Annex 2

for

"EQuIP: Designing a transformative industrial policy package"

Annex 2: Examples of policy interventions to increase productive activities (IP objective 1)

Chapter 1 in section B of this report discussed the common industrial policy objective to "increase productive activities". The chapter outlined a variety of considerations for designing industrial policy instruments that can contribute to the objective and provided an overview of a number of exemplary policy instruments. Annex 1 provides a wide range of possible instruments under this objective. This annex provides some additional details on possible motivations for selected regulations, incentives, information and public goods and services that could be considered as interventions for this objective.

It is important to highlight that the examples outlined here are not exhaustive and we do not suggest to consider them with highest priority. A large range of alternative interventions could be considered for any of the examples outlined below and various readers might feel that various other instruments would have deserved to be included here. However the elaboration below is not supposed to propose the best solutions. Instead it is meant to give some examples for the diversity of challenges that could be addressed by industrial policy instruments. It also illustrates the need to make a context-specific judgement on the selection among regulations, incentives, information and public goods and services (or a combination of those) to affect a concrete change in a given country.

1. Regulations

Within their industrial policy mix, governments can decide to deploy their power to set rules that positively affect productive activities for example by focusing on any of the issues highlighted in chapter 1 of section B in this report. The following examples are meant to illustrate the variety of regulations that could be considered relevant depending on the specific issue at hand.

Example 1 ("new firms"):

*Governments can make good use of their regulatory power to make it easier for domestic entrepreneurs to **engage in new ventures** as well as to attract foreign companies to set up a subsidiary in their country (the attraction of FDI is also highly relevant within objective 2 "deepen global market integration"). For many developing countries, a few larger firms, in a couple of sectors undertake the bulk of production. Meanwhile, the majority of people are engaged in small-scale production in the form of informal agriculture, industry and services. Therefore one of the core priorities for many governments is to increase the number of formalized larger-scale producers in their economy. It is worth highlighting that stimulating the emergence of new firms is also relevant for other IP objectives discussed in section B of this report. For example, new firms can also contribute to objective 4 "generate productive employment" if they increase the absolute number of job opportunities that are available in productive activities. They can also contribute to objective 6 "ensure inclusive production" if they locate in a less developed region or to objective 8 "promote self-sufficiency" if they get engaged in the production of strategically relevant goods and services.*

In the following, we will give examples of regulations that relate to the expansion of production by affecting the ability of firms to start-up operations. It is worth mentioning that depending on the national priorities, governments may want to increase the number of firms engaged in current activities or may be more concerned with promoting new activities (note: new activities also relate to product diversification and would hence potentially also contribute to objective 7 "build economic resilience").

The following examples illustrate this:

- *The "ease of doing business" is a notion coined by the World Bank that is commonly referred to as an engine of economic development and is based on the assumption that **simpler procedures to open a new business** will stimulate new investments. On this basis, many developing countries have pursued regulatory reforms for instance to reduce the required time, cost or minimum capital to open a new business, simplify access to industrial land, construction permits and electricity connections or protect property rights. With the main objective of "increasing productive activities" in mind, it is difficult to identify strong reasons for stricter regulations for the creation of new firms per se. Although other objectives could potentially lead the government to a more restrictive regime that avoids the emergence of certain types of businesses (e.g. because of certain working conditions or pollution effects).*

- *A more specific strategic intervention relates to the **regulation of foreign direct investment.** The spectrum of tactics in this area is significant: while most countries decide to somehow restrict foreign ownership in the productive sector, others decide to offer preferential treatment to FDI (specific preferential treatment of FDI could include the relaxation of labor or environmental regulations that apply to domestic firms). The main argument by FDI proponents is that countries should generally not discriminate in the treatment afforded to domestic and foreign/non-resident investors in order to maximize the benefits of foreign investment flows. Others follow the view that certain restrictions are required for the benefit of the host economy. Regulations that can be used to institute a regime that is in line with the government's respective strategy can broadly be divided into foreign equity restrictions, screening and prior approval requirements, restrictions on foreign personnel, and operational restrictions (e.g. acquisition of land, repatriation of profits, etc.). While any restriction can potentially reduce the willingness of certain foreign investors to choose a specific destination, they can also contribute to a pattern of foreign investment that is more in line with national industrial policy priorities.*

For example the obligatory involvement of local partners in foreign ventures and the establishment of quotas for the recruitment of local staff can be relevant considerations to prevent the establishment of FDI enclaves with limited connections to the host economy.

