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Global Value Chains and Industrial Policies

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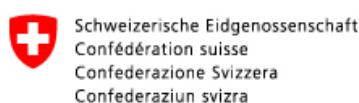
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ABSTRACT

The nature and configuration of global value chains (GVCs) permit a degree of geographically substitutable value creation along supply chains. This is where industrial policy comes in. Governments may seek higher shares of value added on existing chains through trying to shift firms' activity in GVCs, or through participating in new production sharing activities. Governments and firms do not necessarily share the same objectives. Governments seek to maximise value capture at the national level to promote objectives such as better living standards, higher productivity, the deployment of new technologies, increased employment opportunities, and more diversified and resilient economies. The key interest of firms is to maximise profits.

Different motivations and objectives may reasonably be expected to result in varying perceptions of the most desirable outcomes. In a world of constrained optimization, the challenge is to seek mutually accommodating outcomes between markets and the state. In the final analysis, however, it is the responsibility of governments to do whatever is required to maximise social welfare. The conception and design of industrial policy is fundamental to the successful pursuit of this objective. The emergence of the more complex world of GVCs calls for more effective strategic collaboration between governments and the private sector, and accentuates the importance of government capabilities for policy effectiveness.

In the long and varied debate on industrial policy over the last six decades or so, different approaches have emerged. They can be broadly put in five main categories—import substituting industrialisation; export-oriented industrialisation; resource-based industrialisation; export processing zones; and industrialisation through innovation. The close involvement of governments in many variants of industrial policy can be a source of considerable risk. Good governance and integrity must be well developed. Technical, analytical, and operational capabilities must be strong. Solid strategic relationships and communication channels between governments, the private sector, and other relevant non-state actors need to be in place. The greater the extent to which a government convincingly pursues what are commonly described as horizontal policies, the greater the likelihood that conditions will exist for the successful application of industrial policy.

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LIST OF ABBREVIATIONS

AoA	Agreement on Agriculture
EOI	export-oriented industrialisation
EPZ	export processing zones
GATT	General Agreement on Tariffs and Trade
GVCs	global value chains
ISI	import substituting industrialisation
ItI	industrialisation through innovation
PTAs	preferential trade agreements
R&D	research and development
RBI	resource-based industrialisation
SCM	Subsidies and Countervailing Measures
SIP	Strategic Industrial Policy
TRIMs	Trade-Related Investment Measures

INTRODUCTION

Governments in developing countries are increasingly asking themselves how they can increase the benefits of participating in global value chains (GVCs) in a world of internationally fragmented production structures. In many ways, this is a new take on an old question. Since the beginnings of the process of industrialization, manufacturing has been seen as a vehicle for economic diversification and a source of growth and prosperity. Trade has always figured in this story, as has the role of government in shaping economic structures. The current terms of the debate have been largely fashioned since the second half of the 20th century by the emergence of development as a branch of economic, social, and political analysis. The term "industrial policy" does not carry a precise meaning in the literature, other than to denote a role for government in creating conditions that promote industrial development. The influence of ideological preferences on whether governments should have any role at all in shaping economic incentives has sometimes obstructed a much more relevant debate over the efficacy of different options.

Two important developments in recent years have influenced the nature and content of the debate over industrial policy. Both of them are largely the result of technological advances, predominantly in the fields of transport, communications, and production technology. First, increased efficiency in transportation and communication technology has led to the shrinkage of distance and acceleration of transactional speed. This means that as opportunities to gain from trade have increased, so too have the costs of poorly conceived or designed government policies. Second, advances in production technology and the development of standards have facilitated the fragmentation of production processes, fostering the rise of GVCs and broadening opportunities for participation in international production sharing. Here too there is a role for government policy in promoting a conducive operating environment, and stimulating participation in competitive GVCs.

The nature and configuration of GVCs permit a degree of geographically substitutable value creation along supply chains. This is where industrial policy comes in. Governments may seek higher shares of value added on existing chains through "upgrading", or through participating in new production sharing activities.¹ Upgrading has been defined as "the shift in firms' activity in the GVCs to sustain higher earnings" (Humphrey and Schmitz 2000).

