Chapter 5 Industrial policy for Africa in the new global environment

In Chapter 4, we examined a wide range of successful industrial policy experiences. Experiences of today's rich countries in the earlier phases of their economic development as well as in the post-WWII period were discussed. We also analysed the industrial policy experiences of the poorer developing countries (including two African countries – Ethiopia and Rwanda). Most of the successful industrial policy experiences we discussed concerned manufacturing but we have also explored cases that targeted agriculture (Brazil, Chile, and Ethiopia) or services (Rwanda). We believe that this 'treasury' of experiences can offer many useful lessons for industrial policy-makers in Africa.

However, there is a growing concern that the world economy has so fundamentally changed in the last two or three decades that industrial policy experiences of the past, however successful they may have been, are not relevant any more. Two most frequently discussed sources of this supposedly fundamental change are the shrinking 'policy space' and the rise of global value chains (GVCs).

First, many people point out that the establishment of the WTO and the proliferation of bilateral and regional trade and investment agreements have resulted in bans – or at least significant constraints – on many of the industrial policy measures that were used by today's rich countries (including the more recently developed countries of East Asia) in the past. Given this, it is said that developing countries of today cannot use those policies, even if they wanted to.

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Second, it is frequently argued that the rise of global value chains (GVCs), in which production is segmented into specialised components and located all over the world, has fundamentally transformed the paths towards economic development for today's developing countries. The rise of the GVCs means, it is argued, that developing countries cannot – and should not try to – 'do another Korea' by entering difficult industries on their own terms. Given this, developing countries should give up on old-style industrial policy and try to join GVCs by liberalising trade and investment, which will motivate transnational corporations (TNCs) that control GVCs to come and invest.

In this chapter, we discuss how these changes have changed the policy-making environment for developing countries and how developing country industrial policy-makers should reflect on them in their policy-making.

5.1. SHRINKING POLICY SPACE – THE WTO, BILATERAL AND REGIONAL TRADE AND INVESTMENT AGREEMENTS

5.1.1. An overview

Developing countries today face a lot more constraints on their policy options than they did a few decades ago. With the establishment of the WTO in 1994 several multilateral rules have taken shape, which either prohibit or restrict the use of industrial policy tools. The WTO is committed to trade liberalisation and in general dislikes any sort of government intervention that would impede the flows of trade. To this end, the organisation is one of the main drivers of the prevalent policy orthodoxy that argues against the use of industrial policy by developing countries.

A parallel proliferation of bilateral and regional agreements on trade and investment has further expanded the scope of these restrictions. Sanctioned by the WTO, these agreements usually tend to apply trade liberalisation beyond the levels agreed under WTO commitments. Under some schemes, developed countries have even pushed non-trade issues as a condition for enhanced access to their markets by developing countries. These issues can put a further cap on industrial policy efforts.

At first glance, these agreements appear to be a serious threat to developing countries' chances of industrial progress. However, the situation is not entirely fatal at least with regard to multilateral rules. There are many industrial policy measures which can still be used legally.

For some measures, international rules do not apply or do so rather leniently to developing and least developed countries – export subsidies, which are illegal for all countries except the LDCs, are the best example of this. Similarly, export taxes are permitted under Article 11 of GATT. Or it may be because the policy measures are inherently domestic in nature and thus not subject to international agreements. Sometimes there are policy measures that could well be restricted by international rules but are not because no international consensus has evolved to place a bar on them. Also, ambiguities in certain rules or their application can create further scope for pushing

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certain policies till they are detected or challenged. As a rule of thumb, with regard to multilateral obligations, if a policy measure does not affect exports or imports, it does not fall directly under WTO laws and should be allowed.

An illustrative list of certain measures that are not directly prohibited under the WTO is given at **table 5.1** below. As it can be seen from the table, the range of policies that can be used is rather extensive.

Table 5.1 **List of policy measures not directly covered by WTO agreements**

a) targeted infrastructural investments
b) targeted and/or subsidised investments in skills development
c) strategic government-mediated mergers of local firms in fragmented industries (e.g., through special loans from government-owned banks, equity injection by development banks or sovereign wealth funds), to achieve scale economy and reduce 'wasteful competition' (i.e. duplicative investments that will result in the scrapping of some capacities)
d) tax benefits to encourage investments, such as exemption of corporate income tax for a fixed period, accelerated depreciation allowances
e) the establishment of government-funded R&D centres, to transfer technologies to private sector firms, especially SMEs, at lower but technically non-subsidised prices (this could be done by deliberately not taking patents out on their technologies or by charging only 'competitive market' rates).
f) the encouragement of industry-university links through non-subsidy measures (e.g., creating a forum for dialogue, reducing legal barriers to university-industry collaboration, re-prioritising and re-channelling of government research funding to targeted areas, so that they become 'focal points' for industry-university collaboration).
g) exemption of SMEs from certain anti-trust laws, so that they can cooperate more in areas like R&D and export marketing.
h) government procurement (e.g., US defence, Finland telecommunications, Japan mainframe computer industry). At present there is only a plurilateral agreement on this in the WTO and developing countries are not signatories to it.
i) use of SOEs to start and/or develop 'infant industries' that the private sector is not willing to engage in.
j) worker training requirements for large firms.
k) export taxes to restrict the export of certain products (e.g. to prevent the export of raw materials and encourage that of more value-added products in the chain)

Source: Authors' compilation based on WTO data

Unfortunately, some of these measures may not be allowed under certain bilateral agreements, which, as explained below, place greater constraints on policy choices. Moreover, pressures from developed countries and international financial institutions may make it difficult to use measures that are allowed even under bilateral agreements. Thus, in carrying out such policy measures, the real test becomes that of the policymakers' commitment to maintaining emphasis on industrial policy efforts. The situation is challenging, but if policymakers are swayed by the prevailing orthodoxy from the outset, the lack of policy space will only be accentuated.

In the sections below, we present some of the main constraints on industrial policy space for developing countries under both multilateral and bilateral trade agreements and uncover areas where there is still room for manoeuvre, if countries want to use strategic industrial policy.

5.1.2. Multilateral Agreements

The formation of the WTO in 1995 resulted in a set of agreements that impinge directly on domestic policies of member countries. In addition to the General Agreement in Tariffs and Trade (GATT), which deals with tariffs, agreements such as the GATS (General Agreement on Trade and Services), SCM (Agreement on Subsidies and Countervailing Measures), TRIPS (Trade Related Intellectual property Rights) and TRIMS (Trade Related Investment Measures) were adopted. These agreements contain binding and enforceable obligations that systematically restrict the choices developing countries have for conducting industrial policy (Mayer, 2009; Gallagher, 2005; Brown and Stern, 2006; Di Caprio and Gallagher, 2006). Some of these constraints are discussed below.

(a) Tariffs

All WTO member countries are required to bind at least some of their tariffs at a certain level in a Schedule of Commitments maintained by the WTO. Binding is an upper limit on the tariff beyond which it cannot be increased. No changes to the bound levels are generally allowed. Most developing countries have already bound their tariffs on a large number of sectors and are constantly under pressure to bind the remaining ones. Applied tariffs can be anywhere between zero and the bound limit. The difference between applied and bound tariffs for a country is called 'water' in WTO parlance. It is usually argued that the more water in a country's tariff profile, the more room it has for manoeuvre in its tariff policies. This argument is presented to show that there is a lot of policy space in the WTO system. However, this shows a bigger problem developing countries have faced under the free trade orthodoxy, that of autonomous liberalisation, i.e. liberalisation undertaken by countries voluntarily and not as part of a negotiated trade agreement (some authors such as Baldwin [2010] use this interchangeably with 'unilateral liberalisation').

As part of various reform programmes introduced by international institutions such as the IMF, developing countries were forced to reduce their applied tariffs under a 'tariff rationalisation' process. Alongside, with the WTO and World Bank's support, these countries were taught how unilateral liberalisation would carry developmental benefits for them (Safadi and Laird, 1996; Krueger, 2005). As a result, applied tariffs in developing countries

today are generally much lower than their bound rates, giving a sense of large amount of water. **Table 5.2** shows the latest figures on binding coverage, and the average bound and applied rates for countries in Africa (excluding North Africa). It can be seen that the same is generally true for countries in Africa (excluding North Africa).

These existing levels of applied tariffs are exceptionally low compared to the historical experience of industrialised countries at equivalent levels of development. For instance, towards the end of the 19th century when the United States was trying to catch up with Britain by way of infant industry protection, its average applied tariffs on manufactured imports were close to 50 per cent. Applied tariffs in developing countries today average less than 20 per cent. These include countries, which have applied tariffs in some sectors close to 5 per cent or below. As seen in **table 5.2**, certain LDCs in Africa (excluding North Africa) have average applied tariffs around 7 per cent (Akyüz 2005).

Countries in Africa (excluding North Africa) may still find ample room to use tariffs for industrial policies. For instance, as long as the Doha Round remains dormant, NAMA obligations will fortunately remain only proposals.

Table 5.2 **Bound and applied tariffs of African countries** (excluding North Africa)* (non-agricultural / industrial products)

Country / Territory	Binding coverage in per cent	Simple average		Duties > 15 per cent (Share of HS 6 digit subheadings in per cent)		Maximum duty	
		Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
Angola	100	60.1	6.9	100.0	10.0	80	30
Benin	29.9	11.3	11.5	5.3	37.2	60	20
Botswana	95.5	15.7	7.4	34.7	20.5	50	307
Burkina Faso	30.0	13.8	11.5	5.4	37.2	100	20
Burundi	10.2	26.5	11.6	7.2	37.4	100	61
Cabo Verde	100.0	15.2	9.8	41.4	29.0	55	50
Cameroon	0.2	67.1	17.4	0.2	44.8	80	30
Central African Republic	56.2	37.7	17.4	56.2	44.8	70	30
Chad	0.4	76.3	17.4	0.3	44.8	80	30
Comoros**	..	..	15.8	..	75.3	..	20
Congo	3.5	15.1	17.4	1.1	44.8	30	30
Côte d'Ivoire	23.3	8.5	11.5	2.8	37.2	25	20
Democratic Republic of the Congo***	100	95.8	..	98.8	..	100	..
Djibouti	100	39.9	22.0	99.6	76.7	230	33
Ethiopia**	..	..	16.5	..	47.8	..	35
Gabon	100	15.4	17.5	1.0	43.9	60	30
Ghana	1.3	39.7	12.2	1.3	37.3	99	20
Guinea	29.5	10.1	11.5	5.0	37.2	40	55
Guinea-Bissau	97.4	50.0	11.5	97.4	37.2	50	20
Kenya	2.0	57.0	11.6	2.0	36.9	100	61
Lesotho	100	60.1	7.4	100.0	20.5	200	60
Liberia, Republic of**	..	..	10.1	..	17.1	..	50
Madagascar	19.5	25.2	11.2	16.6	35.2	30	20
Malawi	21.6	42.3	11.5	21.6	34.3	125	25
Mali	30.9	13.4	11.5	6.4	37.2	60	20
Mauritania***	30.1	10.6	..	5.5	..	50	..
Mauritius	4.7	27.6	1.0	1.9	1.2	122	125
Mozambique	0.5	22.8	9.5	0.1	29.4	100	20
Namibia	95.5	15.7	7.4	34.6	20.5	50	307
Niger	96.2	38.2	11.5	72.1	37.2	50	20
Nigeria	7.0	49.2	11.1	6.9	35.9	150	35
Rwanda	100	91.7	11.6	97.3	37.4	100	61
Sao Tome and Principe**	..	..	10.1	..	10.4	..	20
Senegal	100	30.0	11.5	99.9	37.2	30	20
Sierra Leone	100	48.5	11.3	100.0	37.7	80	30
South Africa	95.5	15.7	7.5	34.6	20.5	50	> 1000
Sudan**	..	..	19.7	..	47.2	..	40
Swaziland	95.5	15.7	7.4	34.6	20.5	50	307
Tanzania	0.3	120.0	11.6	0.2	37.4	120	61
The Gambia	0.7	60.5	13.7	0.6	54.1	110	20
Togo	0.9	80.0	11.5	0.8	37.2	80	20
Uganda	3.0	51.0	11.6	3.0	37.3	80	61
Zambia	4.2	44.0	12.2	4.2	29.7	125	25
Zimbabwe	10.4	10.9	15.8	2.5	26.6	150	206

Source: World Trade Organisation statistical database

* Does not include Equatorial Guinea, Eritrea, Seychelles, Somalia, and South Sudan as they are either observers or non-members.

** Observer countries have no bound tariffs

*** Applied rates are not available

Highlighted countries are not LDCs

As one of its general objectives, the WTO seeks to reduce the water in countries' tariff profiles so as to bring the bound rates as close as possible to the applied ones. To this end, the proposed NAMA (Non-Agriculture Market Access) negotiations in the Doha Round have been designed to reduce tariffs across the board for all WTO countries. Under NAMA, countries would be required to first bind all unbound tariffs and then slash them using a so-called "Swiss Formula"[73] – proposed first by Switzerland during the Tokyo Round (1973-79) and so named thereafter. The formula is to be applied on a (tariff) line-by-line basis at a high level (at least 6 digits) of HS classification. As these cuts would apply to bound tariffs, this would essentially eliminate any water in the tariff profile, making potential reversal in tariff liberalisation, virtually impossible.[74] Even though NAMA discussions have remained in a stalemate similarly to the general negotiations in the Doha Round developed countries are continually trying to find new ways to broker a deal.

Nevertheless, if they so desire, countries in Africa (excluding North Africa) may still find ample room to use tariffs for industrial policies. For instance, as long as the Doha Round remains dormant, NAMA obligations will fortunately remain only proposals. Therefore, as a first step, tariffs can be legally raised up to the bound rates and this would be an internal decision for relative governments not requiring any approval from the WTO. Moreover, many developing countries in Africa (excluding North Africa) have not bound their tariffs completely, so they have a lot of room for increasing tariffs. For some, such as Eritrea, the WTO bindings do not even apply yet as they are not members of the WTO, so they can use tariffs even more freely.

Secondly, it is still legally possible, albeit quite difficult, for a country to apply for re-negotiation of bound tariffs on one or several products. Under GATT Article XXVIII, a lengthy procedure has been laid down which entails notification of intention to the WTO and negotiation of new tariffs individually with all countries that have a "principal supplying interest"[75] in that product. Negotiations must also be carried out with other countries that claim to have a "substantial interest"[76]. As part of the renegotiation, these countries need to be offered compensation in the form of tariff concessions in other products of their interest. It is likely that compensating several countries for a renegotiation can lead to reduction of tariffs on several products. Finally, the modification to the bound schedule needs to be certified and approved by the WTO by consensus. This procedure is cumbersome and costly both in terms of time spent and losses from tariff reduction offered as compensation on several products. Since the inception of the WTO, only a small number of renegotiations have taken place and those were on very few (usually agricultural) products.

73 The Swiss Formula is represented as $T_{new} = (C \times T_{old})/(C + T_{old})$ where Told is the current bound rate, 'T_{new}' is the resulting tariff after reduction and 'C' is the coefficient of reduction. Using this formula, the coefficient would become the cap for any tariffs in that schedule. For instance using a coefficient of 20, a current bound tariff of 80 will be reduced to 16. While there has been no formal decision on the issue as yet, the latest situation in the Doha Round points towards an agreement on a coefficient of close to 20 for developing countries and around 10 for developed countries (WTO, 2012).