This example illustrates that interconnections between the different prioritized IP objectives and intervention areas are highly relevant when it comes to the design of interventions. For example, governments that prioritize objective 1 "increase productive activities" alongside objective 2 "deepen global market integration" might find it more conducive to follow a very open approach to FDI promotion that generally favours foreign investors irrespective of the exact nature of their investments. However, countries that prioritize objective 3 "maximize domestic value capture" together with objective 1 "increase productive activities" might consider the intervention areas of "embeddedness of foreign firms in the national economy" and "strengthen domestic ownership" as highly relevant issues that require a somewhat more cautious or protective approach to FDI.

Example 2 ("access to inputs"):

*Apart from specifically aiming at the creation of new firms, regulatory efforts can also support existing firms and entrepreneurs with **accessing the factors required for production.** These interventions broadly aim at productivity enhancements that make domestic firms more competitive. Hence they will obviously also be relevant for new investors, as they will be affected once their operations commence. In principle, rules that are introduced under an industrial policy can govern the access to all the different production inputs, including financial resources, human resources, land, utilities, raw materials, intermediate inputs and production equipment:*

- *Financial resources – Access to finance can be a critical factor influencing the ability of firms to start-up or expand their production. In most cases, having access to finance will be a pre-requisite for being able to procure all other resources (listed below) required for production.*

- *Human resources – When starting or expanding a business, it is important to be able to find the required number of employees with the right skills to support your production process (this is also a highly relevant consideration under objective 4 "generate productive employment).*

- *Land – Having access to land is vital determinant of many productive activities. For activities such as agriculture, mining or tourism, land can be the most important input for a successful production process. In industry, the location of factories can be of strategic importance in terms of their access to inputs and sales markets.*

- *Utilities – Traditionally governments have played a major role in ensuring societal access to utilities such as electricity, water, transportation and telecommunications. Having affordable and reliable access to these utilities plays an important role in the ability of firms to engage or expand their production activities.*

- *Raw materials – Having access to raw materials, such as agricultural or mineral commodities, is very important for firms that transform these materials in their production processes.*

- *Intermediate inputs – Many enterprises depend on goods and services produced by other actors in the economy. These intermediate inputs are then used or further transformed by the production process. In some sectors the access to so called "core components" are a crucial prerequisite for production activities to emerge.*

- *Production equipment – Access to machines, which facilitate or expedite the production process, can be a large stimulus for the expansion of production, an increase in productivity or the commencement of the production of new goods and services.*

The following examples illustrate the potential relevance of these types of interventions:

- *One area that is frequently targeted by regulations is the* ***access to raw materials*** *(e.g. minerals, agricultural products)* ***and intermediate inputs*** *(e.g. semi-finished products, components). The underpinning logic of these interventions is based on the assumption that the current access to various production inputs is constrained (for quantity or price reasons) and that an improved access will boost domestic production activities. The interventions most commonly target the suppliers of the respective inputs either domestically or abroad.*

  - *For instance the domestic supply of inputs can be affected with rules that* ***restrict the export of domestically available resources.*** *In principle, if certain minerals or agricultural products cannot be sold abroad because of an export ban, their availability for domestic production should increase. Hence, prohibiting exports of industrial inputs is probably the strongest type of intervention. Export quotas that still allow a limited level of export are a variation of this instrument.*

  - *Another means for government to improve the local availability of inputs is* ***competition policy.*** *If certain industrial inputs are produced locally by a single or few domestic companies, monopolistic rents can potentially increase the prices of industrial inputs. A stronger enforcement of competition rules can hence contribute to a reduction of costs for domestic buyers.*