Governments and firms do not necessarily share the same objectives. Governments seek to maximise value capture at the national level to promote objectives such as better living standards, higher productivity, the deployment of new technologies, increased employment opportunities, and more diversified and resilient economies. Part of this effort

must focus on managing market failures, including a range of positive and negative spillovers.

The key interest of firms is to maximise profits. Lead firms on vertically integrated value chains typically seek to locate activities where they yield the highest returns. This may or may not offer participatory or upgrading opportunities for particular countries and value chain participants within their borders. Domestic value chain participants will want to maximise their own value added and will seek ways of doing so, including by engaging with other supply chains or seeking to become lead firms themselves.

Different motivations and objectives may reasonably be expected to result in varying perceptions of the most desirable outcomes. In a world of constrained optimization, the challenge is to seek mutually accommodating outcomes between markets and the state. In the final analysis, however, it is the responsibility of governments to do whatever is required to maximise social welfare. The conception and design of industrial policy is fundamental to the successful pursuit of this objective, where governments seek to maximise alignments with firms as value chain actors.

SCOPING POLICY OPTIONS

TWO KINDS OF POLICIES: HORIZONTAL AND INDUSTRY-SPECIFIC

Policies can be broadly or narrowly focused. Broad-based or horizontal policies are targeted at removing inefficiencies and dead-weight losses, thereby increasing competitiveness. Such policies may include streamlining administrative procedures; lowering the costs of doing business; strengthening institutions; investing in human capital; and developing infrastructure. The main point about horizontal policies is that they have economy-wide implications rather than being specific to sectors, industries, or firms. These kinds of policies are less contentious than narrowly focused approaches and carry considerably less risk in terms of the unforeseen consequences of policy-induced relative price relationships.

The fact that horizontal policies can affect many different aspects of the operating environment means that they may be more or less affordable, and may yield tangible results over quite different time-frames. Administrative reform and various measures of trade facilitation can be relatively

¹ Upgrading is only one mechanism for adding additional value from supply chain participation. Gunter (2011) distinguishes between industrial diversification, industrial expansion and upgrading, and industrial deepening.

costless and yield rapid results. Institutional reform is of a more basic character, will be harder to achieve, and may take longer to yield dividends. Investment in human capital through training and education and physical infrastructural investment may be costly and take some time to produce results, but will be high-yielding.

In effect, these kinds of horizontal reforms and investments would not be regarded by some as industrial policy. This taxonomical approach typically reserves the definition of industrial policy to interventions specifically targeted at industries or even firms.

Industry-specific policies, on the other hand, seek to change the incentive structure and stimulate activities in particular areas. A typical justification for such actions would be that market failures result in resource misallocation, leading the economy to a suboptimal future. A major argument of those opposing industry-specific policies is that government failures more often than not substitute for market failures.

Renewed interest in industrial policy has emerged recently in the light of major changes in the global trade landscape. These changes include the fact that trade in intermediates has surpassed trade in final goods (at least by some definitions of intermediates); services have become a more important part of the production process; trade in tasks is a rising phenomenon; tariffs have fallen while non-tariff measures, including standards, have increased in significance; and geographically dispersed production has placed additional emphasis on trade facilitation and connectivity. The emergence of the somewhat more complex world of GVCs calls for more effective strategic collaboration between governments and the private sector, and accentuates the importance of government capabilities for policy effectiveness (Rodrik 2004).

Different terms have been used to refer to variants of updated approaches to industrial policy, from Strategic Industrial Policy (SIP) (Gunther 2011), and New Industrial Policy (Devlin and Moguillansky 2012) to Global Value Chain-Oriented Industrial Policy (Gereffi and Sturgeon 2013). Instead of proposing a new term, this note considers how old approaches might be updated. An advantage of this approach is to remind us that the industrial policy debate is a good deal older than the GVC phenomenon we witness today.