74 It may be mentioned here that the Swiss Formula cuts are still under consideration alongside other proposals. Certain new proposals have come up in the recent past suggesting different formulae or a change to the coefficients. The US is even working on average tariff cuts based on a "request and offer" approach as opposed to tariff cuts across the board. However, the Swiss Formula remains the most likely option at the moment.

75 Principal supplying interest is determined on the basis of set guidelines under WTO rules. Generally, it relates to countries that are the biggest suppliers of the product in question to the country concerned over the period preceding application for renegotiation.

76 Substantial interest can be claimed by other countries exporting that product or whose trade is likely to be affected by the change in tariffs.

Another way of increasing bound tariffs is to resort to the so-called 'Government Assistance to Economic Development' provisions under GATT Article XVIII. These allow developing countries to raise their tariffs "to promote the establishment of a particular industry" if they are faced with "low standards of living" and "are in the early stages of development". This also requires a lengthy procedure involving notification to the WTO, negotiations with countries having a substantial interest, compensating them by way of other tariff reductions and approval of WTO members. Despite all these, it may be sometimes worth trying to re-negotiate tariffs in case the likely benefits outweigh the costs. For instance, there may be certain industrial sectors that are strategically more important for a country and it does not mind compensating other governments in (relatively) less important areas at the time. Ukraine is a recent example of such renegotiations.[77]

Developing countries may also impose quantitative restrictions in addition to tariff increases to address Balance of Payments difficulties Under Section B of Article XVIII, applied together with certain rules in Article XII and a separate "Understanding on the Balance-of-Payments Provision of the GATT 1994". These rules require a notification to the WTO on the BoP difficulties faced by a country which are then discussed by all members along with a verification of the situation by the IMF. The proposed import restrictions can then be implemented if agreed by the members. A complete text of Article XVIII can be found at Annex-II.

As with renegotiations under Article XXVIII, the use of BoP provisions to restrict imports has declined since the inception of the WTO[78]. This is due to more stringent and elaborate procedures that have come about as part of the WTO system. Moreover, WTO members do not generally welcome the introduction of protective measures. Any attempts, even though legal, are met with reluctance and resistance and developing countries are persuaded as much as possible to withdraw their protectionist requests. A detailed description of the use of BoP provisions since 1995 is given in **table 5.3** It can be noted that since 2000, there have been only two such instances – Ukraine, 2007 and Ecuador, 2010. However, even if difficult, it still remains an option for countries that are faced with such difficulties.

(b) Subsidies

Before and during the GATT years, developing countries had a considerably freer hand in the use of industrial subsidies until the Uruguay Round. The WTO's SCM agreement has altered this situation completely invoking much tighter constraints on subsidy use. In WTO's understanding, subsidies are generally considered trade-distorting measures that give the subsidising country unfair price advantages in a free trade environment. The agreement, therefore, prohibits any sector-specific subsidies along with those for export promotion and for enforcing the use of local content in manufacturing. It not only disallows assistance

77 Ukraine became a WTO member in 2008 and negotiated commitments during accession that it could not sustain afterwards. In 2012, Ukraine made a request for renegotiation of tariffs on several products (more than 350 tariff lines) and the application was met with strong resistance. Several developed countries blocked the proposal to allow Ukraine the chance of renegotiation, and several others, including large developing countries persuaded Ukraine to withdraw its request in the interest of global free trade. In February 2015, the country invoked the Balance of Payments provisions to apply a surcharge of 5 per cent on imports of industrial goods and 10 per cent on imports of agricultural goods to deal with "exceptional conditions", in addition to its requests for renegotiation under Article XXVIII (WTO, 2013). More details on Ukraine's experience may be found here https://www.wto.org/english/news_e/news15_e/impl_28apr15_e.htm

78 A detailed description of the use of BoP provisions since 1995 is given at Annex-III.

accorded through the government budget but also restrains indirect subsidies in the form of intra-private sector transfers brought about by government regulation.

Subsidies other than those for export promotion or requiring local content are allowed, but they can be challenged in a WTO dispute and, should the challenge be successful, be

Table 5.3 **Invocations and disinvocations of Articles XII and XVIII:B*** since entry into force of the WTO Agreement

Member	Consultations	Measures
Bangladesh	1995(S), 1997 (S), 1999(S), 2000, 2001, 2002, 2004, 2007	QRs remained on a few items as of 2007; remaining items liberalized 2007–10
Brazil	1995	Import quota on motor vehicles introduced June 1995, eliminated effective 27 October 1995
Bulgaria (Art. XII)	1997, 1998	5 per cent import surcharge introduced Jun. 1996, reduced 1998, eliminated Jan. 1999
Czech Republic (Art. XII)	1997	Import deposit scheme introduced Apr. 1997, eliminated Aug. 1997, Art. XII disinvoked
Ecuador	2007, 2010	QRs applied in 2009, gradually replaced by price-based measures 2009; all BOP measures removed Jul. 2010
Egypt	1995(S)	Disinvoked Article XVIII:B as from 30 June 1995
Hungary (Art. XII)	1995, 1996	Import surcharge introduced March 1995, reduced in 1996, eliminated July 1997
India	1995, 1997	Discretionary import licensing
Israel		Disinvoked BOP provisions Sept. 1995
Nigeria	1996, 1997, 1998	Import prohibitions
Pakistan	1997, 2000	QRs invoked 1997; phased out 2002
Philippines	1995(S)	QRs since GATT accession in 1980; eliminated on most agricultural products 1996
Poland (Art. XII)	1995	Import surcharge introduced Dec. 1992, eliminated 1 Jan. 1997
Romania (Art. XII)	1999, 2000	Import surcharge introduced Oct. 1998, eliminated Jan. 2001
Slovak Republic (Art. XII)	1995, 1997, 1999, 2000	Import surcharge introduced 1994, reduced July 1996, eliminated 1 Jan. 1997, reintroduced Aug. 1997, abolished Oct. 1998; import surcharge introduced June 1999 abolished Jan. 2001
South Africa	1995	Import surcharge removed Oct. 1995; disinvoked BOP provisions Oct. 1995 Import licensing; partially liberalized 1996. Art.
Sri Lanka	1995	XVIII:B disinvoked May 1998
Tunisia	1996	QRs on motor vehicles; liberalization completed 2001
Turkey	1995(S)	Import charges pre-dating WTO; eliminated 1 Jan. 1997
Ukraine	2007	15 per cent import surcharge on some products for up to 6 months, introduced Mar. 2009, discontinued Sept. 2009

Source: WTO Analytical Index (3rd edition updated to 30 September 2011), accessed 3-2-2015.

* Under provisions of Article XII, XVIII:B and the "Understanding of the Balance-of-Payments Provisions of the GATT 1994", a Member may apply import restrictions for balance-of-payments reasons.

removed. They can also be punished with the imposition of countervailing duties. These are called 'actionable' subsidies and can be used as long as they do not cause 'injury' to the importing country's domestic industry, 'nullify or impair' tariff concessions on the products, or 'seriously prejudice' other members' exports of the same product. In all these cases, the aggrieved member can dispute these subsidies at the WTO, and have them revoked.

Moreover, subsidies for R&D, upgrading of disadvantaged regions in the country and for developing environmentally friendly technology can be used more actively. These subsidies were exempted from these rules and considered non-actionable until the end of 1999. Even though they are now 'actionable' these subsidies have hardly been disputed, partly because these are subsidies most frequently used by developed countries, who are usually the main challengers to subsidies. Given that there appears to be a general tolerance to such subsidies among WTO members, developing countries should more actively use these subsidies. In fact, other subsidies could also be disguised as R&D or regional development expenditure, allowing countries to buy some more time before the subsidies are detected and / or disputed.

In case a subsidy causes injury, the importing country, apart from disputing it, also has the right to impose countervailing tariffs to offset its effect. These duties can be applied after proving that the subsidy in question is actually responsible for causing injury to the industry. A wrongful imposition of countervailing duties can also be challenged in a dispute. To date, countervailing duties have been largely used by developed countries to target the subsidies of developing countries and protect their own industries.

In spite of the above, there is still room for developing countries to use some subsidies. For example, LDCs and developing countries that are not classified as LDCs[79] but have a per capita income of less than $1,000 (listed in Annex VII to the SCM agreement) are permitted to use export subsidies. However, these countries are not exempt from the use of CV duties against them, in case their subsidies cause injury. Moreover, this exemption is available only until the countries graduate from this category, i.e. cease to be LDC or reach per capita income levels of more than $1,000. There is a further caveat that, in case an LDC or Annex VII developing country achieves export competitiveness[80] in a product whose export is being subsidised, the export subsidy needs to be phased out within eight

79 The WTO recognizes as least-developed countries (LDCs) those countries which have been designated as such by the United Nations. There are currently 48 least-developed countries on the UN list, 34 of which to date have become WTO members (WTO). The UN list can be found here: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf

80 According to Art.27.6 of the SCM agreement export competitiveness in a product is achieved if a country's exports of that product reach a share of at least 3.25 per cent of world trade in that product for two consecutive calendar years. LDCs and Annex-VII developing countries should phase out export subsidies on such products within 8 years. Other developing countries are allowed 2 years for the phasing out. The SCM agreement further lays down that export competitiveness for a developing country's exports can only be determined in two ways: (a) on the basis of a notification by the developing country having reached export competitiveness; or (b) on the basis of a computation undertaken by the Secretariat at the request of any country. This implies that if the member does not tell others that it has reached export competitiveness, the matter can only be brought to light if some other country raises the issue with the WTO secretariat. Even then, it will only be a perception (speculation?) till it is confirmed (or rejected) by the secretariat. This process will also need time. Therefore, in terms of seeking additional policy space, if countries don't confess, they may be able to get away with their export subsidies even after reaching export competitiveness till they are found out.

Table 5.4 **Countries in Africa according to the SCM agreement** (excluding North Africa)

Least Developed Countries (LDC)	Annex-VII developing countries	Other developing countries	Countries not bound by SCM	
			WTO Observers	WTO Non-Members
Angola, Benin, Burkina Faso Burundi, Central African Republic, Chad, Democratic Republic of the Congo, Djibouti, Guinea, Guinea Bissau, Lesotho, Malawi, Madagascar, Mali, Mauritania, Mozambique, Niger, Rwanda, Sierra Leone, Tanzania, The Gambia, Togo, Uganda, Zambia	Cameroon, Congo, Côte d'Ivoire, Ghana, Kenya, Nigeria, Senegal, Zimbabwe	Botswana, Cabo Verde, Mauritius, Namibia, South Africa, Swaziland, Gabon, Seychelles	Comoros, Equatorial Guinea, Ethiopia, Liberia, Sao Tome and Principe, Sudan	Eritrea, Somalia, South Sudan

Source: WTO

years. **Table 5.4** identifies countries Africa (excluding North Africa) that fall in respective categories according to the SCM Agreement.[81]

All developing or least developed countries can use actionable subsidies until they cause adverse effects such as injury or serious prejudice. While the threat of a dispute or countervailing duty against such subsidies remains real, the implementation design of these punishments can allow countries to get away with subsidy programmes for at least a few years. To challenge a subsidy in a dispute involves a lengthy process of notifications, consultations, appointment of panels and rulings by the Dispute Settlement Body. Even if the panel rules against the subsidy, the verdict can be appealed against in the Appellate Body. The findings of the Appellate Body are supposed to be binding. But this entire process can take at least 2 years from the time a country decides to challenge the subsidies. Even when the Appellate Body orders the removal of a subsidy, a certain time period is allowed for complete withdrawal. Given that the subsidy will take some time before it actually causes the adverse effect prompting a challenge, the subsidy can remain in force for three or more years at least before being removed.

In the past, some powerful countries such as the US have persisted with their subsidies even after they were declared illegal by the Appellate Body. This can lead to the challenging country seeking authorisation for retaliation against the subsidising country. This retaliation is in the form of market access restrictions in other products or revoking their obligations in

81 Other developing countries were allowed until the end of 2002 to phase out their export subsidies but they can apply for yearly extensions. This programme of extensions has been modified and is now available only to certain developing countries, with a share in world merchandise export trade of less than or equal to 0.1 per cent, and a Gross National Income (GNI) of $ 20 billion or below (in the year 2000). Furthermore, only export subsidies in the form of full or partial exemptions from import duties and internal taxes, and which were in existence before 1 September 2001 could be provided an extension. This facility will also cease at the end of 2015

other WTO agreements such as GATS or TRIPS. However, this route requires considerable economic and political strength, as it requires warding off pressure from all WTO members. In reality only rich and powerful countries have attempted this route such as the US against EU in the case of aircraft subsidies and against Brazil in the case of certain cotton subsidies.

Exploiting the procedural timeline is also possible in the case of countervailing duties. First, for initiating countervailing action, a country must notify and seek consultations, which may take a few months. Given that injury must exist for a country to raise an issue, a subsidy could be in place for several months before countervailing investigations even begin. But compared to dispute settlement, countervailing duties may be placed sooner as there is allowance for imposing provisional countervailing measures during the course of investigation.

All developing or least developed countries can use actionable subsidies until they cause adverse effects such as injury or serious prejudice.

Nevertheless, the key point is that subsidies can be used till they are challenged or countervailed. This challenge may never come, and if it does, it will take at least 2 to 3 years to be effective. During this time, the subsidy can remain in place. It should, therefore, not be a deterrent for countries who wish to use subsidies.

In any case, bringing a trade dispute against another country or imposing countervailing duties is usually more politically driven actions. Stronger industrial lobbies are more able to convince their governments to take action against subsidised imports and even then it is up to the government to eventually fulfil that request. Therefore, not all subsidies are countervailed or challenged. Moreover, effective diplomacy can also ward off threats of a dispute or countervailing duty as countries discuss these matters well before taking any step.

Countries that wish to use countervailing action can exploit the system in an even stronger way. (This applies to the use of antidumping duties as well). Once such duties are imposed, the only way for a country to have them removed is to challenge them in a dispute. The same timeline would then apply as in the case for subsidies. Even if eventually declared illegal, countervailing duties can remain in place for two to three years. If not challenged, they can be used for five years in one stint. Indeed, developed countries have often resorted to this mechanism while protecting their own industries. However, using countervailing duties involves more legal costs and technical difficulties as compared to subsidies or simple tariffs. Developing countries can still use them but they would have to weigh their options accordingly.

(c) Performance requirements

In addition to subsidies and tariffs, development history of today's advanced economies shows the use of specific interventions in the area of foreign investment. Elaborate policies to enforce minimum performance parameters regarding, for example, exports, mandatory use of locally manufactured inputs and local workers, requirements for joint venture and technology transfer were all used in order to maximise the impact of FDI on local productive capabilities (Kumar 2005; Rasiah, 2005).