  - *Apart from focusing on domestically available inputs, the government can also support its national industry by* ***facilitating access to imported inputs*** *(this intervention is closely related to objective 2 "deepen global market integration"). Most countries control and regulate the imports of foreign goods at least to some extent. A liberalization of those customs laws, regulations and procedures can potentially make it easier and/or cheaper for foreign companies to supply certain imported industrial inputs. One example is the review of goods currently classified as restricted or prohibited imports under an import control regulation with a view to facilitate access for those goods. A reduction of requirements to comply with various product standards (e.g. safety, health, quality) or a relaxation of existing import quotas are other examples. Countries can also ask their trading partners to discontinue existing export restraints.*

- *If the limited availability of adequately skilled human resources is a constraint for firms' expansion,* ***regulating education*** *can be considered a relevant industrial policy intervention (this type of intervention also relates to objective 4 "generate productive employment"). Regulations can either target the recipients of education, e.g. students, or the providers of education, e.g. schools, universities or training centres.*

  - *A common regulation of education relates to the establishment of laws that make the* ***attendance of school*** *mandatory until a certain education level is attained. The enforcement of this rule and the provision of the respective education ensures that the largest number of students will enter the labor market with at least the required basic skills, including numeracy and literacy.*

- *A **regulation of educational content** through the design or approval of curricula is a different example for government interventions. Within vocational education, for instance Korea has developed the National Competency Standard (NCS) for 276 occupations in 16 industries since the late 1990s. The NCS is a set of standards which define the knowledge, skills and qualities required of workers in specific occupational fields in order to set systematic criteria based on which individuals may be educated and trained. The German dual system traditionally includes similar regulations and has been proposed as a model for developing countries more recently. It is however important to highlight that the regulation of educational content has to be aligned with the specific requirements of industry in order to ensure effectiveness and prevent skill mismatches. Accordingly, the blueprint replication of regulations from other countries are not likely to be successful.*

Example 3 ("boost demand"):

*Industrial policy regulations can also indirectly boost productive activities by **increasing the demand for domestically produced goods.** In recent years economic policy has sometimes tended to focus on the "supply" side of production with little appreciation for the importance of "demand". However, it is clear that there is little point in producing something if there is no one to buy it. Therefore, whilst expanding production by increasing the access to required inputs is an important consideration, the flip-side of the coin is that there needs to be a simultaneous appreciation of the factors which influence the demand for that production. There are many factors which influence how much a particular good or service is demanded in an economy and this will vary considerably depending on the context, location and activity but in general we can identify some core factors that affect the demand for goods and services in an economy:*

- *Consumer buying power (individuals, business and government) – Consumer buying power relates to the ability of people or institutions in a society to buy particular goods and services. Domestic demand for production will therefore be significantly influenced by the income levels in society and particularly by how much disposable income individuals, businesses and the government has to buy domestically produced goods and services.*

- *Income distribution - If there is a high level of income inequality in an economy, there will be many poor people and a few rich people in the society. In this situation, demand for production will be low. If there is a more equitable distribution of income, there will be high level of demand for the production of basic goods and services by the poorer segments of society and demand for the production of luxury goods by the richer segments. Therefore, there is a positive net effect on production demand by making the distribution of incomes more equitable.*

- *Market access – Demand will be highly influenced by the ability of producers to access their potential customers. Market access nowadays is commonly associated with a producer's access to international markets (via exports) but it can also relate to access to domestic consumers (via quality infrastructure and supply chains).*

- *Competition – From the perspective of a government trying to boost demand for domestically produced goods and services, one of the most important inhibiting factors will be competition from abroad (either via foreign imports or in export markets).*

The following examples of interventions relate to this:

- *A regulatory instrument that governments frequently deploy within their industrial policy packages are **import restrictions** that are meant to shield domestic producers from foreign competition. If national firms only produce a limited range of goods, consumers will have to turn to imported products. Once imports dominate consumption, it will be difficult for domestic firms to re-capture the market even if they are able to produce similar products. Accordingly domestic investors might shy away from entering the respective activities.*

    - *Import bans can be a strong intervention for the protection of infant industries. Domestic producers will benefit from market protection if the government is prohibiting the imports of certain goods from certain countries. While this strategy has been used very commonly in industrial policy packages globally, the WTO rules to formally constrain the policy space in this area significantly today. However, in particular least developed countries can still deploy this intervention if the range of products is limited and well justified and the time horizon for protection is not indefinite.*