APPROACHES TO INDUSTRIAL POLICY

In the long and varied debate on industrial policy over the last six decades or so, different approaches have emerged. They can be broadly placed in the five main categories that follow. The typology is rough and the categories can overlap in terms of their respective policy or strategic emphases. Moreover, the approaches may not always be mutually exclusive.

Import substituting industrialisation

Import substituting industrialisation (ISI) relies on the domestic market for economies of scale and diversification, and conventionally focuses on the production of final goods and services. This approach can be viable for a certain time in countries with sizable domestic markets and the ability to identify sources of dynamic comparative advantage. Domestic enterprises typically receive low-priced (duty-free) imported inputs and are insulated from competing imports. These industries are expected to overcome their cost disadvantages through learning-by-doing and the realisation of economies of scale (if any), eventually becoming internationally competitive. Identifying the right industries that have the highest potential to be competitive in a sustainable way is a key challenge in this approach.

In GVCs, opportunities for upgrading and diversification may be present both upstream and downstream, in goods or services. A reduction in the anti-export bias that is frequently encountered under ISI policies—brought about by high-cost production and misaligned exchange rates—would help firms overcome the confines of domestic markets. Domestic market size is a crucial determinant of the potential success of ISI policies. The most obvious policy tool for ISI is tariffs, although some countries have resorted to quantitative restrictions in the past. The scope for using tariffs for this purpose is broadly defined for WTO Members by their tariff commitments. Tariff levels are also likely to be constrained by commitments under preferential trade agreements (PTAs).

For ISI to yield positive results for development, it should provide limited, time-bound protection. Industries that fail to become competitive should not be protected indefinitely. Effective consultation with the private sector, industry experts, consumer groups, competition authorities, and research institutions would help to identify bottlenecks and opportunities while mitigating the influence of vested interests.

Export-oriented industrialisation

Export-oriented industrialisation (EOI) strategies rely on exports to diversify the domestic economy. This industry-specific incentive structure is typically designed to ensure that returns to exports are no less attractive than returns to domestic sales. The policy mix requires that where possible inputs are provided at world prices, exports of the final product are subsidised to compensate for more costly inputs of domestic provenance. At the same time, the domestic market is not strongly protected from competing imports.

Support to the industry is removed within a specified time-frame, so the beneficiaries know that they have to compete internationally to survive. This approach was successfully followed by some South-East Asian economies in the second half of the 20th century. EOI may start with exporting processed resource-based products before graduating to manufacturing exports of increasing technological content.

It is likely to have more backward (and forward) linkages to domestic markets than export processing zones and buyer-driven, assembly-oriented GVCs.

In GVCs, EOI can be targeted at intermediate products, allowing countries to focus on parts of production where they already have a comparative advantage. The available tools for EOI are now constrained by the prohibition of export performance-based subsidies under the WTO for many countries. As standards increasingly play a role in coordinating international production sharing, concerted efforts to improve the standards compliance capacity of firms and the general trade facilitation infrastructure become crucial for competitiveness.

Resource-based industrialisation

Resource-based industrialisation (RBI) is a strategy that may be used if a country has an exportable raw material and the potential to elaborate that raw material into a manufactured good locally for export. The key policy instrument is an export tax on the raw material that lowers its domestic price, effectively subsidising domestic downstream manufacturing. This diversification strategy may have negative domestic distributional consequences, at least in the short term, if producers are already poor or if domestic processing capacity is inadequate or commercially infeasible.

Downstream processing of natural resources may not be feasible for all countries or products. As noted by Kaplinsky (2011), other ways of increasing domestic participation in commodity supply chains involve the development of upstream and downstream linkages in complementary markets relevant to the commodity supply chain. These could be fiscal linkages, and production and consumption linkages, including services.

In the past, WTO rules have not constrained the use of export taxes, but this has changed for some countries that have joined the WTO in recent years. Some PTAs also have provisions on export taxes. More generally, pressure is likely to increase on limiting the use of export taxes.