The need for such requirements in recent years has grown rapidly since transnational companies (TNCs) from the advanced countries have begun to take control of international production networks. To engage in these assembly networks by raising domestic content is extremely important for developing countries, as it allows them a chance to manufacture technology-intensive parts and components, which is fundamental for industrial upgrading. In many cases at present, developing countries are involved in 'assembly networks' as assemblers, rather than the producers of 'technology-intensive parts and components. The latter are typically imported. Of course, even learning how to assemble technology-intensive products adds something to the local productive capacity. But that must be distinguished from learning to produce parts and components which is a step higher in building technological capabilities. Prime examples of such networks can be seen in the manufacture of electronics and automobiles (UNCTAD, 2014a; Rasiah, 2003; Kumar, 2005).

The WTO's agreement on Trade Related Investment Measures and specific commitments made in the General Agreement on Trade in Services for commercial presence of foreign enterprises place a bar on countries from interfering with the affairs of foreign investors.

The WTO's agreement on TRIMs (Trade Related Investment Measures) and specific commitments made in the GATS (General Agreement on Trade in Services) for commercial presence of foreign enterprises place a bar on countries from interfering with the affairs of foreign investors.

(d) TRIMS

The TRIMs agreement applies to all investment in goods production, and includes prohibition of many regulatory measures concerning FDI, particularly of domestic content requirements, and foreign exchange (or trade) balancing measures. The transition period for all developing countries and LDCS to phase out any such investment policies ended in 2000 and 2002 respectively.

The TRIMS agreement, however, does not limit the use of other regulatory investment measures, such as conditions for maintaining joint ventures with local firms, transfer of technology and limitations on foreign equity ownership. These are important investment measures and can be used by developing countries to create a useful investment strategy.

As in the case of renegotiating tariffs, countries can make use of GATT Article XVIII (the so-called 'Development' provision) and the BoP difficulty provisions to use investment policies in violation of TRIMS. These provisions allow developing countries that are in early stages of development and maintaining low standards of living to promote particular industries by temporarily contravening their WTO commitments. But this course can only be taken after approval from the WTO and involves compensating trading partners that are likely to be affected by the change. Just to be sure, such deviations are supposed to be only temporary and under constant scrutiny of the relevant WTO council.

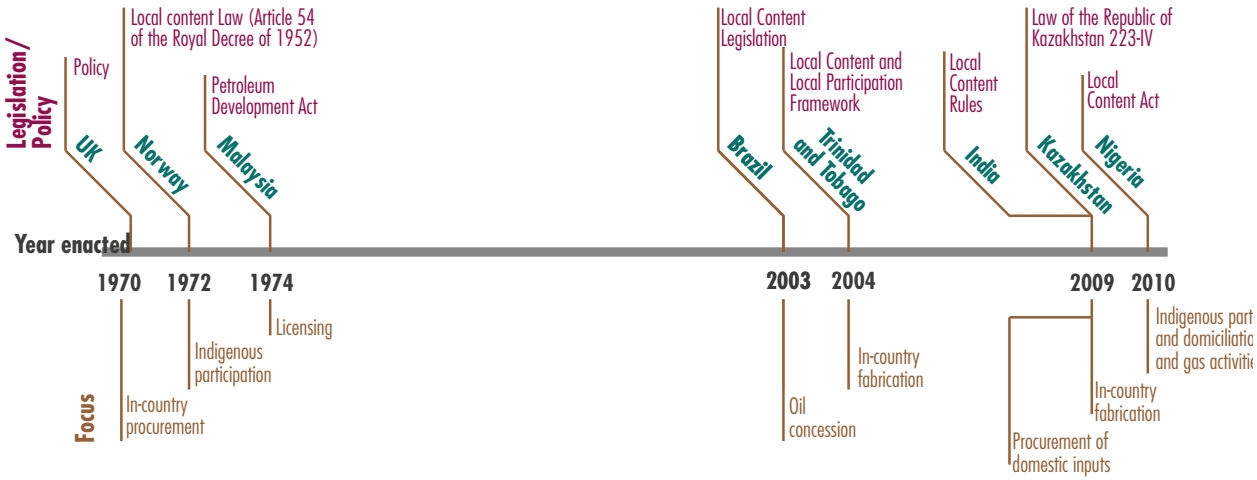
Similarly to most other WTO commitments, making policy interventions in foreign direct investment can only be reprimanded if the affected parties report the offence to the WTO. Reportedly, there are still countries that are using local content requirements in their investment policies but have not been challenged. Non-WTO member countries are in any case exempt from WTO commitments and have been seen to abundantly use various forms of performance requirements including those requiring local content (Gu and Yabuuchi, 2003). According to Ado (2013), advanced countries also use various forms of local content enforcing policies in disguised forms. A list of some local content policies of certain countries in the Oil and Gas sector is given in **figure 5.1**.

Indeed, the Rules of Origin requirements in various Preferential Trading Arrangements (PTA) or bilateral FTAs maintained by developed countries are not even prohibited under the WTO. For example, the Generalised System of Preferences (GSP) of various developed countries and other PTAs such as the African Growth and Opportunities Act (AGOA) of the United States contain lengthy and intricately designed Rules of Origin which are the basis for deciding what products can qualify for preferential treatment and are used as a means of ensuring a certain proportion of local contents of those products.

The AGOA provides duty-free access to textiles and apparel manufactured in Africa (excluding North Africa) and exported to the US. However, the garments must contain raw materials sourced only from the home country, or the US. They are allowed to use yarn and fabric from a 'third' country, but such exports are permitted only up to a cap applied to all imports from AGOA countries. Only very few countries can make use of this small window as the cap works on a first-come-first-served basis. Similarly, in the US-Singapore FTA, the US applies a "yarn forward rule" on textile and apparel products. To qualify for immediate duty-free entry into the US, textiles and apparel from Singapore must be made from yarn sourced from Singapore or the US. This means that US yarn has to be used, instead of cheaper yarn and fabric sourced from the Asian region. Such provisions have neither been questioned, nor challenged. Similar requirements have been employed by the US in NAFTA (Takechi and Kiyono, 2003). The EU antidumping legislation also incorporates local content requirements (Bronckers, 1995).

While such provisions are designed by developed countries to ensure their own domestic content, developing countries can do several things to help their own industries. For one, countries could look towards investments in enhancing local production rather than relying on imported inputs for manufacturing the finished garments. Also, if the available tariff advantage is utilised to its fullest, there may be room to create pressure on the benefit-granting countries to enhance the existing caps or remove them altogether. Moreover, the above instances of developed country use of local contents requirements can serve as an example for developing countries to be ingenious in finding ways of putting performance requirements in place.

Figure 5.1 **Countries that applied or are still applying the local content policy in their oil and gas sectors**



Source: Ado, 2013

(e) GATS

The GATS, so far, applies only to commitments that the countries have undertaken themselves in their respective schedules of commitments. Mode 3 of service delivery under GATS[82], through the establishment of a commercial presence in a foreign country, mainly pertains to foreign direct investment by a service firm. If countries commit to keeping Mode-3 in a certain sector 'without limitations', it implies that there are no restrictions on entry or performance for a foreign investor in that area. Much like the binding of tariffs in industrial products, countries can choose which sectors in services trade to bind by making specific commitments. For instance, in Telecommunication services, countries can bind themselves to allowing at least three foreign suppliers. It may allow more in its applied regime but will be bound to give access to at least three firms. Similarly to tariffs, these bindings cannot be changed except through renegotiation with all other countries holding a substantial interest. Most developing countries have undertaken at least some commitments since the end of the Uruguay Round, but these are far fewer than those on tariffs.

82 GATS recognises 4 modes of service delivery. *Mode-1* pertains to both service provider and consumer being based in their home countries, e.g. provision of services online and through call centres etc. *Mode-2* relates to consumption abroad where the consumer moves to the provider's country to avail the service, as in the case of Tourism. In *Mode-3* the service provider moves to the consumer's country by establishing a commercial presence there and relates to any form of FDI. *Mode-4* is a case of temporary movement of natural person's abroad, where individual professionals (lawyers, auditors, constructions workers, doctors etc.) move to the service consumer's country to provide the service.

There is, however, a lot of room for pursuing proactive investment policies, particularly in sectors that have been left unbound by countries. Far lesser commitments have been made by developing countries in the area of GATS compared to trade in goods. It is possible to craft entry conditions for foreign enterprises in a way that circumvents restrictions over domestic content requirements. Such conditions can be entered into the GATS schedule under Mode-3. As with goods investment, joint ventures can also be made mandatory and limits on foreign equity ownership assigned wherever necessary. Moreover, there are no compulsions to restrict the local procurement of services as a condition for entry. Such measures are termed as 'limitations' in the GATS schedule. In fact, if countries have not made any specific commitments, leaving the sector completely unbound may also be useful for that allows them to use whichever policy they like in that sector.

While such options remain open as long as developing countries make no commitment of unrestricted market access to foreign investors, the current Doha Round seeks to make developing countries commit to further bindings in GATS. Developing countries are being urged by developed countries, experts, and international institutions to consider services as the new avenue for locating growth potential. It is argued that being relatively richer in labour endowment developing countries could concentrate on liberalising their services regimes, particularly in Mode-3 to bring in the much needed foreign investment, and try to gain more access in Mode-4 to export natural persons for service delivery abroad. As with the case of unilateral liberalisation in tariffs, the influence of international institutions can be felt, as developing countries are increasingly being encouraged to focus their attention on liberalising their services regimes. Such developments are certainly a step towards closing the available policy space.[83] African countries would be well advised to not make any binding multilateral commitments with countries outside the continent in the sectors where they seek to impose restrictions as part of their development strategies. At the same time, these countries should seek to strengthen their services sectors as part of their industrial policies.

In the case of both the TRIMS and the GATS, there is considerable space to institute investment policies for industrial expansion. GATS obligations seem to be more pliable than TRIMS ones at the moment. However, if intelligently crafted and employed, policies may not even get challenged under TRIMS. In any event, even if challenged, the usual dispute settlement procedures would apply making the policy applicable at least for a couple of years.

In the case of both the TRIMS and the GATS, there is considerable space to institute investment policies for industrial expansion.

83 While Doha still remains in a deadlock, a separate TISA (Trade in Services Agreement) has been proposed which would operate in the form of a large FTA in Services for participating countries. Participation is not mandatory, and developing countries are shying from any large, formal commitments, but they are being urged to consider this as a boon for their economic prospects. So far, a few developing countries such as Costa Rica, Paraguay, Panama, and Pakistan have been reported to join the TISA negotiations.

(f) Technology Transfer and Intellectual Property Rights

One of the most integral components of industrial development is technological upgrading. Access to innovations in the industrial field is a direct means to climbing up the technological ladder and building the required capabilities. Usually, the more advanced countries are at the forefront in conducting new research and innovation. For developing countries, it is very important to be able to access this new technology and learn to imitate it (with suitable adaptation) for their industrialization.

The TRIPS agreement impinges directly on such transfer of knowledge and technology to developing countries. The agreement provides global protection to innovators of knowledge and lays down minimum standards that developing countries must meet in establishing regimes for protecting intellectual property rights (IPRs). Patents and copyrights are the foremost IPRs in terms of their implications for technology policies. Members of the WTO are bound under TRIPS to protect patents generated in other countries and not to discriminate among IPR holders under the national treatment principle. Patents are protected for 20 years during which the technology cannot be used by anyone else without paying expensive royalties. By the time the patent expires, the gap between the so-called haves and have-nots of technology has widened so much that it becomes even more difficult to catch up. Similar rules apply to copyrights. In some cases, copyrights are required to last for several decades, for instance in the 1993 US copyright law, known as the 'Mickey Mouse Law', which gave – retrospectively – 95 years of copyright protection to works of corporate creation. Such protection for IPRs was almost non-existent in most of today's industrially advanced countries during their developmental years, and their nationals had much easier access to advanced technology (Chang 2001; Bercovitz 1990; Gerster 2001; Kumar 2003).

Nevertheless, certain flexibilities are provided in the agreement which, if developing countries could exploit, would serve them some leverage in technological capability building. This would require appropriate and creative national legislation and negotiation (Rasiah 2005; Shadlen 2005). For instance, after much debate in the WTO, developing countries are allowed to issue compulsory licences for registered patents under justifiable circumstances like public health emergencies. Also, there are ambiguities in the definitions surrounding the concept of 'invention', which may make patenting slightly more difficult. This can allow countries to smartly avoid patenting certain technologies and create room for technological invention.

5.1.3. Bilateral and Regional Agreements

Almost all African countries receive preferences from developed countries under various PTAs, and maintain bilateral agreements with some other countries.

A further set of restrictions on policy space falls within the ambit of bilateral and regional trading arrangements. Most of these agreements tend to be more pervasive and restricting in terms of policy space than the multilateral agreements. The WTO recognises two kinds of agreements that are not multilateral – PTAs (Preferential Trade Agreements) and RTAs (Regional Trade Agreements). Almost all African countries receive preferences from developed countries under various PTAs, and maintain bilateral agreements with some other countries.

(a) Preferential Trading Arrangements

PTAs are unilateral and non-reciprocal tariff preferences granted by developed countries to developing countries, i.e. they do not demand similar tariff concessions or market access from the recipient countries[84]. However, as explained below, the non-reciprocity is limited to market access commitments only. The preferences are usually MFN plus, i.e. tariffs applied on eligible products are lesser than the donor country's applied MFN rates. Each developed country maintains its own preferential trading regime and applies its own laws and conditions on it. Examples include the Generalised Scheme of Preferences (GSP) of most developed countries usually applicable to all developing countries, or specific regional initiatives such as the African Growth and Opportunities Act (AGOA), the Andean Trade Preferences Act (ATPA) and the Caribbean Basin Incentive (CBI) of the United States. So far, about 26 PTAs of various types are known to exist (WTO, 2013).[85]

In such agreements, the preference-giving country has complete discretion in setting out eligibility criteria to include or exclude benefit receiving countries and / or products from the tariff preferences. Thus, developed countries, in return for preferential market access, demand both formal and informal commitments on several trade and non-trade issues from developing countries as a condition for qualifying for such preferences. Most of these issues are those that developed countries have been unable to push through for negotiation at the multilateral level because of lack of global consensus, for example, issues such as labour standards and environmental regulations or stricter rules on FDI regulation and government procurement or even a general commitment to free market economy, privatisation, and deregulation.

The United States requires minimum technical standards to be met for qualification as a recipient of its preferences. Apart from a condition that the country in question is not Communist, several activities are forbidden. For example, countries cannot take ownership, in any way, of a company that is owned by a US citizen or firm (or holds at least 50 per cent partnership of US citizens). Countries are further forbidden from nullifying an existing agreement with American firms, violating a patent, trademark or other intellectual property, or even imposing any taxes or operational conditions which may have the effect of expropriation or taking control. Moreover, countries must not "fail[s] to work towards the provision of adequate and effective protection of intellectual property rights"; must sign a treaty regarding the extradition of United States citizens; and must take steps to afford internationally recognized worker rights to its workers (USTR, 2013).

There are additional discretionary criteria, which, if violated, could make the President of the US deny tariff preferences to the country. These include a compulsion to follow the accepted rules of international trade provided for under the WTO, i.e. to refrain from using export subsidies, export performance requirements or local content requirements. Furthermore, countries must take steps to support the US efforts against terrorism and corruption. The AGOA also requires efforts for democratisation as a pre-condition for qualification. Indeed, according to the USTR, Cote d'Ivoire was expelled from the programme after military

84 Although PTAs are deviation from the MFN principle of the WTO, they have been granted legitimacy through the 'Enabling Clause – a waiver granted and made part of the WTO law to allow the existence of such preferential regimes.