    - *Very similar but slightly less strict regulations are import quota. These still allow the import of certain products up to pre-defined quantity limits (e.g. per year). WTO restrictions are also relevant for this intervention and also depend heavily on the characteristics of countries and products.*

    - *A more common strategy to reduce import penetration are technical regulations/ standards, which are referred to as non-tariff barriers. The adoption of detailed product standards, safety regulations, etc. can de facto ban the import of certain products from certain countries, while it does not require a de-jure restriction. Accordingly WTO rules are less problematic in this scenario than in the case of bans and quotas.*

2. Incentives

Instead of or in addition to applying their regulatory power, governments can make use of economic means to increase productive activities through targeted incentives that affect the emergence of firms, the access to resources required for production or the demand side. This section provides a brief discussion of selected incentives that could be considered within an industrial policy package either alongside or instead of regulations. The three examples from above are now discussed with regard to incentives accordingly. The section is not trying to be exhaustive with regard to the instruments covered but is meant to illustrate the process of considering various types of interventions (e.g. regulations vs. incentives) to tackle a given issue.

Example 1 ("new firms"):

Apart from regulations, an industrial policy can foresee specific provisions for the creation of new firms in the economy by incentivizing domestic or foreign investors to engage in productive activities:

- *The provision of **financial resources for start-up firms** is an example in this respect. Investment finance can be provided through multiple ways, for example either with cash grants or preferential lending arrangements (e.g. subsidised loans, lower interest rates or better payback periods). Interventions can be targeted at specific types of ventures,*

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e.g. more needs-based micro-finance can be considered for rural entrepreneurs while venture capital funding or competitive grant application schemes could be considered for promising innovative start-ups that introduce new technology to the productive sector of the country.

- *Financial **incentives to attract FDI** can be considered in conjunction with the regulations discussed above in order to attract foreign investors in general or in specific sectors or activities in particular. A very common form of FDI incentives are tax exemptions that reduce the tax burden for foreign companies with regard to profit tax, sales tax or corporate tax. Other options are direct financial transfers (e.g. grants) or indirect financial support (e.g. provision of industrial land or cheaper energy access). Depending on other relevant policy objectives (as discussed above), the incentives should be tailored to the expected outcomes of the new investment. In particular if tax revenues are foregone for an extended period or significant financial support if offered, it has to be considered which other benefits need to be ensured for the national economy (e.g. employment effects, linkages with domestic producers, technology transfer).*

Example 2 ("access inputs"):

Besides affecting the domestic availability of the various resources required for production with regulations, governments can also decide to deploy economic means. In principle, incentives can improve the availability of all types of inputs in a variety of ways. The underlying assumption for most of these interventions is that firms do either not possess the required financial means for investments (e.g. because of issues in the financial sector) or that the associated costs are not competitive. Accordingly in many cases the deployment of incentives in this area is justified on the basis of the notion that interventions are required for a limited amount of time until these structural challenges are overcome. In some cases interventions do however also start from the notion that a longer-term alteration of relative prices is required in order to actively contribute to the expansion of certain activities rather than others.

The following examples highlight some options in more detail:

- *If governments want to enhance the access of firms to any resource required for production, one option is the **direct provision of financial resources.** If existing producers lack the required financial means to access readily available inputs (e.g. raw materials, intermediate inputs, production equipment, land, skilled labor), governments can consider the provision of grants or loans for defined purposes. An important distinction in this respect is between inputs that are bought in a single investment and hence require access to finance for capital expenditure (e.g. procuring a new machine, building a new factory) and inputs that require recurring investments and hence can be supported with access to working capital (e.g. procuring raw materials or semi-finished components for production or utilities). Capital expenditure loans generally tend to be for higher amounts and in most cases require significantly longer pay-back periods, while working capital loans are required on a recurring basis but for shorter periods of time.*