Export processing zones

Export processing zones (EPZs) can be viewed as the poor cousin of EOI, but may be one of the few viable options for economies with neither a sizable domestic market nor resource endowments. Zones are demarcated as extra-territorial for fiscal and regulatory purposes and are normally supplied with essential infrastructure for production and exports. EPZs may often be little more than assembly or light manufacturing operations relying almost entirely on imported inputs.

They frequently come with the risks of footloose investment (investments with low fixed costs that flee as soon as preferences end); minimal backward linkages; and entrapment in a race to the bottom. Labour and

environmental standards may also be compromised in EPZs as host countries compete for a limited pool of investment projects. On the other hand, successful EPZs may develop into more than just job opportunities for unskilled workers. They could be the incubator for innovation and the gradual development of backward and forward linkages. A broader spectrum of ancillary goods and services may also emerge over time with the promise of capturing a greater share of value added.

Industrialisation through innovation (ItI)

Unlike the former approaches that focus on changing the external framing conditions in which firms operate, the emphasis of industrialisation through innovation (ItI) is on change from within. Firms' upgrading potential can be enhanced by strengthening innovation systems and firm-level technological capabilities, including through networking and building mutually advantageous relationships with other firms, suppliers, consumers, governments, and relevant non-state actors. Value chain upgrading, after all, means innovating better than competitors.

GVC participation provides firms with access to technology and upgrading assistance from their networks, that is, the lead firms and other sources. This approach also acknowledges that technological learning is not costless. Technological capabilities differ among firms and allow those that possess them to seize the learning opportunities from GVC participation for successful upgrading (Lall 1992; Morrison et al. 2006).

The outcomes of firms' technological learning and upgrading efforts are affected by the environment in which learning is taking place, that is, the innovation systems (Tijaja 2012). Innovation systems are defined as the flow of technology and information among people, enterprises, and institutions that facilitate innovation and are a key to firms' competitiveness. Firms located in an efficient innovation system can cope better with the complexity of GVC transactions.

Innovation systems can be strengthened through effective science and technology policy, and activities and initiatives such as industry-specific dialogues; science competitions; internships or work placements; collaboration with universities/research institutes; research and development (R&D) support; joint R&D; science parks; business incubators; and personnel mobility.² Many of these policies may seem horizontal in the first instance, but the peculiar nature of technology means that after a certain (low) threshold, effective intervention will become sector specific (Lall 1992).

Innovation systems are multi-layered at the national, sub-national and sectoral levels. Malerba (2002) defines a sectoral system of innovations as "a set of products and

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These are also referred to as soft-meso industrial policy (Wade 2012).

the set of agents carrying out market and non-market interactions for the creation, production and sale of those products.³ The conditions required to facilitate learning differ across sectors (Malerba and Nelson 2011). In some, technology might be embedded in capital goods, calling for close interactive relations with suppliers for successful upgrading. In others, like agriculture, the low appropriability of innovations may require prompting by public institutions. Innovation-led industrialisation is complementary to other approaches, regardless of country characteristics.

As noted above, international agreements sometimes constrain the use of policies aimed at protecting domestic production, including tariffs, subsidies, and local content requirements. A risk is that some policies are constrained while others are not, resulting in the use of less-efficient policies or hidden protection.

WTO RULES

This short note does not enter into all the subtleties surrounding the interpretation of the legal permissibility of trade policies required for the pursuit of different kinds of industrial policy. Many of these have been highlighted, if not fully resolved, through the WTO dispute settlement mechanism. In other cases, ambiguity or uncertainty remains because governments have chosen not to mount legal challenges.

The note does not cover departures from WTO rules in PTAs or in government procurement contracts. PTAs may well be more important than the WTO for some developing countries in defining the degree of flexibility they enjoy in pursuing industry-specific policies. Even within the WTO, the degree of policy flexibility will almost certainly be different for economies that acceded to it after it came into force in 1995. This is because acceding Members have typically been persuaded to agree to conditions in their protocols of accession that go beyond the legal obligations template of the WTO. WTO obligations will also vary among Members at different levels of development due to special and differential treatment provisions.