85 India, China, Morocco and Kyrgyz Republic are the only non-developed countries that maintain a PTA meant as duty-free treatment for LDCs.

interventions in its government. Therefore, the non-reciprocal preferences are in reality very much reciprocal – only that the reciprocity is not in the form of market access.

Similarly, the EU's 'GSP plus'[86] requires countries to not only ratify but also to enact enabling legislation for, and implement at least 27 international conventions pertaining to labour, environment and good governance (EU, 2012). These conventions include 16 UN and ILO conventions on human and labour rights, respectively; and 11 conventions pertaining to environment and governance principles. It is not so much the demand for ratification of such conventions that may be difficult for developing countries but requiring the enactment of enabling laws and ensuring effective implementation extends deep into their policy making domains.

From our earlier discussion, WTO disciplines on intellectual property, subsidies and performance requirements although limiting, contain certain exceptions that developing countries could potentially make use of. However, eligibility requirements of the above nature in PTAs are more binding and restricting. First, there are no exceptions or flexibilities under PTA obligations. If a clause is violated, the country is at the behest of the US to be thrown out of the preferential programme. Bolivia's trade preferences under the ATPA were suspended in 2008, as it had failed to meet eligibility requirements pertaining to counter-narcotics cooperation (USTR, 2013). Second, as opposed to the WTO where there is recourse to the Dispute Settlement Body in case of a violation, there is no such mechanism here. Donor countries are at liberty to make and use their criteria as they wish. Third, on issues such as labour standards and worker rights, developing countries had been resisting their linkage to international trade to avoid having to make binding commitments in the WTO. These agreements, however, have found an effective way to make developing countries adhere to it.

WTO disciplines on intellectual property, subsidies and performance requirements although limiting, contain certain exceptions that developing countries could potentially make use of. However, eligibility requirements of the above nature in PTAs are more binding and restricting.

PTAs, therefore, present a catch 22 situation for developing countries. On the one hand, they are given incentives of enhanced market access to the larger developed countries, with no reciprocal demands for similar treatment. On the other, the concept of non-reciprocity is twisted to extract commitments that not only violate their policy autonomy, but may even hinder development. One option for developing countries could be to opt out of such preferential regimes, but that would depend on how they weigh their short term benefits of market access on products of current interest against the long term shackles they place on their own policy options. So far, no country has made a voluntary request to opt out of a preferential tariff regime. That is not surprising given that, most of the advice they receive for economic policy-making is focussed on gaining market access; and most pressures they face are for liberalising their own regimes and protecting others' intellectual property.

86 The EU GSP has two parts. The first where general preferences are granted to eligible countries and the GSP plus where additional preferences, amounting to duty-free access on eligible products is provided.

Other options involve political negotiation and diplomacy, whereby countries continue to make policy interventions for industrialisation but ward off the threat of expulsion from such PTAs. After all, the eligibility criteria are completely discretionary and violations can be overlooked by preference-granting countries, if they so desire. In 2004, Pakistan was granted enhanced GSP benefits for combating drug trafficking (now incorporated into the GSP-plus programme) primarily because it was seen as a frontline state in the war against terror by western powers and the country used this new-found leverage to its negotiating advantage. Of course, the stated reason for the grant of these preferences was Pakistan's efforts against drug trafficking, even if it came only close to fulfilling all the criteria.

(b) Bilateral and Regional Trade Agreements

RTAs are reciprocal agreements where countries accord tariff preferences to each other on a reciprocal basis. RTAs can take the form of Free Trade Agreements (FTA) or Customs Unions (CU). Three categories of FTAs can be differentiated between depending on the type of country involved – North-North, North-South and South-South. According to Thrasher and Gallagher (2008) FTAs can be understood in a hierarchical way with reference to policy space. In terms of constraints placed on typical development strategies and tools, North-South agreements involving the United States are the most restricting. Those involving the EU are slightly less restrictive and South-South FTAs are most lenient. Shadlen (2005) makes a similar assessment, arguing that the bargain of enhanced market access in exchange for more constraints on industrial policy becomes more entrenched in the case of bilateral integration. Moreover, the US and EU are most influential in asking countries to form bilateral and regional trade agreements which are most restraining for developing countries compared to WTO agreements.

Countries negotiating bilateral FTAs with the US, Japan or EU is generally found to have less bargaining power than they do in multilateral negotiations. They have weaker negotiating positions due to the lack of negotiation capacity and resources and due to less developed political institutions. Moreover, despite their limitations, WTO agreements have embedded flexibilities for developing countries, which are absent in FTAs. Furthermore, as with the PTAs discussed above, many North-South FTAs include rules on investment, government procurement, competition law, labour standards and environment standards, so have much broader scopes than the WTO does.

At a more specific level, each area of negotiation like goods, services, investment, or intellectual property rights, adds further constraints on developing countries' policy options. In the case of goods, negotiations on tariffs are largely based on applied rates. This reduces tariffs on negotiated products even further than the applied MFN rates.[87] Even if developing countries raised their MFN tariffs to utilise the water available, the commitments made under the FTA with partner countries remain binding. Renegotiating those commitments with a partner such as the US, for example, would be very difficult particularly without making even further concessions in other areas.

87 The term 'MFN tariff' is used in international trade negotiation to refer to normal applied tariffs, as WTO members are supposed to offer MFN tariff to all members. FTA is the only place where countries can offer another country better rate than the MFN tariff under GATT Article XXIV. Countries that are not part of the FTA face the MFN tariffs while FTA partner countries get the reduced tariffs.

Furthermore, US FTAs go beyond GATT and WTO disciplines to restrict countries. For example, while the GATT does not consider duty drawbacks (against imported inputs used for export) as export subsidies, FTAs with the US invariably prohibit duty drawbacks. Moreover, US agreements also permit safeguard measures only for injurious import levels and balance of payments difficulties but safeguard measures may include only suspending concessions or raising duties but not imposing quantitative restrictions – options that are technically exercisable under the WTO with some restraint. Furthermore, for an imposition of safeguards under a US bilateral agreement, developing countries must meet higher legal standards than those required by the WTO such as establishing that a surge in imports is actually a substantial cause of injury to the industry (Thrasher and Gallagher, 2008).

When it comes to IPRs, one of the primary goals of the US in negotiating this section in an FTA is to induce countries to introduce new legislation that would give protection in line with what is available in the US (USTR, 2004). Developing countries that enter into such an FTA with the US would typically accept obligations that go far beyond those required as signatories of TRIPS under WTO. For example, increased patent protection via 'pipeline' protection and extended periods of data exclusivity are standard characteristics of such agreements (Shadlen, 2005; Maskus, 1997, 2000; Correa, 2000). Pipeline protection pertains to the granting of patents to products that are not new. For instance, drugs that were not earlier patented in developing countries because of a lack of patent laws would be required, under pipeline protection, to be patented for the duration of the patent in the first country. Extended exclusivity relates to blocking access to the test data of a pharmaceutical company. This denies producers of generic medicines the chance to get regulatory approval without replicating the clinical trials which are extremely expensive and time consuming.

In services and investment, the story is similar for the US FTAs and most EU FTAs as well. US bilateral agreements prohibit the imposition of any performance requirements in connection with the establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment.

Where a full FTA is not possible, the US has resorted to Trade and Investment Framework Agreements (TIFA). Under these, the US does not offer full tariff liberalisation but puts in place requirements to move towards an FTA. Obligations such as those for IPR protection and phasing out any interventionist policies that might exist in the potential partner country are part of such framework agreements. In the case of the EU, it has negotiated Economic Partnership Agreements (EPA) with groups of African countries. EPAs are also promises for enhanced market access for that particular group of countries in return for similar tariff concessions and other obligations on FDI regulation and labour, human and intellectual property rights.

South-South FTAs are bilateral agreements formed between two or more developing countries. It is argued that these agreements are still very lenient as far as policy space is concerned. For one, they contain only very few commitments outside the lowering of tariffs on goods. Some may include commitments on liberalising services. Therefore, being a member of an FTA with a developing country should not, for instance, forbid it from maintaining export subsidies if it is otherwise allowed under the WTO. Several countries in Africa (excluding North Africa) have formed such partnerships in the form of FTAs or CUs with regional developing countries. African countries' regional agreements, including TISA or other agreements with developed countries are listed in **figure 5.2**.

(c) Economic Partnership Agreements (EPAs)

Economic Partnership Agreements (EPAs) are reciprocal trade agreements between the EU and 79 African, Caribbean and Pacific (ACP) countries. The WTO's insistence on reciprocity and non-discrimination in granting tariff preferences resulted in a set of controversial negotiations between the EU and various groups of countries across the African region over 12 years. Eventually, countries belonging to three African negotiating groups, namely West Africa (ECOWAS), East African Community (EAC), and South African Development Community (SADC), concluded their respective EPAS in 2014[88]. According to Mevel, Valensisi and Karingi (2015), the acceptance of EPAs was accelerated under threat from the EU for the withdrawal of all or part the preferential access to the EU for African countries unless EPA negotiations were concluded. Negotiations with two remaining blocs of Central Africa, and Eastern and Southern Africa (ESA) are still ongoing, although a number of countries in these two groups have signed interim EPAs individually (e.g. Kenya).

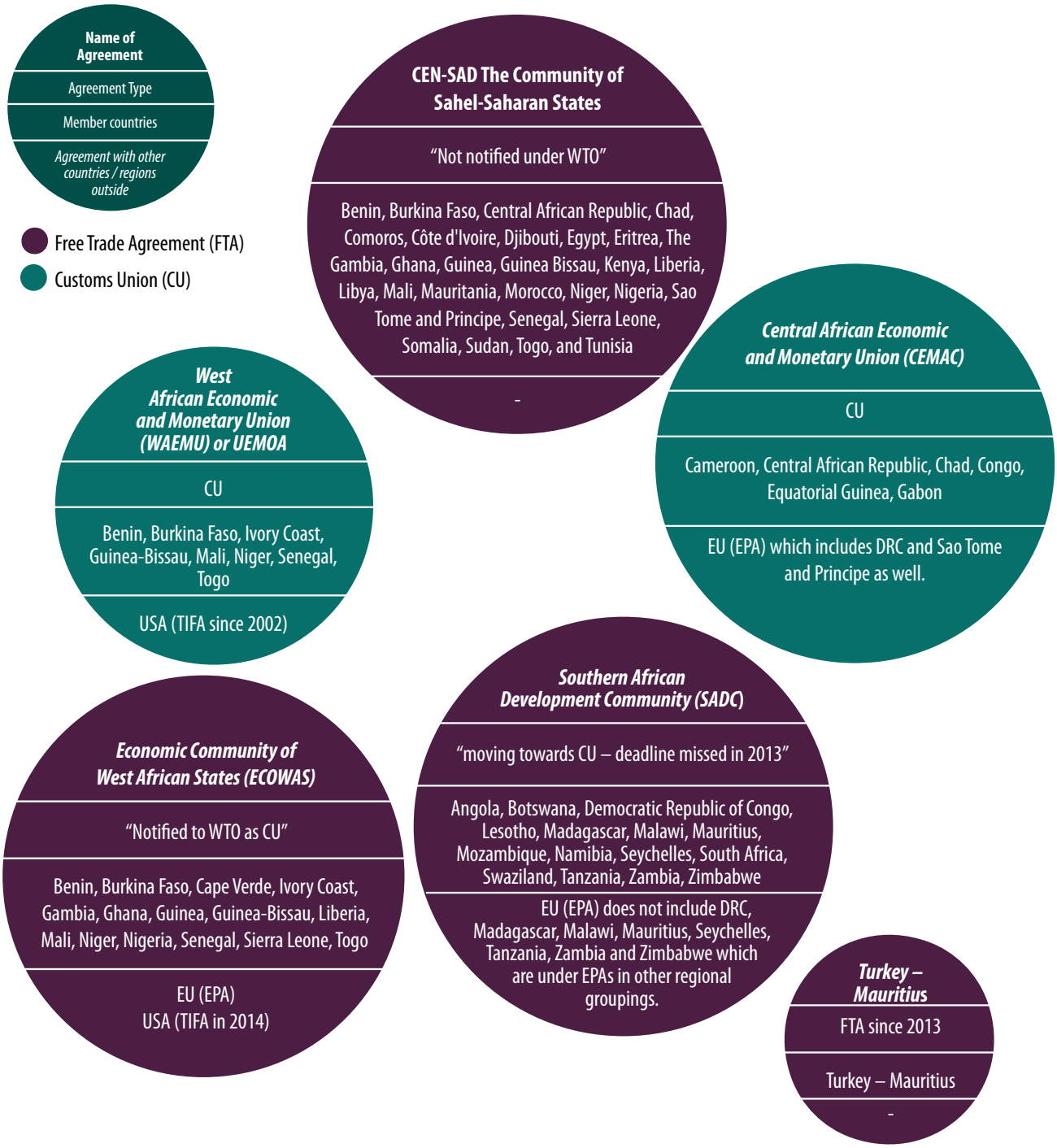
Under the EPAs, the EU is expected to grant market access on a completely duty- and quota-free basis in response to a commitment from its EPA partners to progressively make their markets duty-free for up to 80 % of their imports from the EU.

Most African countries already enjoy preferences on their exports to the EU market under the GSP for non-LDCs and Everything but Arms initiative for LDCs. Therefore, the impact of the EPAs on market access for African countries is expected to be minimal. The greater advantage in the region would most likely go to African non-LDCs, whose existing tariff preferences under GSP could be further enhanced. African LDCs

If EPAs lead to an increase in exports for Africa at all, most of them will be in a few agricultural sectors (rice, sugar, milk, vegetables, fruit, etc.). Even for these, the gains could be overestimated, given the EU's stringent sanitary and phytosanitary requirements. The rise in imports from the EU are also likely to hinder intra-African trade up to $3 billion, following full implementation of the EPAs

88 Negotiations formally started in 2002 and were initially expected to be concluded in 2008 but only four African countries from ESA (Madagascar, Mauritius, Seychelles and Zimbabwe) complied. In July 2014, ECOWAS heads of state and Mauritania endorsed their EPAs for signature. In Central Africa, only Cameroon ratified the interim EPA in July 2014. Burundi, Kenya, Rwanda, Tanzania and Uganda are negotiating a comprehensive regional EPA for EAC. In July 2014, EPA negotiations concluded in the SADC region with an agreement to replace the interim EPA signed—but never ratified—by Botswana, Lesotho, Mozambique and Swaziland.

Figure 5.2 **Regional Trade and Integration Agreements in Africa**
(WTO notified in Italics)



Sources: Meyer et. al, 2010 (OECD); World Bank (2009); UNECA, Europa.eu, WTO and other

ECCAS
Economic Community of Central African States

Angola, Burundi, Cameroon, Chad, Central African Republic, Congo, Democratic Republic of Congo, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe.

-

EU (EPA) does not include Angola, Rwanda and Burundi.