- *As an alternative to providing financial resources directly, the government can also decide to facilitate investments into certain resources by **subsidizing the costs of access** for businesses. Preferential loans at interest rates below the market rate as well as income tax exemptions are relatively broader measures in this area as they reduce the overall costs of operations and theoretically free-up additional investment capital. More specific subsidies can for instance be offered for trainings of employees, procuring utilities below market rates, renting or buying industrial land at lower prices or reducing the cost of capital equipment through accelerated depreciation.*

- *With regard to domestically available raw materials,* ***export taxes*** *can be put in place as a disincentive that increase the costs for their exports vis-à-vis domestic sales. Export taxation can be used to encourage downstream industries. If the export restriction discourages exports of raw commodities, this is equivalent to an indirect subsidy to the industries that use these raw products as the domestic price of these products compared to the world price is lowered. As an alternative mechanism to an export tax, the government can set a VAT refund for exporters that is below the general VAT rate. In this way exporters do not necessarily receive a complete refund of the domestic VAT they paid on their inputs. For example China uses its system of VAT rebates on exports in addition to export taxes to discourage the export of some domestic commodities (e.g. those that are required for industrial production).*

- *A very common instrument that governments deploy to improve the access to industrial inputs from abroad are* ***duty exemptions*** *(this intervention also relates to objective 2 "deepen global market integration"). These can often be linked to economic zones, for instance in the common case of export processing zones that permit duty free entry of materials manufactured into export products. An example from South Africa is the strategic reduction of selected tariffs on mature capital-intensive upstream input industries in the interest of lowering input costs into downstream activities (www.itac.org.za).*

Example 3 ("boost demand"):

Incentives can also be directed at boosting the demand for domestically produced goods and services. National producers can be discouraged from expanding their capacity for the production of goods that currently only have limited domestic demand or where the demand is largely captured by competing imported products. If the government decides to become active in this area, the following examples of interventions that target the relative prices of domestic products vis-à-vis imported ones or enhance the aggregate demand of domestic consumers can provide a starting point:

- *Levying* ***import taxes/tariffs/duties*** *can be an alternative to the regulatory import restrictions discussed above to actively reduce the competition from imported products. Tariffs on imported goods increase their price for domestic consumers and hence make similar domestic produce relatively more attractive. This additional accessible demand can potentially stimulate the expansion of domestic production capacity. This "infant industry argument" has frequently been encapsulated in industrial policy packages either explicitly or implicitly. These incentives can potentially be affected by WTO rules and might hence not be feasible for certain countries or certain products.*

- *In general,* ***consumer subsidies*** *can incentivize individuals to buy larger amounts of certain goods by affecting their disposable income and purchasing power. If domestic consumers do not have sufficient means to acquire certain products, subsidies can be considered for various reasons. Consumption subsidies are most common in developing countries where governments subsidize essential commodities like food, water, electricity, fuels and education to ensure that every citizen can access those most basic requirements. While the most common application (e.g. for food) is more oriented towards the needs of the poor, they are sometimes also introduced for advanced products (e.g. solar panels) or for products that have certain specifications (e.g. more fuel efficient cars). It is important to consider that an effect on increased domestic production can only be expected if the additional demand can be captured by domestic suppliers, which is often not the case in particular if the subsidies are introduced outside an industrial policy context.*

3. Information

Apart from using regulatory and economic means, governments can also support the expansion of productive activities by providing targeted information that can influence the behaviour of various economic actors. In particular in developing country contexts, information on specific business opportunities or innovative production techniques and processes are not readily available to prospective investors. While making that information available to the right audience can be highly effective in itself, the provision of information can also be combined with regulations and incentives. For example, it is intuitive that any of the incentives outlined above will only be effective if the target audience is well aware of their existence and the potential benefits. Depending on the type of information provided, it can ideally stimulate the emergence of new firms, improve the accessibility of the resources required for production or provide a better access to market demand. The examples of instruments covered here are not meant to be exhaustive but attempt to illustrate the important process of considering various types of interventions to approach a given issue.