In what follows, we take each of the policy areas identified along the horizontal axis of Table 1 and consider the extent to which WTO rules do, or are likely to, constrain the ability of countries to apply the policies in question. This will provide us with a first take on the degree to which WTO obligations may constrain the pursuit of industrial policies. It should be noted that these constraints will turn out to be real only when one WTO Member mounts a successful legal challenge against another for the use of a particular policy. In legal terms, government measures are presumed to be WTO-consistent until the Dispute Settlement Body concludes otherwise.

One should not underestimate, however, the fact that the possibility of a legal challenge introduces uncertainty, which bears a cost.

In Table 1, we have distinguished between those policies judged to be essential to the pursuit of a particular industrial policy and those that could be additionally used to attain or reinforce the same end, but in a strict sense could be considered non-essential. This implies a degree of subjectivity in the assessment of how essential particular interventions are to the attainment of the objective. On the other hand, the distinction is useful in helping to sharpen the focus on the nature of WTO-imposed constraints on policy flexibility.

Underlying this distinction between essential and non-essential interventions there are also efficiency issues on which disagreements are likely to arise. It would be argued by many, for example, that quantitative restrictions are generally more costly than tariffs because of their particular incentive-and price-distorting effects. If tariffs can achieve the same end as quantitative restrictions, then WTO strictures on the use of the latter may be a welcome constraint on policy flexibility. Provisos to this argument are that the price effect of tariffs will act with a time lag and that it can be difficult to determine the appropriate tariff rate to achieve a particular result. These considerations would need to be weighed against the costly features of quantitative restrictions. A similar set of arguments in relation to price versus quantity interventions might be made in relation to domestic content requirements.

Traditional economic analysis also establishes the welfare superiority of subsidies over tariffs. This argument is based on the fact that tariffs create distortions in consumption that are avoided by subsidies. This is a reason why RBI might be considered superior to ISI. One drawback with this argument, however, is that it assumes the revenue required for paying out subsidies can be collected in a relative price-neutral manner. An additional consideration is that developing countries will find it easier to tax than to subsidize because of a sparse revenue base. These debates are not entered into in any detail in this note.

TARIFFS

Individual WTO Members have consolidated their tariffs on goods under the WTO Agreement (Article II, General Agreement on Tariffs and Trade [GATT] 1994) to differing degrees and at different levels. Except for some customs unions, no two Members have identical maximum tariff obligations (bindings). Nor do Members generally share identical applied tariff rates. This is a reflection of several factors, including levels of development, the degree of participation in rounds of negotiations, and the conditions under which countries joined the GATT (accession or succession under Article XXVI, GATT 1947).

With the exception of RBI and Itl, the industrial policy approaches listed in Table 1 depend to some degree on differentiated tariff levels, typically ranging from high tariffs on competing imports and low or zero tariffs on inputs. For ISI, this kind of structure is essential. The picture becomes more complicated if a domestic input industry is also being protected. For EOI, levels of protection in the domestic market may be less pronounced because of the export orientation of the strategy and the objective of equalizing returns to domestic and export sales. However, the policy generally seeks to ensure that imported inputs can be acquired at world prices. For RBI, high tariffs are not essential because the source of support is lower production costs resulting from taxes or restrictions on exports of manufacturing inputs. In the case of EPZs, imported inputs attract zero tariffs.

Although the experiences of individual countries may vary in terms of the factors determining bound tariff levels, it remains the case that many developing countries still maintain applied tariffs below their bound rates. This suggests that for these countries, tariffs are not likely to be among the most significant constraining policy instruments in their industrial policy design. Moreover, the provisions of Article XXVIII, GATT 1994 allow for the renegotiation of tariff bindings.