Common Market for Eastern and Southern Africa (COMESA)

CU (moving to CU, combined with EAC and SADC)

Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, Zimbabwe

EU (EPA) does not include Egypt, Libya, DRC, Swaziland, Kenya, Rwanda, Burundi and Uganda. Apart from Egypt and Libya, the remaining countries are under EPAs in other regional groupings.

US (TIFA in 2001)

East African Community (EAC)

CU (moving to CU combined with COMESA and SADC)

Burundi, Kenya, Rwanda, Tanzania, Uganda

EU (EPA)
USA (TIFA since 2008)

IGAD
Intergovernmental Authority on Development

"Not notified under WTO"

Djibouti, Ethiopia, Eritrea, Kenya, Somalia, South Sudan, Sudan, and Uganda

-

Southern African Customs Union (SACU)

CU

Botswana, Lesotho, Namibia, Swaziland, South Africa

EU (EPA) – all countries here are included in an EPA with SADC countries. EFTA (Switzerland, Norway, Liechtenstein and Iceland) FTA since 2006. USA (TIDCA – Trade, Investment, and Development Cooperative Agreement since 2008). MERCOSUR **(Brazil, Argentina, Paraguay, Uruguay) PTA since 2004. India PTA ongoing negotiations. China FTA ongoing negotiations.**

EU – Cameroon

FTA since 2009, effective 2014

EU, Cameroon

-

EU – Cote d'Ivoire

FTA since 2008

EU, Cote d'Ivoire

-

regional websites

would actually lose out as their existing preferential advantage under the EBA would be eroded and their exports could face a decline in competition with their non-LDC counterparts.

In terms of products, according to ECA's Economic Report on Africa (2015), if EPAs lead to an increase in exports for Africa at all, most of them will be in a few agricultural sectors (rice, sugar, milk, vegetables, fruit, etc.). Even for these, the gains could be overestimated, given the EU's stringent sanitary and phytosanitary requirements. The rise in imports from the EU are also likely to hinder intra-African trade up to $3 billion, following full implementation of the EPAs (ERA, 2015). The gains for Africa in industrialisation and economic progress as a result of the EPAs are, therefore, expected to be quite insignificant.

The EU, on the other hand, has been facing relatively higher tariffs on its exports to Africa. Thus, its access to Africa's market is likely to be significantly increased as a result of the EPAs. This will also result in considerable loss of tariff revenue for African countries. Fontagné et al. (2011) estimate that even though ACP exports to the EU may be 10% higher with EPA, these countries are forecast to lose 71% of tariff revenues on EU imports[89].

On top of this, there are likely to be serious implications for Africa's policy space. Firstly, African countries use export taxes (permitted under the GATT) frequently to generate revenue as well as reduce the price of inputs for domestic manufacturing units (Bouët and Laborde, 2010). These taxes are to be restricted and constantly monitored under the EPAs. As a first step, they are required to be frozen at current levels and will be subject to frequent reviews and to be phased out eventually. They may be allowed under specific circumstances, such as protecting infant industries, protecting environment or maintaining currency stability but only for a limited amount of time and on a restricted number of products. These conditions appear no different from the SDT provision for developing countries under the WTO, which are allowed only for a limited amount of time.

Secondly, much like the application of the MFN principle under Bilateral Investment Treaties (explained in section (c) below), an MFN clause has been added to the EPAs.[90] This means that any tariff concession granted by African countries to a developed or major developing country[91] after signing the EPA must automatically be extended to the EU. This is a far more restrictive understanding of the MFN clause of the WTO, and an imposition on African countries' policy autonomy. For instance, African countries offering preferential treatment to, say, Brazil would be acceptable under WTO law whether as an FTA or a PTA. However, this new MFN clause in the EPA would force African countries to extend the same preferences accorded to Brazil etc. to the EU as well. This will not only obscure any advantage African countries might have sought to gain from their PTA with Brazil (or other developing countries) but also discourage any potential agreements between African and other developing countries.

This MFN clause appears particularly imposing for African policy space in the wake of Africa's engagement in aid projects from China and India. There is generally no conditionality

89 According to ERA (2015), the EU Foreign Affairs Council has committed to provide financial compensation to African countries between 2015 and 2020 to mitigate these losses, but the assistance will not be enough to compensate for EPAs' adverse impacts on intra-African trade.

90 The MFN clause in EPAs, however, is not automatic. A joint EPA committee must assess the preferences in question before making any decision. This is understandable as the EU would want to apply this clause only in case the products or terms of engagement are of their interest.

91 Defined as a country with its trade representing at least 1 per cent of the world trade in the year before signing of the EPA.

attached to aid disbursement between two developing countries, as opposed to aid provided by developed countries, even though they may require access to natural resources in return for investments in heavy infrastructural projects. Though debatable in its own right, these projects provide less restrictive policy options than those with the EU.

(d) Bilateral Investment Treaties

Apart from FTAs that pertain to international trade in general, countries have recently taken a fancy toward concluding BITs (Bilateral Investment Treaties). It is assumed, as in the case of the trading agreements that such treaties will usher in productive investment from developed to developing countries if they are assured that their investments will be adequately protected. However, the objective of concluding BITs for a developed country, particularly the US, is: to protect its investment abroad in countries where investor rights are not already protected; to encourage the adoption of market-oriented domestic policies in partner countries; to increase its own exports to partner countries; and to support the development of international legal standards consistent with these objectives (USTR, 2013). Already a few countries in Africa (excluding North Africa) have BITs with the US and other developed countries. The list is covered in **table 5.5**.

Among others, BITs generally tend to directly affect the ability of developing countries to maintain capital controls. Gallagher (2010) and Anderson (2009) have separately argued that BITs with the US are extremely restrictive in this regard. The language used in such BITs has also entered the chapters on investment in some US bilateral FTAs. Other than the usual rules about national treatment and most-favoured nation status for its investors, the US, in its BITs, strictly forbids the direct or indirect expropriation of the United States investments, without prompt and full compensation. Also, it requires that US nationals and firms be permitted to freely transfer payments in and out of a host country without delay. A typical US BIT also forbids nations from imposing performance requirements such as local content rules, joint venture requirements, R&D requirements, export requirements, rules related to personnel decisions, and so forth. Apart from the local content rules, these requirements are usually permissible under the WTO's TRIMS agreement.

Restrictions on capital controls under the GATS (and IMF regulations), and other investment prohibitions under TRIMS, are much less damaging than those under BITs. Under WTO agreements, violations of rules can only be challenged in a dispute if a member country feels so compelled. Even in FTAs, where investment restrictions in general are stronger than those in the WTO, disputes or alleged violations are a state-state arbitration concern.

Under BITs, however, the investing 'firms' have the right to binding arbitration of disputes related to violations of the agreements. Investors do not have to file claims through governments but can take a claim to an arbitral panel, often the International Centre for the Settlement of Investment Disputes (ICSID) at the World Bank. In the case of US BITs, investors can demand compensation, which must be paid promptly. Argentina, after its crisis in 2001–02, was subject to numerous such investor-state arbitration claims in the hundreds of millions of dollars (Gallagher, 2010).

Table 5.5 Bilateral Investment Treaties of African Countries with selected other countries

Partner Country	African Countries Involved	BIT signed but not yet in force OR other type of Investment Agreement signed
USA	Cameroon, Congo, DRC, Mozambique, Rwanda, Senegal,	Ghana – Investment Development Agreement
Canada	Cote d'Ivoire, Mali, Senegal, Nigeria, Cameroon, Tanzania, Benin, South Africa	
EU	Individual European countries have signed bilateral agreements with several African countries. There are 271 BITs in force presently that involve European and African countries (UNCTAD).	
India	Mauritius, Mozambique and Senegal	Djibouti, Ethiopia, Ghana, DRC and Seychelles, Sudan, Zimbabwe
Japan	Mozambique	
High Income Developing countries (including Korea, China, Singapore, Taiwan, Malaysia, Turkey etc.)	83 bilateral agreements with individual African countries are reported with this group.	
Israel	South Africa, DRC, Ethiopia	
China	Benin, Botswana, Cape Verde, Cameroon, Chad, DRC, Congo, Cote d'Ivoire, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Mauritius, Mozambique, Namibia, Nigeria, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.	
Russia	Angola, Equatorial Guinea, Namibia, Ethiopia,	
Brazil	0	
African countries (excluding North Africa)	There are 72 BITs between and among African countries (excluding North African countries)	

Sources: Meyer et. al, 2010 (OECD); World Bank (2009); UNECA, Europa.eu, WTO and other regional websites

Note: The BIT list does not include TIFAs signed with the US. TIFAs with an African regional grouping are covered in the Trade list separately. Bilateral TIFAs with individual African countries also exist which are not mentioned in either list above.

According to Hagan (2000), BITs allow only foreign country investors to use investor-state arbitration and not host country investors; which effectively elevates foreign investor rights over domestic investors – a stricter binding than the National Treatment principle of the WTO. Furthermore, the MFN principle under the US BIT operates as an interesting variation of the WTO's MFN principle. If a country has a BIT with the US and it grants any benefit or concession to another country in its investment laws, which is over and above that given to the US under the BIT, that concession must automatically be granted to the US investors. A violation to this effect can lead to investor-state arbitration in ICSID.

Among developed countries, BIT partners for developing countries vary. The US treaties have very few exceptions to the restrictions mostly related to security or taxation. In contrast, the EU, Japan, Canada and increasingly China have numerous BITs which allow certain flexibilities, for example, in the form of a broad "balance-of-payments" temporary safeguards, or a "controlled entry" exception that allows a nation to deploy its domestic laws pertaining to capital controls. The Japan- Korea BIT and ASEAN agreements clearly allow for restrictions on both inflows and outflows of capital in the event of serious balance-of-payments problems, or where movements of capital cause or threaten to cause serious difficulties for macroeconomic management (Salucuse, 2010).

Once countries sign have signed BITs, particularly with the US, there is very little that they can do to escape the binding policy constraints in those agreements. Of course, they could potentially violate their agreement, which would amount to risking investor-state arbitration and other sanctions from the partner country. Another option could be to opt out of the BIT completely or renegotiate its terms if possible. Feeling severely constrained in making effective industrial policy choices, several countries have recently taken the latter option and started to revoke their Bilateral Investment Treaties with developed countries. In some cases, since BITs are enforced for a limited time, countries have not attempted to renew them after their duration lapsed.

South Africa has led the way in this regard, revoking 14 of its 47 BITs recently, attracting much criticism from mainstream analysts and the United States. Investor State Dispute Settlement (ISDS) is felt as a major bone of contention for most countries and recently Bolivia, Ecuador and Venezuela have opted out of this option in some of their BITs. India and Indonesia are also reviewing their BIT regime, with a view to renegotiation or revocation of existing BITs containing ISDS (le Roux, 2015).

For developing countries in Africa that have already signed BITs and feel restricted, this trend bodes well. They can follow the lead of larger developing countries and learn from their efforts in renegotiation of investment agreements. Such steps are bound to attract criticism and repercussions from large developed countries such as the US. Smaller African countries may be able to cushion themselves against the potential backlash, if they politically align themselves with these developing countries.

5.1.4. Concluding remarks

Industrial policy-making in today's multilateral rule setting has become a significant challenge for developing countries. The task has become more onerous for those countries that have bound themselves in bilateral trade or investment agreements with developed countries, in pursuit of greater market access.

However, all is not lost. In many places, the multilateral rules allow significant room for making interventions of choice. The WTO appears most tolerant in the use of tariffs, and developing countries have significant scope in this area. Even with subsidies, smart policies can evade several constraints. Flexibilities are largely available in investment policies. While many policies are allowed under TRIMS, the GATS regime allows even more space. In bilateral or regional agreements with other developing countries, the rules are far less restrictive compared to RTAs or PTAs with developed countries.

The real task, however, is for policy-makers to recognise the existence of this space and make an effort to utilise it. Often, countries have been found adopting a holier-than-thou attitude when it comes to making interventionist policies, either because they are misinformed about the existence of policy space or they are too lazy to undertake proactive industrial projects, or they are far too indoctrinated in neoliberal ideas.

Flexibilities are largely available in investment policies. While many policies are allowed under TRIMS, the GATS regime allows even more space. In bilateral or regional agreements with other developing countries, the rules are far less restrictive compared to RTAs or PTAs with developed countries.

In orienting themselves towards transformative industrial strategies, policy-makers are likely to face several hurdles. Pressures from developed countries and international institutions will have to be resisted, if they decide to move away from free market dictates. Moreover, these countries would have to intelligently balance their needs for enhanced market access, which bring certain short-term benefits, and restrictions on industrial policy choices, which harm their long-term development prospects. They will also have to risk facing legal disputes and punishing tariffs from various countries. In doing so, awareness of rules, procedures and specific timelines will be extremely helpful. Those that are not yet part of the WTO or of bilateral agreements could be forewarned to negotiate more smartly when negotiating their deals. The present report is, therefore, an attempt to provide information on what can be done, provided there is a will to do it.

5.2. THE EXPANSION OF GLOBAL VALUE CHAINS

Since the early 1990s, a globalisation of production has taken place, driven by falling transport costs, advances in information and communication technology and lower trade and investment barriers. From 1990 to 2013, the world's trade dependence ratio[92] increased from 19.5 per cent to 30 per cent, and world FDI inflows as share of GDP increased from 0.9 per cent to 2.3 per cent (reaching a peak of 4.7 per cent in 2007) (WDI, 2015). This growth in international trade and offshoring is underpinned especially by the fragmentation of production processes and the dispersion of tasks and activities within them. This has led to borderless production systems, popularly referred to as global value chains (GVCs).

The proliferation of GVCs has in large part been driven by transnational corporations (TNCs) purchasing more of their raw materials and intermediate inputs from abroad, either through outsourcing parts of their production to companies in the targeted country, or establishing their own production plant abroad to trade within the confines of their own corporation[93]. Internationalisation of production of goods and services has taken place in practically all product categories – from apparel, footwear, vegetables, fruits, beverages and flowers to computers, mobile phones, automobiles, aircrafts and professional services.