Example 1 ("new firms"):

When specifically aiming at the creation of new productive activities, information campaigns can target potential investors that are projected to enhance the productive capacity of the country. The following examples will illustrate that while investment attraction efforts are most commonly aimed at foreign investors today, they can equally target domestic actors:

- *The delivery of* ***training programs on entrepreneurship and business management skills*** *can be considered as an intervention that contributes to a more dynamic process of enterprise creation and growth. National citizens who have been exposed to the idea of initiating their own business in some detail are more likely to pursue this path. Acquiring specific managerial competencies will further support this process and can also be expected to contribute to a higher probability of success for new companies. Trainings can be targeted to various audiences, for example by exposing students to the general principles of starting or managing a business early on in their education or by supporting individuals who have already decided to start their own business with more specific information. A regulation of school or university curricula can potentially be considered to provide the foundation for this activity in some cases, while the simultaneous provision of training subsidies that ensures access of the right target audience can be another option.*

- *Apart from providing trainings, governments can also play a role in strategically attracting new domestic investments by* ***providing convincing evidence on currently unexploited market opportunities.*** *Cooperating with or encouraging the creation of sectoral associations in the private sector that provide a platform for the generation and dissemination of specific market information in certain key industries can be one mechanism for this. The regular publication of statistical data and business information or economic indicators as well as the issuance of market briefs are other examples. The dissemination of investment information and services through specific investment promotion agencies for domestic investors can be particularly relevant in larger countries that offer unique opportunities and challenges within specific sub-national regions. Several countries, including Brazil, Malaysia, Indonesia and South Africa make use of a network of decentralized investment promotion agencies that can effectively generate and disseminate in-depth information on the respective sub-regions of the countries (this intervention can also contribute to objective 6 "ensure inclusive production" if it generates new investments in disadvantaged regions).*

- ***FDI attraction campaigns*** *can be considered as an add-on or an alternative to the provision of economic incentives to foreign investors. If financial support is offered to specific types of FDI projects, it will increase the take-up of this incentive scheme if an information campaign is targeted at potential investors. In some cases it might also be sufficient to provide foreign investors with a convincing case for the main reasons for investing in a country. This can either focus on information about the available national market (e.g. for larger countries), the availability of certain resources (e.g. raw materials, skilled labour, industrial land) or other convincing arguments.*

Example 2 ("access inputs"):

The provision of information can also facilitate the access of existing firms to the required resources for expansion. In situations where the required inputs area readily available in the country, information campaigns can be a sufficient and cost effective solution. But additional efforts of awareness creation are also relevant in cases where the government intervenes with specific regulations or incentives to make certain resources available to domestic firms:

- ***Industrial technology and innovation support*** *is currently one of the most frequently discussed areas of intervention in industrial policy. While technology and innovation policy packages commonly also include regulation and incentives, the provision of information to the private sector plays a large role.*

  - *Some elements of technology extension and transfer services can briefly be mentioned here: Providing information on opportunities for improvement in existing technologies, best practices, international trends, relevant regulations, business networks, benchmarking companies in their industries to identify areas for improvement, technical assistance and consulting in areas like quality management and certification, training of workers in the effective use of more advanced technologies, joint projects between companies and public research institutes to solve specific problems related to the company's products or processes.*

  - *Note: The joint OECD/World Bank platform (www.innovationpolicyplatform.org) provides a wealth of information with regard to common interventions to promote Innovation and Technology, including regulations, incentives, information and public goods and services. The World Bank's "Innovation Policy: A guide for developing countries" is another very rich resource in this respect. The recent UNIDO working paper (WP 09/2015) titled "Innovation Policy and Industrial Policy at the Cross-Roads" presents more directly relevant examples for a variety of policy interventions developing countries have used in the aircraft and palm oil industries specifically.*

- *Another important area that can benefit from information is the* ***cooperation among firms.*** *For example the organization of specialized trade fairs or matchmaking platforms that can connect national (and foreign) producers of inputs with domestic industrial firms that demand those inputs can be relevant. Following a similar logic, governments might also consider supporting industry associations in the design of a business registry that allows firms to search for producers of certain goods and services. Given the scenario that a large number of small domestic producers require certain inputs in small quantities, the government could connect those firms and support them in their joint interaction with domestic and foreign suppliers. One example for this process of cooperative sourcing is the creation of purchasing cooperatives. Apart from sharing the burden of identifying suitable suppliers, the pooling of the firms individual demand can also reduce procurement costs and potentially make logistics more efficient.*