EXPORT TAXES

For historical reasons, export taxes have never received the same attention as import taxes. This is reflected in the absence of systematic bindings of export taxes, as well as any flanking policies dealing with valuation for tax purposes and with licensing (both elements of the WTO regime for

imports). RBI is the only industrial policy that relies on export taxes, given the source of protection applied for this kind of diversification/industrialisation policy. It is precisely because RBI typically applies in cases where domestic (agricultural and non-agricultural) raw materials can be restricted on world markets that some countries are pressing for negotiations on new disciplines in this area. For the time being, however, apart from the case of some economies that have acceded under the WTO, the possibility of freely deploying export taxes remains open.

QUANTITATIVE IMPORT AND EXPORT RESTRICTIONS

Quantitative trade restrictions are generally frowned upon in economic analysis because of their distortionary and cost-raising impact in comparison to price-based measures. These arguments may be modified over long periods under uncertainty, as the recent literature dealing with climate change policies has demonstrated.

The general prohibition of quantitative trade measures, save in carefully specified exceptional circumstances (including for public policy reasons under Article XX, GATT 1994), does not appear to have been especially contentious. If anything, emphasis has been placed on ensuring that the legitimate use of quantitative limitations on trade is not compromised by hidden protection. It may be noted that in Table 1 all the listed industrial policy options except Itl could deploy quantitative restrictions instead of, or as well as, price-based measures. But we have argued that constraints here are not a strong restraint on flexibility precisely because of available alternatives.

TABLE 1:

Required and Potential Settings for Alternative Approaches to Industrial Policy (without prejudice to WTO legal interpretation)

Notes: ISI = import substituting industrialisation; EOI = export-oriented industrialisation; RBI = resource-based industrialisation; EPZs = export processing zones; Itl = industrialisation through innovation; X = "best" or "essential" policy; O = alternative/additional intervention going in the same direction.

	Differential tariff levels	Differential export taxes	Quantitative restrictions	Trade-related investment measures	Other subsidies	
					Domestic	Export
ISI	X		O	O	O	O
EOI	X		O	O	O	X
RBI	O	X	O	O	O	O
EPZs	X		O	X	O	X
Itl					X	

TRADE-RELATED INVESTMENT MEASURES

The WTO strictures on the use of trade-related investment measures are perhaps more contentious than those applying to quantitative trade restrictions. The WTO Agreement on Trade-Related Investment Measures (TRIMs) prohibits the use of any measures linked to investment that infringe the national treatment provisions of Article III, GATT 1994, as well as the general prohibition on quantitative restrictions under Article XI, GATT 1994. The Agreement makes a temporary exception for developing countries in relation to the use of quantitative restrictions on balance-of-payments grounds.

TRIMs place a range of regulatory requirements on the purchasing or marketing behaviour of investors. These requirements will in one way or another favour domestic production over imports. Investors are expected to accept these constraints in exchange for cost-offsetting advantages such as privileged market access (protection against competing imports) or subsidization (for example, corporate tax breaks). Both the obligation imposed on an investor and the reward offered in exchange may in some cases fall foul of WTO law.

While these WTO provisions restrict the use of industrial policy in different ways, a question arises as to whether alternative approaches might be available to achieve the same objectives, possibly at a lower cost. This is a similar argument to the one made in relation to quantitative trade restrictions in terms of efficiency costs. A possible objection to the comparison is that TRIMs may be less susceptible to the kinds of distortions that plague quantitative restrictions. The basic issue is whether the objective of securing favourable market conditions for domestic products in relation to competing imports could be better achieved through the tariff structure or through subsidies. This kind of argument has not prevented the fairly widespread use of TRIMs.

SUBSIDIES

The Agreement on Subsidies and Countervailing Measures (SCM) deems a subsidy to exist if there is a financial contribution (including revenue foregone) or any form of government-sanctioned income or price support, and a benefit is thereby conferred. An important additional element of the definition is specificity. A subsidy is considered specific if access to it is explicitly limited in some way (including to specific sectors, industries, or firms), either in terms of design or possibly outcome. In addition, Article 3 of the SCM Agreement prohibits subsidies that are contingent on exports or the use of domestic over imported goods. Both these are presumed to be specific subsidies. In practice, this is the key difference in the treatment of production and export subsidies, where the former are not ruled *prima facie* illegal,

although they may turn out to be so in cases where adverse effects are established through a dispute settlement finding.

