Fiji, 196]. In Mozambique, efforts were successful in implementing standards for fisheries only to see rising fuel and other costs depress exports [Mozambique, 141].

An example of non-agricultural technical assistance was the introduction of mobile telephones to Bangladesh [64]. Grameen Bank branched out into mobile telephones and equipped women with the capacity to connect villages with the nation, to market better their products, and to become part of the formal financial system. This raised incomes of the phone ladies several fold, and transformed

the lives both of the women and those that benefited from the new connectivity [Bangladesh, 64]. Simple technical assistance to mobile telephones in the Dominican Republic also helped that industry take off; USAID (as part of its FTA-related) provided assistance to allow telephone numbers to be portable across carriers; meanwhile new competition induced prices to fall and the market to widen [Dominican Republic, 231].

A no less interesting example is the story of rattan furniture production in Indonesia. With the support of Germany's GIZ, Indonesia undertook a study of the integrated value chain for rattan furniture exports, identified constraints -- in productivity, human resources, knowledge of foreign markets, and capital -- and worked with firms and workers in the industry to overcome these constraints. The results, though adversely affected by the 2008 downturn, have included increased productivity, quality improvements, and a 16% increase in exports in 2010 from 2009 [Indonesia, 185].

### ***Tangible results***

This group of stories often included quantitative indicators of successful outcomes, such as increases in production, exports, and incomes, or even evidence of improvements in gender equality and environmental sustainability. For example, increases in exports were reported in Tonga [99], West Africa [13], Ethiopia [75], and Guatemala [53]. Women also benefited according to some stories: a notable example is the Enterprise Uganda case story [Uganda, 116]; another is the rice technical assistance for the seven countries of West Africa, where some 80 % of the producers were women. (We return to the theme of gender-related projects in the final theme.)

These findings are consistent with more sophisticated econometric studies that use techniques that effectively control for other factors. Brenton and Von Uexkull (2009), for example, used a difference in differences method to examine the effects of 88 export development programs in 48 different countries. They found that, on average, export development programs have coincided with or predated stronger export performance. However, their conclusion that this type of aid for trade would appear to be related to success in expanding exports had to be tempered by what one postulates would have happened in the absence of the policy intervention.

## REFERENCES

- Harrison, A. and A. Rodriguez-Clare (2009), "Trade, Foreign Investment, and Industrial Policy for Developing Countries", *Handbook of Trade Economics*.
- Hausmann, R. and Bailey Klinger (2006) "Structural Transformation and Patterns of Comparative Advantage in the Product Space", CID Working Paper 128, August.
- Hausmann, R. and D. Rodrik (2003), "Economic development as self-discovery", *Journal of Development Economics*, 72: 603-633.
- Hausmann, R, Hwang, J, and D. Rodrik (2007), "What You Export Matters", *Journal of Economic Growth*, 12:1-25.
- Lederman, Daniel and William F. Maloney (2010), "Does What You Export Matter? In Search of Empirical Guidance for Industrial Policies" Policy Research Paper, World Bank, Washington.
- Nolan, M. and Pack, Howard. (2003), "Industrial Policy in an Era of Globalization: Lessons from Asia", Institute for International Economics, Washington, DC.
- Pack, Howard and Kamal Saggi (2006), "Is there a Case for Industrial Policy? A Critical Survey", *World Bank Research Observer*, vol. 21, no. 2 (Fall 2006)
- Rodrik, Dani (2004), "Industrial Policy for the 21<sup>st</sup> Century", CEPR Discussion Paper 4767, London.
- Wade, Robert (2003), "Governing the Market: Economic Theory and the Role of Government in East Asia's Industrialization", Princeton University Press.