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While global value chains have existed since the 1950s, when countries like South Korea and Taiwan were starting their industrialisation (for example, until the late 1980s, Nike's production was almost entirely outsourced to South Korea and Taiwan), the intensity of production segmentation within value chains has increased massively. Consider the production, assembly and retail of an Apple ipod, as outlined by Milberg and Winkler (2013): The hard drive is made by the Japanese company Toshiba, which offshores its hard drive production to companies in the Philippines and China; the display module is made in Japan, by Toshiba-Matsushita; the multimedia processor chip is made by the US company Broadcom, which offshores most of its production to Taiwan; the central processing unit is produced by the U.S. company PortalPlayer; the

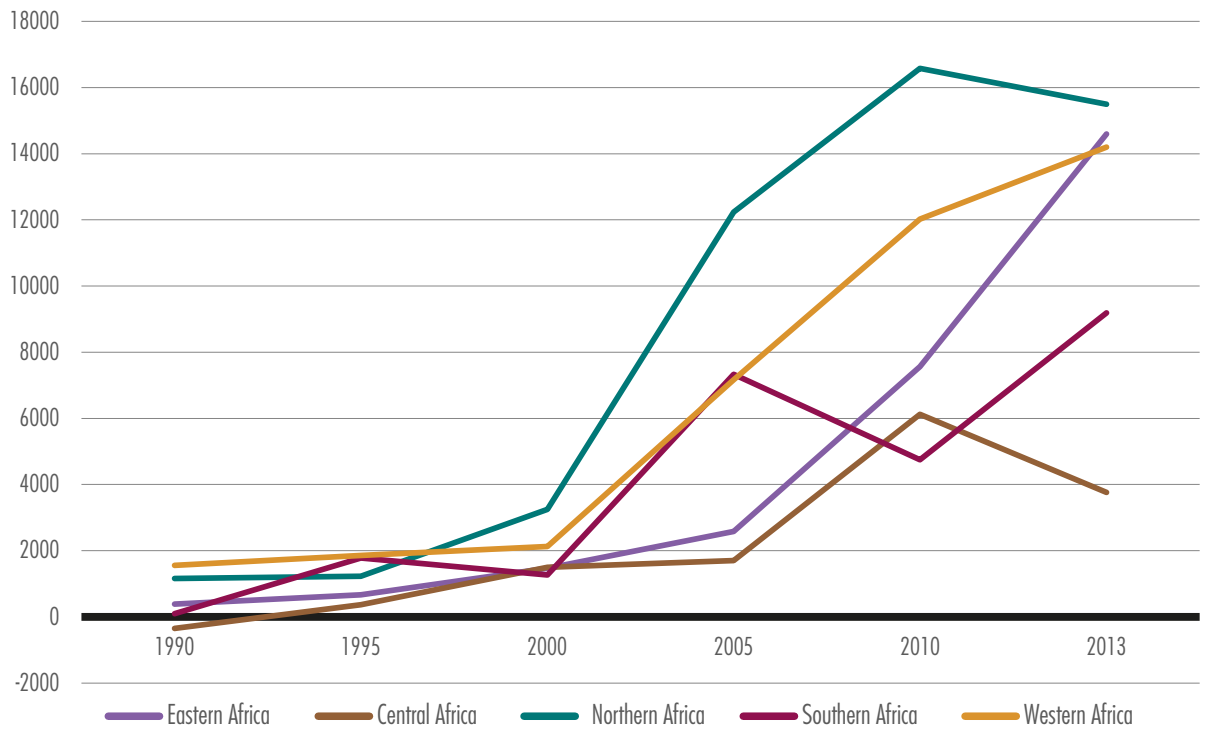
92 This is the average of imports and exports of goods and services.

93 Keep in mind that this doesn't necessarily have to result in an increase in imports for the country that outsources its production, as in some cases, the 'mother firm' thickens links between its subsidiaries abroad.

Taiwanese company Inventec carries out the final insertion, test, and assembly in China; and Apple earns its profit through overseeing distribution and retail.

The search for cost savings, cheap labour as well as market growth has led companies in the West to relocate large parts of their value chains to developing countries. Therefore, FDI inflows and GVC participation have seen the most explosive growth in those countries. From 1990 to 2013, FDI inflows in developing countries increased from $35 billion to $778 billion (from 17 per cent to 54 per cent of world FDI inflows). In Africa, FDI inflows have increased roughly 20-fold in the same period, from $3 billion to $57 billion (from 1.4 per cent to 4 per cent of world FDI inflows), with all sub-regions experiencing a significant increase, as seen from **figure 5.3**.

Figure 5.3 **FDI inflows in Africa, million $**

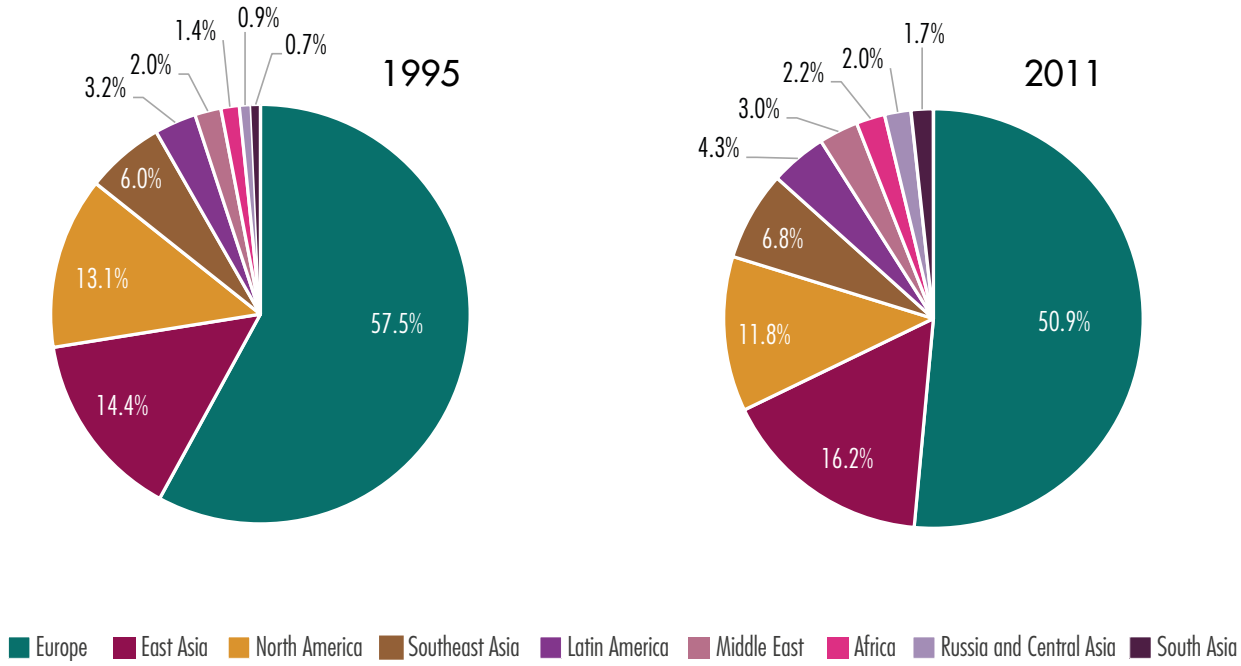


Source: Authors' calculations from UNCTADSTAT 2015

The participation in GVCs is commonly measured by 'trade in value-added' (TVA). It takes into account both the share of foreign value added in a country's exports – called backward integration – and the share of a country's value added in other countries' exports – called forward integration. The developing-country share of global TVA has increased from 22 per cent in 1990 to 42 per cent in 2010 (UNCTAD, 2013). As can be seen from **figure 5.4**, Africa's share of this trade has increased from 1.4 per cent in 1995 to 2.2 per cent in 2011[94].

94 This does not mean that global value chains are unimportant in Africa. It is rather an indication of Africa's share of world trade, which was only 3.3 per cent in 2013.

Figure 5.4 **Share of global trade in value added**



Source: AfDB-OECD-UNDP (2014)

This 80 per cent increase is the highest growth of global value chain integration of all world regions, after South Asia.

Although African countries export some manufacturing intermediates (which involve backward integration) to the rest of the world,[95] Africa's participation in GVCs remains at lower rungs – a high degree of forward integration driven by exports of primary commodities. However, this is not a new development that GVCs have brought about. Natural resources and unprocessed agricultural products have always dominated Africa's exports. What is new is that TNCs are increasingly coming to invest in Africa.

This section will address both the positive and the negative effects that the expansion of global value chains has on the productive structures of developing countries, with a particular focus on Africa, and the implications for industrial policy. We will argue that, while the GVCs have altered the way things are produced and thus the way industrial policy can be conducted, many 'old-style' industrial policy measures are still valid. The challenge for industrial policy-makers is to find a way to work with TNCs more closely while making it sure that they do not erode the possibilities of nurturing domestic productive capabilities.

95 These are mostly resource-based manufacturing goods, such as metals, chemicals, plastics and fuels.

5.2.1. Upsides of GVCs

Developing countries' participation in GVCs involves net inflows of FDI. Because most developing countries have small stocks of savings (especially least developed countries in Africa), attracting FDI is an important tool to raise investment rates.

(a) Theoretical arguments

Developing countries' participation in GVCs involves net inflows of FDI. Because most developing countries have small stocks of savings (especially least developed countries in Africa), attracting FDI is an important tool to raise investment rates. Attracting FDI can also result in technological upgrading, as TNCs generally bring with them superior technology (machines, production methods and marketing and management practices) that can 'spill over' to domestic firms (Farole and Winkler, 2014; UNCTAD, 2007; Lall, 2000). This can happen through many channels: increased competition; imitation by domestic firms ('demonstration effect'); backward and forward linkage effects; heavier export exposure, which in turn entails exposure to the technological frontier; joint ventures and technology transfer deals, often mediated, or even imposed, by the 'host' government; and movement of workers and managers from foreign firms to domestic firms.

Second, the expansion of global value chains means that production has become increasingly segmented. In theory, this should make it relatively easier for developing countries to specialise in particular links in a GVC, developing advantages in a range of small, narrowly defined items, without having all the upstream capabilities in place (Bigsten and Söderbom, 2009; Gereffi and Lee, 2012). For example, you don't need to have an auto assembly plant in order to enter the auto industry – you can become a specialised supplier of certain parts and components.

Third, given that most developing countries' participation in the global economy nowadays happens through participation in GVCs, GVCs become the main channel through which these countries attain gains from trade openness. For example, there is rich evidence that countries that have higher export volumes generally grow faster than countries that export less (Frankel and Romer, 1999; Sachs and Warner, 1995). Furthermore, the expansion of markets arising from trade may enable firms to take advantage of economies of scale that cannot be achieved when sales are limited to the domestic market (OECD, 2013 b). This partly explains why firms that engage in international activities show significantly higher productivity levels, compared to those that do not (UNCTAD, 2013).

Fourth, lead firms in GVCs often specify the exact characteristics of what their suppliers should produce and how they should produce it. With growing product differentiation and increased consumer awareness of social and environmental concerns, quality standards set by lead firms for their suppliers are a key mechanism by which they govern value chains (Gereffi et al., 2011, Gereffi and Lee, 2012). These standards can induce firms to improve the quality of their products and upgrade production management, as proven by some smallholders who are successfully entering niche markets for organic products (Humphrey, 2008).

(b) Learning from GVC success: the cases of Singapore and China

Singapore is a good example of how to successfully attract FDI and integrate into global production networks. Between 1971 and 1995, FDI net inflows as share of gross fixed capital formation in Singapore was 22.9 per cent, the highest in the world in this period (Chang, 2006 a). Between 1980 and 1990, Singapore received more FDI in absolute terms than any other developing country (Huff, 1995). This is astonishing considering that it only had a population of no more than 3 million people in 1990. On a per capita basis, using 1990 population, the figures were $767 for Singapore compared to $1.50 for China, the latter of which was the fourth largest LDC recipient of FDI at the time (Huff, 1995).

Given the lack of entrepreneurial talent and technological knowhow in Singapore, attracting TNCs from abroad provided a perfect strategy to acquire state of the art technology and access to global networks. Policies for attracting FDI included liberal entry and ownership conditions, a range of custom designed financial incentives and efficient and transparent administration (Lall, 2000). In parallel with these policies, heavy investments were made in infrastructure and education oriented towards industries that they sought to promote and attract TNCs into. Singapore remains of the most internationally integrated economies – after Luxembourg, it has the highest GVC participation in the world (OECD, 2013b).

China is another good example of how to utilise GVCs for economic growth and development. It is arguably more relevant than Singapore, as it grew rapidly during a period in which the segmentation of international production networks really started to intensify. It has become a significant global player in almost all manufacturing product categories, from textiles, garments and toys to cars, ships and electronics.

China has increasingly directed its production heavily towards the international market – by 2000, the country's manufactured exports had expanded 26 times the value recorded in 1981 (Memedovic, 2004). This tremendous growth has benefitted especially from Export Processing Zones (EPZs). These are zones that give favourable treatment to the entry of foreign firms and are specifically geared towards processing intermediate goods for the purpose of exporting final goods. Between 2000 and 2008, China accounted for 67 per cent of the world's processing exports (Gereffi and Lee, 2012). The share of foreign-invested enterprises in processing trade rose rapidly during the expansion of China's processing trade: from 39 per cent in 1992 to nearly 70 per cent at the end of 1990s and to 85 per cent in 2008 (OECD, 2013 b). Chinese exports are also starting to add more domestic content, no longer simply involving the assembly of imported inputs. Domestic value added in China's total exported value rose from 49 per cent in 2000 (Kee and Tang, 2013) to 66.2 per cent in 2011 (OECD, 2013). This means that Chinese firms in EPZs are increasingly moving simple contract assembly to 'full-package' manufacturing, with Chinese firms controlling all stages from material procurement to product design.

In most African countries, however, firms are still struggling to gain access to GVCs beyond natural resources and unprocessed agricultural exports. Whereas GVCs have benefitted a number of countries in East Asia, the same gains haven't really materialised in Africa. The next section will look at the challenges posed by GVCs.

Whereas GVCs have benefitted a number of countries in East Asia, the same gains haven't really materialised in Africa.

5.2.2. Downsides of GVCs

(a) TNCs are expanding and consolidating their power

The global expansion of TNCs has been nothing short of immense. From 1990 to 2013, total assets of foreign affiliates increased from $4 trillion to $97 trillion (from 18 per cent to 127 per cent of world GDP), and employment by foreign affiliates increased from 21 million workers to 71 million workers (UNCTAD, 2014 b). In 2010, The Guardian calculated that Wal-Mart (the world's largest retail company) ranked as China's seventh largest trading partner, ahead of the United Kingdom).

The power of TNCs has also been consolidated significantly. Since the early the 2000s, practically every global industry has had only a handful of firms accounting for 50 per cent or more of the industry's global market share (Nolan, 2007). The immense rise in revenue and size of TNCs has almost entirely taken place among companies in the West (most significantly in the United States), even though companies from some developing countries, such as Brazil and China, have advanced in international ranking. Of the top 100 companies in the world, as ranked in the Financial Times 500 for 2014, only eight are from developing countries - six from China, one from Brazil and one from Russia. Of these eight, only one is outside the oil or banking sectors – the Brazilian beverage company Ambev.