Potentially important exceptions to this framework arise in the case of agriculture, and for some developing countries. The Agreement on Agriculture (AoA) contains provisions permitting the continued use of export (and production) subsidies at negotiated levels, but this only applies to countries that were using such subsidies at the time the AoA was negotiated, and most developing countries have not negotiated such flexibility for the use of subsidies. It is notable that the definition of agricultural products includes processed foodstuffs.

In addition, Article 27 of the AoA allows least developed countries to continue to use export subsidies on manufactures, and other developing countries to do so provided their income per capita is below USD 1,000 per annum. Under Article 27.2 (b), developing countries were granted an eight-year period following the entry into force of the Agreement during which they were permitted to use export subsidies. This provision was subsequently renewed for certain developing countries on a set of specified products. Without further action to extend these exemptions, those that remain will soon expire.

Whether or not subsidies are considered illegal, they may be subject to countervailing or anti-dumping duties. This possibility clearly reduces any security that countries might otherwise enjoy in terms of legally sanctioned access to certain subsidy practices.

As far as the use of subsidies for industrial policy is concerned, WTO provisions are both constraining and a source of uncertainty. Production subsidies would seem to be an essential ingredient of IIL policies. Export subsidies are also a key ingredient of EOI and EPZs. Ultimately, the exposure to risk from WTO-sanctioned actions against countries using subsidies as a development tool depends on whether trading partners wish to take action. The likelihood that they will generally increases with country size and competitiveness.

In analytical terms, it is straightforward to distinguish between good and bad subsidies from a social welfare perspective. In practice, however, such distinctions are complex and contentious. Nevertheless, a case could be made for refining the legal approach to subsidisation on developmental and perhaps technological grounds (for example, R&D subsidies), while at the same time exploring ways of softening the competitiveness consequences of subsidies in the market place. It is worth recalling that Article 8 of the SCM Agreement provided for such partial flexibilities, but there was no consensus to continue its application at the end of the transition period in 2000.

CONCLUSIONS

Some of the strategies reviewed are more promising than others, both intrinsically and as a result of the influence of GVCs in production. Country or domestic market size can be a crucial determinant of opportunities, as can resource endowments. A key question underlying all this literature is how far policy can effectively shift resources to alternative, more desirable uses while ensuring competitiveness over time. The answer will obviously be context-specific and quite a few industrial policy experiments have foundered over the years.

The close involvement of governments in many variants of industrial policy can be a source of considerable risk. Good governance and integrity must be well developed. Technical, analytical, and operational capabilities must be strong. Solid strategic relationships and communication channels between governments, the private sector, and other relevant non-state actors need to be in place. In the absence of a certain level of attainment in these underlying conditions, the pursuit of these policies could leave a country no better off than it would be with no industrial policy at all.

Moreover, the greater the extent to which a government convincingly pursues what are commonly described as horizontal policies, the greater the likelihood that conditions will exist for the successful application of industrial policy. Most horizontal policies are less subject to constraining external influences that trading partners could deploy through the exercise of their WTO rights. On the contrary, aid-dependent countries may be able, with relative ease, to convince their major trading partners to provide financial and technical assistance to pursue horizontal reforms and build development infrastructure, including through such initiatives as Aid for Trade.

Governments will not necessarily do better than the market in identifying winners and must be able to act decisively in dropping failures before they become burdens on the economy. All said, however, the risks of leaving matters entirely to the market are likely to be as great.

As to the question of policy flexibility afforded by the WTO to pursue industrial policy, and the degree to which this may be considered a worthwhile issue for negotiation in the future, the note has laid out the issues without offering a systematic prescription. We have not entirely refrained, however, from offering views as to the direction one might look towards in addressing these issues. One of the stronger economic cases for seeking to negotiate modifications in WTO rules appears to be in the field of subsidies.

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