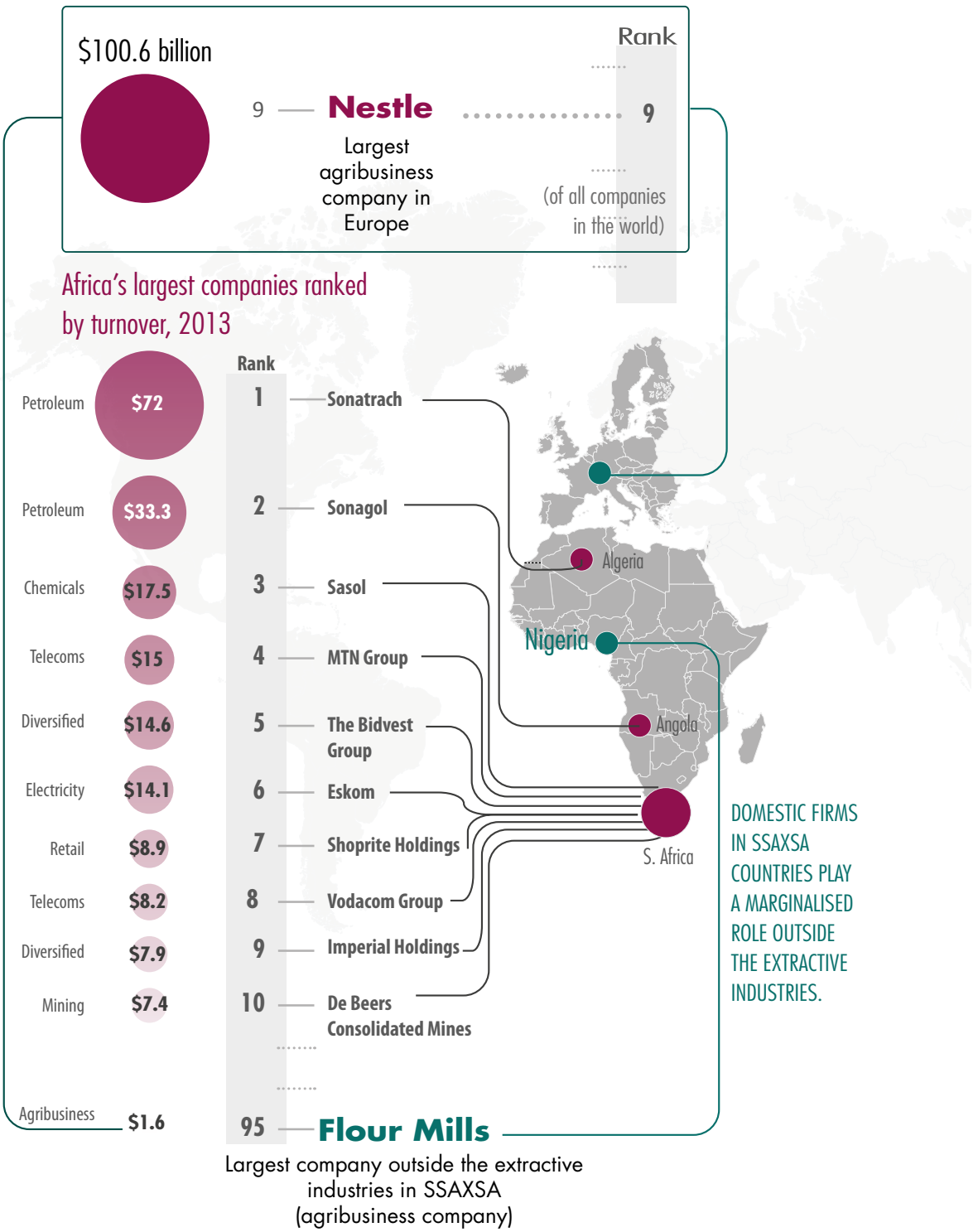
Figure 5.5 shows us the largest companies in Africa. In the SSAXSA region (Africa excluding South Africa and North Africa),[96] Flour Mills of Nigeria, an agribusiness company, is the largest outside the extractive industries. The fact that it ranks as low as 95 illustrates the marginalised role that domestic firms in SSAXSA countries play outside the extractive industries. By contrast, the largest agribusiness company in Europe, Nestle, ranked 9 of all companies in the world in the same year, with an estimated turnover of $100.6 billion, 63 times larger than Flour Mills of Nigeria.

The structure of global production networks differs between sectors, but some useful general distinctions can be made. The early seminal contributions to GVC research are motivated by the observation of the growing importance of global buyers (most often based in the West) as key drivers and dictators in the formation of internationally dispersed production and trade networks (Gereffi, 1994). Product specifications are usually designed by the buyers and branded companies, and then production is carried out in independent factories located in developing countries. This type of GVC is referred to as a Buyer-Driven Value Chain (BDVC) and has become dominant in labour-intensive consumer goods industries, such as garments, footwear, toys, consumer electronics and furniture. Large retailers and brand name merchandisers, such as Wal-Mart, Tesco, Nike and Reebok are examples of lead firms.

On the other hand, Producer-Driven Value Chains (PDVCs) typify industries in which large industrial enterprises play a central role in controlling the production system. PDVCs are most characteristic of capital- and technology-intensive industries, like automobiles, aircraft, and electrical machinery. International subcontracting is common, especially for the most labour-intensive production processes.

96 The SSAXSA region is made up of 47 countries and often considered to most accurately represent Africa in an aggregate manner, at least when talking about the continent from an economic point of view.

Figure 5.5 **Africa's largest companies ranked by turnover, 2013**



Source: Authors' calculations from the Africa Report (http://www.theafricareport.com/top-500-companies-in-africa-2013.html)

However, the distinction between BDVCs and PDVCs is not useful in all contexts. In the apparel industry, GAP is a good example of a typical lead firm in a BDVC, without its own manufacturing facilities, but Levi-Strauss governs a vertically integrated chain (see Kaplinsky and Morris, 2001) more in line with the PDVC structure. The food industry value chain is typically classified as a BDVC, but in Africa, big companies, such as Nestle, are setting up their own production facilities, so it is increasingly acquiring the characteristics of a PDVC.

Although the GVCs that operate in Africa fit into many different typologies, the common feature, as indicated earlier, is that large TNCs with home bases outside the continent are gaining increasing shares of the African market, especially in food and retail.

Although the GVCs that operate in Africa fit into many different typologies, the common feature, as indicated earlier, is that large TNCs with home bases outside the continent are gaining increasing shares of the African market, especially in food and retail. A most recent case in point is the stakes bought by Danone (the world's biggest yoghurt company) in Africa's major dairy companies. In 2014 it bought a 40 per cent stake of Brookside Dairy Limited, East Africa's largest milk company, giving Danone access to over 140,000 milk farms across the East African region. Beyond this acquisition, the company has also set plans to raise its stake in the Moroccan dairy company Centrale Laitiere to more than 90 per cent. Centrale Laitiere holds a 60 per cent share of the Moroccan dairy market (ECA, 2015).

According to ECA (2015), "transnational foreign-owned firms in the longer run are not far from taking full control of almost all profit-making opportunities at the expense of the … weak African smallholder agriculture, totally crowding out along the way the emergence of indigenous-owned food giants or branded agribusiness…there is urgent need to see African governments intervene to prevent emerging success stories of the indigenous food sector be financially cannibalised and owned across Africa by the most financially endowed firms in the food and retail industry" (ECA, 2015, p. 108-109).

(b) TNCs are appropriating increasing shares of profits

The problem with the expansion and consolidation of the most powerful global companies is that it allows a small number of actors to appropriate increasing shares of profits – accruing from technological dominance (fortified by strong protection of intellectual property rights), brand name recognition, and privileged access to low-cost capital – over a larger market.

Unsurprisingly, the last decades of increased offshoring have coincided with increased corporate profits as share of national income in almost all major industrialised countries. Milberg and Winkler (2013) found that US corporate profits as percentage of gross value added increased from 25 per cent to 65 per cent from 1970 to 2010, while at the same time, US goods imports from low- and middle-income countries as a percentage of total goods imports increased from 10 per cent to over 50 per cent. TNCs based in the West are basically

growing their profit shares from intangible activities that are increasingly knowledge- and skill-based. The knowledge they incorporate is tacit in nature, and acts as natural barriers to entry. They offshore parts of the results of their innovations (that is, use them to produce things abroad) but not the innovative capabilities, locating almost all their technology-creating activities in their home countries. Relatively little R&D, other than lower-level support laboratories, has been relocated to developing countries (Dicken, 2011). This trend was actually observed as early as 1966 by Raymond Vernon. In his product life-cycle theory, he argued that products have a cycle of globalisation, with (mass) production eventually being offshored to poorer countries, with the richer countries retaining much of the profits (Vernon, 1966).

The companies that possess capabilities in the tangible realm, which have low barriers to entry, like primary commodity production and labour-intensive manufacturing, are losing out.

For example, in the coffee industry, producing countries (growers and exporters) appropriated half of the total income of the final retail price of processed coffee (roasted and ground) until the mid-1980s. When the farm-gate prices of coffee crashed in the early 1990s, retail prices of processed coffee stayed the same, shrinking the income share of producing countries. This change was driven by increased market power of the largest coffee TNCs, who controlled marketing and distribution links. Today, 90 per cent of the total income from coffee, calculated as the average retail price of a pound of processed coffee, goes to the countries where the TNCs have their home base (ECA, 2013).

We are seeing a similar trend in low-technology manufacturing industries, such as the textile, garment and footwear, as competition among developing countries is growing. With greater participation of China and other Southeast Asian countries in the global economy, the developing country share of low technology manufacturing exports has almost tripled since 1980 and the global pool of unskilled labour has doubled since 1990 (Kaplinksy and Morris, 2001; Kaplinsky 2005, 2013). Therefore, after sustained growth in the prices of globally traded manufactures until the early 1980s, we have witnessed an aggregate relative decline in these prices, most significantly for those exported by developing countries (Kaplinsky, 2005). Milberg and Winkler (2013) confirm this trend: they find that clothing, footwear, textiles, furniture and toys all experienced import price declines (relative to U.S. consumer prices) over two decades of more than 1 per cent per year on average, or 40 per cent in the period from 1986 to 2006. The global competition in low-technology manufacturing is only likely to solidify, with what seems like an endless supply of cheap labour in Asia and especially Africa in the years to come.

Therefore, TNCs from high-income countries are likely to continue to enjoy a 'race to the bottom' among developing countries – declining global wages as a consequence of abundant supply of unskilled labour in those countries. At the same time, developing countries are likely to suffer from a 'fallacy of composition' – many of them entering the production of low-technology manufacturing goods in the belief that it will significantly boost their export earnings, only to find out that the earnings are nowhere as high as expected, as the prices of those goods have fallen exactly because so many countries have started to producing them.

(c) Failing to enter, getting locked in or getting tossed from a GVC

As mentioned, lead firms in GVCs set stringent quality standards to be met by their suppliers. In some instances, these standards induce greater productivity, but because they are set at such high levels, many firms in developing countries struggle to enter GVCs, not to speak of establishing and managing their own value chains. In the food industry, for example, to ensure food safety and quality, large supermarkets work with a small group of preferred, generally large-scale suppliers that are capable of meeting stringent requirements. This marginalises small farms unable to comply because of high costs and lack of required skills (Gereffi and Lee, 2012; Dolan and Humphrey, 2004). In the horticultural industry, it is also becoming increasingly difficult to meet private quality standards. To upgrade in the chain (e.g. from production to packaging), suppliers must invest in new technologies to understand hygiene standards in pack-house operations, set up on-site laboratories for product and staff health tests, and have access to a local packaging industry that can supply appropriate containers. Few developing country firms have the money or the capability to make such investments.

In certain cases, suppliers may even find themselves locked into certain activities within value chains. This most commonly occurs when firms try to functionally upgrade, meaning that they acquire new functions in the chain, such as moving from production to marketing or design. But if suppliers start engaging in activities that are conducted by the lead firms, power relations may limit knowledge flows within the chain. This is illustrated well by the experience of the Sinos Valley shoe cluster in Brazil (see ECA, 2013). In the 1960s, new buyers from the U.S. started targeting suppliers in the cluster that could deliver larger volumes of standardised products. The larger firms were able to meet the new requirements, experiencing increases in product quality in the process. The early 1990s saw the rise of rival Chinese producers and downward pressure on prices. Given years of experience in the global footwear industry, it was timely for the Sinos Valley cluster to move further up the value chain to marketing and design, where rents were better protected. This did not happen however, as 1) large producers in the cluster were reluctant to move to areas of design and marketing for fear of retaliation from the cluster's main buyers, which represented nearly 40 per cent of the total cluster exports and 2) US buyers did not diffuse their capabilities in design and marketing. The cluster simply got stuck with selling shoes to the Americans at declining prices.

The low entry barriers and intense competition in the production of low-technology manufactured goods, as discussed in the previous section, also enable TNCs to 'toss' suppliers out of their value chains. Lead firms can simply relocate supplier activities in their chains if labour costs get too high. Kaplinsky and Morris (2001) provide the case of a firm making denim jeans in an export-processing zone in the Dominican Republic during the early 1990s. It specialised in sewing denim jeans, using materials imported from the US, designed in the U.S. and cut in the U.S., selling them under the brand of a major international company. The local firm began by getting $2.18 per jean. But as neighbouring countries devalued their currencies, thereby reducing their labour costs in terms of US dollars, the firm in the Dominican Republic was forced to reduce its charge-rate. However, even this was not enough and the work was eventually sourced elsewhere.

(d) FDI does not automatically bring about economic benefits

As previously discussed, FDI can have benign effects on the host economy, as seen with the case of Singapore and China. But attracting FDI can in some cases be harmful. Some of these have already been discussed: FDI can easily 'jump' from country to country at the peril of poor countries' industries and the fact that TNCs are generally careful to protect their real innovative capabilities can make domestic firms stuck at the lower end of a value chain.

Additionally, attracting FDI can result in a decrease in a country's net foreign exchange earnings (although one would generally assume that the opposite would happen). TNCs usually import many of their inputs from abroad. In some cases, their import bills may be higher than their export earnings, resulting in a fall in the country's net foreign exchange earnings. This is why some countries, notably India, used to have 'foreign exchange balancing requirement' for TNC subsidiaries (that is, they had to export at least as much as they import), although this regulation has been illegalised by the TRIMs agreement of the WTO (Kumar, 2005).

Most crucially, the extent to which FDI brings about positive or negative effects on the domestic economy depends on how the government handles it. Completely restricting FDI is ill advised, but so is an 'open door' policy that leaves matters entirely to the free market. And in between these two extremes, there are many different ways of managing FDI.

South Korea heavily restricted FDI, relying primarily on capital goods imports, licensing, and other technology transfer agreements to acquire technology (Chang, 1997). It only permitted FDI as a last resort of obtaining technology or gaining access to world markets. Even in joint ventures with foreigners, the South Korean government encouraged majority-Korean ownership or at least 50-50 joint ventures (Lall, 2000; Westphal, 1990). In Taiwan, FDI has played a more important role than in South Korea, but there were still plenty of regulations (Chang, 1997). In the 1960s, the attitude towards FDI was relatively liberal but became more selective in the 1970s. All foreign investment proposals were evaluated in terms of how much they would encourage new exports, transfer technology, and intensify input-output links. A concerted effort was made to 'marry' export-oriented foreign affiliates and domestic suppliers in order to replace imports, insofar as it did not damage the exporting firm's international competitiveness. Policies included export requirements, local content requirements, and/or joint venture requirements (Wade, 1990, 2011).

As mentioned above, Singapore and China have successfully utilised FDI and GVCs for economic development. But, their policies towards GVCs were always parts of a strategy to develop national productive capabilities, most importantly (but not exclusively) through industrial policy.

In China, a range of government policies has been used to support targeted industries – most importantly subsidised loans from state owned banks and the protection from foreign competition through tariffs and local content requirements for the foreign affiliates. In addition, the state has mediated consolidation of smaller firms to create large companies in an attempt to compete with the big global businesses. In the electronics industry, examples of these are the China Electronics Corporation

and the SVA group (Chang et al., 2013). Additionally, TNCs have been made to form joint ventures with Chinese companies, mostly SOEs or companies associated with the government, so that the state can retain effective control of foreign affiliates (Roehrig, 1994).

The Singaporean government used different policies. First of all, to raise its low domestic investment rate, it introduced forced saving schemes, imposing mandatory savings contributions by employers and workers. As a result, Singapore had the highest domestic savings rate in the world in the 1980s and 1990s (Huff, 1999). Second, the labour market in Singapore has been highly regulated. To be able to compete with other newly industrialising economies in Asia, wages in labour-intensive manufacturing were repressed between 1972 and 1979. Third, in sectors assessed to be critical for economic prosperity, Singapore has been reluctant to invite TNCs, opting instead to set up SOEs. Singapore's SOEs produce 22 per cent of GDP and include world famous Singapore Airlines and companies in the shipbuilding and telecommunications industries (Chang et al., 2013).

5.2.3. Implications for industrial policies

In addition to asking how to formulate industrial policy in the current era of globalised production, one must more importantly ask: has the industrial policy challenge for African countries fundamentally changed since the 1990s in light of the proliferation of GVCs? Do lessons from success stories like Korea and Taiwan – who started their industrialisation before the dramatic expansion of GVC – hold less validity as a result of it?

We should keep in mind that, although GVCs have strongly proliferated since the 1990s, countries like South Korea and Taiwan did not develop in a world devoid of GVCs. As mentioned in the introduction, Nike – one of today's largest brand names in the global footwear industry (and sporting outfits and accessories industry) – outsourced almost all its shoe production to South Korea and Taiwan from the late 1970s to the late 1980s. Even before that, in the late 1950s, Taiwan started carrying out massive assembly operations for Japanese companies on electronic consumer goods, including televisions, refrigerators, air conditioners, automobiles, diesel engines, and several other items (Wade, 1990). Almost all of the components were shipped in from Japan, before the Taiwanese eventually imposed local content requirements. So people who say that lessons from these countries hold little validity today because production was not globalised, have clearly missed out on key historical facts.[97]

In the African context, AfDB-OECD-UNDP (2014) emphasises 5 key considerations that must guide policy measures in the era of GVCs: 1) Policies must be value-chain-specific and provide the best environment for developing/integrating into the identified value chain with the most potential. 2) Making the most of value chains implies trade-offs, as prioritising one sector over another creates winners and losers. 3) Entrepreneurship and

97 Of course, what is special about countries like Taiwan and especially Korea is that they were not satisfied with being parts of GVCs controlled by foreigners and tried to set up their own GVCs from relatively early one. For example, when South Korea's Hyundai decided to produce its own model, Pony, in 1975, it sourced resources from all over the world. The Italian company Italdesign carried out the design; Japan provided the transmission, engine (both from Mitsubishi) and car body moulding (Ogihara Mould Company); and funds came from Barclays Bank in the UK (Steers, 1998).

collaboration between the public and private sector is crucial, and requires strong business associations. 4) The power and ownership of a GVC can determine which pathways to productivity growth are open and which are not. For example, upgrading to higher-value processing activities may not be feasible in certain GVCs due to the tight control of processing activities that is retained by large manufacturers, such as in the global coffee or cocoa industry. 5) Low-road strategies in GVCs risk a 'race to the bottom'. Therefore, when African countries attract foreign firms in order to integrate themselves into GVCs, they must also focus on creating skills and domestic productive capabilities for upgrading within GVCs.

...when African countries attract foreign firms in order to integrate themselves into GVCs, they must also focus on creating skills and domestic productive capabilities for upgrading within GVCs

These considerations are supremely important, but most of them were arguably equally relevant 50 years ago, and thereby do not point out if or how industrial policy needs to adjust to the new era of globalisation. Point 4 is an exception in this regard. As we have seen, the proliferation of GVCs has entailed a rise in global power of the largest TNCs, which have restricted options open to developing countries in terms of creating their own GVCs – for example, the creation of its own automobile or electronics GVCs by Korea.

Milberg et al. (2014) more explicitly discuss how industrial policy must be changed in an era of GVC expansion. They make three major points. First, industrial policy must shift its focus from developing 'industry', where 'industry' can be understood as the fully integrated production structure, to various ways of upgrading in GVCs (finding niche activities/stages/tasks). "Now the issue facing firms and governments is less than that of finding new, more capital-intensive goods to sell to consumers in foreign countries. Instead it requires moving up through the chain of production of a particular commodity or set of commodities into higher value added activities" (Milberg et al. 2014, p. 171). Second, industrial policy must increasingly be more wary of the harms of import protection for intermediate goods, as competitive success under GVCs requires cheap and easy access to such goods. Third, more now than before, the capture of value within GVCs depends on the constellation and power among lead firms. Industrial policy must look at lead firms and their corporate strategies, focusing on connecting and bargaining with them.

As for the first point, specialising in particular segments of a value chain (and importing inputs), rather than hosting a fully integrated chain, can indeed bring about economic benefits. As discussed in chapter 4 (China and Malaysia) and earlier in this section (South Korea, Taiwan, Singapore, and China), many East Asian countries have achieved some success from labour-intensive assembly manufacturing. Taking advantage of its large pool of low-wage English-speaking workforce, India has also reaped benefits from specialising in particular segments of global service industries (e.g. call centres for IT companies or banks, back offices of airlines).

However, the benefits from specialising in these labour-intensive segments of GVCs are limited. As Milberg et. al. (2014) also emphasise, call-centres and other service activities that India has come to specialise are low-skill-based and haven't brought about much

technological upgrading. Assembly manufacturing brought about large benefits in countries like South Korea, Taiwan, and Singapore only because they used it as a basis for building higher-level productive capabilities, including especially nationally-controlled GVCs (e.g. electronics in South Korea or Taiwan) and at that as a part of ambitious industrial policy strategies. Malaysia is said to be in a 'middle-income trap' because it has not been able to use its GVC participation for productive-capability upgrading as much as Korea, Taiwan, or Singapore have done (Cherif and Hasanov, 2015). China is still struggling to achieve high domestic content in high-technology manufacturing, even though it is close to acquiring control over full-fledged GVCs in textiles, apparel, and consumer electronics.

Moreover, it should be borne in mind that, left alone, specialisation in lower-end segments of GVCs creates limited linkages to the domestic economy, limiting their impacts on economic development (see, for example, Hirschman, 1958). We have discussed above the case of the Dominican sewing industry, but the most prominent example of it is assembly manufacturing in Mexico in the post-NAFTA period. The country opened up massively to foreign investors and became one of the word's leaders in assembly manufacturing, but largely failed to create linkages to the wider economy, resulting in what Gallagher and Zarsky (2007) has termed "The Enclave Economy".

This brings us to Milberg et al. (2014)'s second point about the importance of having cheap and easy access to imports of intermediate goods. Firms that produce for the world market need to have access to imported intermediate goods, if they are to produce goods that meet international quality standards. Especially when those firms operate as parts of GVCs controlled by TNCs, easy access to imported intermediate inputs become even more important, as the lead firms in GVCs are likely to demand even higher quality standards. Indeed, even countries like Japan, South Korea and Taiwan, which used import protection extensively, were relatively liberal with imports of intermediate goods, whether they were used by foreign affiliates or by domestic firms exporting.

Of course, being too liberal with imports of intermediate inputs (which a country too intent on industrialising through joining GVCs are prone to be) can have severe negative long-term consequences for the development domestic productive capabilities. In Latin America, increasing trade liberalisation over the 1990s resulted in the growth of foreign firms' share of input sales to the manufacturing industry relative to domestic ones, preventing the emergence of domestic producers of those inputs and even destroyed the existing linkages to domestic producers. A careful balance need to be struck between the short-run need to use intermediate inputs of highest quality, which are necessary for exporting, and the long-run need to develop national capabilities in the production of those inputs, which are essential for creating a solid basis for economic development.[98]

The third point made by Milberg et al. (2014) is perhaps the most valid one – and is similar to point 4 made by AfDB-OECD-UNDP (2014). The expansion of GVCs has made it more important to establish connections and bargaining with TNCs, especially for Africa, where

98 From this point of view, Ethiopia – arguably the most successful African country in nascent stages of industrial transformation – is going in the right direction when it declares a central goal in its industrial policy to be reducing its dependence on imported inputs in most prioritised manufacturing industries – textiles and garments and leather and leather products (MOFED, 2010). Such policy stance is taken, among other things, in order to create better linkages to the supplier industries (Ethiopia has Africa's largest livestock population and good opportunities for cotton cultivation), to avoid using scarce foreign exchange reserves on importing inputs, and to reduce the risk of foreign firms relocating their production activities to other countries, as it frequently happens in the textiles and garments industry.

most export-oriented manufacturing and services are controlled by TNCs from the West or high-middle income countries. In this process of connecting with TNCs, industrial policy-makers need to make it sure that two things are done.

First, they need to identify the 'right' industries – find which industries have the greatest potential for generating economy-wide productivity growth, given domestic constraints (e.g. whether the country has the right kinds of infrastructure or skills) and global conditions (e.g. how fast the overall demand is expanding, where the 'niches' are). In the process, attempts should be made to establish direct links with manufacturing firms, producer service providers, research institutes, and government ministries from countries that have the technological know-hows and production experiences in the relevant industries.

Second, industrial policy-makers need to induce foreign firms to create linkages with the domestic economy. They should create incentives for those firms to strengthen links with domestic suppliers. One of the traditional methods for this, local content requirements, is now prohibited by the WTO, but some African countries (e.g. Ethiopia) are not yet members of the WTO and can use them legally. Even for WTO member countries, these may be introduced informally through negotiations with the foreign investors (as it was done in many rich countries, including the UK). Moreover, other measures to promote linkages between TNC affiliates and the domestic economy are still perfectly legal. Requirement for joint venture, which gives domestic partners access to high level technologies and managerial skills, is one such measure. ECA (2013) suggests that the host country puts requirements on the foreign firm to report regularly on local sourcing and the degree of local value added, including a clear 'roll-out' plan for future local sourcing. "Such a mechanism is likely to focus the minds of their chief executives, engender a climate of moral enforceability and help to encourage local linkages" (ECA, 2013, p. 244). Conditions could also be imposed legitimately on technology transfer and the conduct of R&D in the host country (even if that can only be at very low levels, to begin with). Host country governments can make the fulfilment of these requirements less burdensome for TNCs by providing a well-trained workforce by funding TVET (technical and vocational education and training) programmes and the university departments producing engineers and scientists.

Third, industrial policy-makers should pay attention to the possibility of upgrading not just through the development of capabilities to physically produce goods but also through the development of producer services, such as design, marketing, and branding. This may sound like an impossible task for African countries, but Sammy Ethiopia, a company specialising in hand-woven textiles and garments, is doing just that. Their products are spun, woven, dyed and embroidered using techniques stemming from old Ethiopian traditions, but also designed and branded by the company. They export their products to high-end retailers in Australia, France, Germany, Italy and Japan. Although it's questionable whether an operation like this can be duplicated with more modern techniques (Sammy Ethiopia's products are largely marketed based on the fact that they are hand-made), it is a good example of something African that sells in Western markets, completely 'made in Africa', and is a testament of the popularity of African brands in the West. To have more firms like Sammy Ethiopia, industrial policy-makers need to provide support for capability developments in these producer services, especially for SMEs, through subsidies, public service provision (e.g. export marketing, design), and encouragement of inter-firm" cooperation (see section 3.4.2.(b)).

5.2.4. Concluding remarks

This chapter has discussed both the upsides and downsides that the proliferation of GVCs has on the productive structures of developing countries – especially those in Africa – and the implications of this for industrial policy.

On the upside, GVC participation brings inflows of FDI, which brings in capital, technologies, and higher quality standards. It also allows developing countries to enter sophisticated industries that they cannot on their own, by allowing them to become specialised niche producers. The experiences of the East Asian countries, especially China and Singapore, show how GVC participation can bring great benefits.

However, in Africa, the gains from GVC participation has not materialised very much, even though FDI inflows to the continent has increased 20-fold since 1990. This is because GVC participation has downsides as well as upsides. The growing power of TNCs means that a small number of actors appropriate increasing the shares of profits arising from GVCs. If developing countries are to capture larger shares of profits, they need to upgrade within GVCs and eventually create and control their own GVCs (as Korea did with automobiles and electronics). This, in turn, requires intelligent industrial policy, as indeed shown by the experiences of the East Asian countries – not just Korea and Taiwan, which engaged with TNCs in quite selective ways, but also the more TNC-friendly China and Singapore. Unless it is done as a part of a well thought-out industrial policy strategy, GVC participation can actually harm developing country economies. For example, in many Latin American countries, neo-liberal reforms in the late 1980s and the 1990s attracted a lot of TNCs but this led to the decline of domestic intermediate inputs producers, as the TNCs chose to import most of their inputs.

Even though GVCs have been part of the global industrial landscape at least since the 1950s, it is true that the recent expansion of GVCs has made it more important for developing countries to establish connections and bargaining with TNCs. This is particularly true for Africa, where most export-oriented manufacturing and services are controlled by TNCs from the West or high-middle income countries.

However, as we have repeatedly pointed out in this report, taking GVCs seriously does not mean that developing countries can – or, even less, should – give up on industrial policy. When they contemplate participation of their domestic firms in GVCs, developing country industrial policy-makers need to do their best to choose the industries with the largest potential, given domestic constraints and global conditions, and induce the foreign firms that control the particular GVCs to create as many linkages as possible. They should also pay attention to the possibility of upgrading not just through the development of physical production capabilities but also through the development of producer services, such as design, marketing, and branding.

5.3. CONCLUSION

In this chapter, we have examined how recent changes in the global economy have affected industrial policy options for developing countries. We looked at two most important aspects of these changes – changes in global rules, which have resulted in shrinking policy space for developing countries, and the changes in the global organisation of production, that is, the rise of the GVCs. In our discussion, we have shown that the reality is much more complex than what is suggested by the standard narratives on changing global rules and on GVCs.

Policy space may have shrunk but is still considerable for most developing countries. Many industrial policy measures are 'domestic' and therefore not affected by the changes in global rules, while there is still a lot of room for manoeuvre even in areas covered by the new (more restrictive) global rules. Moreover, developing country industrial policy-makers need to fully understand the global rules, if they are not to give upon implementing certain policies simply because they think it may be banned. There are also grey areas to be exploited – rules that are de facto not observed by anyone (e.g. rules on R&D subsidies) or rules that are complex to interpret and thus ambiguous.

The expansion of GVCs has downsides as well as upsides. The rise of GVCs may have opened up new opportunities for technology acquisition for developing countries. But it has also constrained long-term options for these countries, as the global expansion of GVCs has resulted in the consolidation of power and increasing appropriation of profits by transnational corporations based in the West, making it more difficult for developing countries to upgrade their economies in the long run. Countries need to make very strategic decisions about their future development paths and policy measures needed to achieve their goals, before they join particular GVCs.

As we have shown in this chapter, if anything, these changes have made it even more necessary for developing country industrial policy-makers to be smart about their policies. Restrictive global rules have made it even more necessary for them to be careful about figuring out potential legal pitfalls and to be innovative about designing policy measures. The rise of GVCs has made it even more important for those policy-makers to be aware of global trends and to be aware of interactions between different policy measures.