- *If the required raw materials or intermediate inputs required for production are currently not being produced domestically yet, the government could also engage in the execution of* ***feasibility studies for the set-up of domestic production facilities for industrial inputs.*** *The results of the feasibility study would then be shared with the relevant actors in the private sector to provide them with a compelling argument for considering an investment in this area.*[1]

Example 3 ("boost demand"):

While information provision can be a highly relevant type of industrial policy instrument as outlined under the examples 1 and 2 above, it can arguably contribute less extensively to the generation of additional demand for domestically produced goods and services. The following examples can however still provide an illustration for possible interventions:

- *Industrial policy can provide information on domestic market demand (and untapped export demand for domestically produced goods and services). If demand already exists or is currently emerging, this type of intervention can be an efficient way to benefit from this demand. Identifying specific export potentials for domestic goods can either be done by conducting an export strategy study on an ad-hoc basis for specific sectors and target regions or by regularly publishing market briefs to update firms on new available potentials.*

- *Conducting "buy local" campaigns for specific products can be an option that focuses on the target group of domestic consumers in order to increase their willingness to buy local goods and services instead of foreign imports. Potentially they can be combined with the preferential treatment of domestic producers by means of incentives (e.g. grants for quality improvement measures) or regulations (e.g. guaranteed shelf-space for domestic products in supermarkets/retail outlets).*

- *Governments can also support domestic firm's attendance of industrial trade fairs abroad. These trade fairs can offer domestic firms an opportunity to learn about potential market demand in specific export markets and to interact with potential customers. If concrete export potentials are identified, subsequent financial incentives can be considered to support the successful completion of export orders (e.g. by subsidizing product certification).*

1 A good example is the initiative by the Industrial Development Corporation (IDC) in South Africa that conducted a pre-feasibility study for a new low-cost iron and steel facility in the country. The objective is to help lower the prices of this critical input into industrialization and to commence production of steel products and grades not currently manufactured domestically. The pre-feasibility study led to the signing of a MoU with a Chinese steel company to jointly conduct a detailed feasibility study for a Greenfield steel plant (http://www.idc.co.za/home/media-room/articles/720-idc,-china-sign-iron-and-steel-deal.html).

4. Public goods and services

Governments can also consider to become more directly involved in the provision of goods and services as part of their industrial policy package. While this type of intervention can also be combined with regulations, incentives and information provision, it is sometimes also described as the last option if the three other types of interventions are not deemed sufficient. Whether governments consider public provision only as a last resort or as equal options next to other types of instruments however strongly depends on the country context. With regard to the 3 examples from above, a couple of options for instruments that rely on public goods and services can be discussed here. The examples of instruments covered here are not meant to be exhaustive but attempt to illustrate the important process of considering various types of interventions to approach a given issue.

Example 1 ("new firms"):

- ***State owned industrial enterprise*** *are the most commonly considered way for a government to get directly involved in the expansion of productive activities in their country. While SOEs are owned fully or with a significant share by governments, they have a distinct legal form and are established to operate in commercial affairs. A large body of economic deregulation literature focuses on the possible inefficiencies of state owned enterprises in order to advocate for a withdrawal of the state from the economy. However, several successful industrial policy experiences have illustrated the potential role they can play in industrial development. SOEs are still a common feature in most developed and developing economies today.*[2] *The creation of SOEs frequently also relates to objective 8 "promote self-sufficiency", in particular if strategic goods are being produced. State-owned enterprises can potentially be conceived for various sectors, although some common examples are to be found in natural monopolies (e.g. public utilities), infrastructure (e.g. railways, telecommunications), strategic goods (e.g. military equipment, healthcare) or natural resources (e.g. mining, oil).*

Example 2 ("access inputs"):

- *Instead of using regulations, incentives and information, governments can consider to become active in the* ***provision of basic industrial inputs*** *directly. The provision of utilities is the most common example in this respect, but a range of countries also decisively took direct control over raw materials in particular in the minerals sector. A World Bank report on state ownership in the global minerals industry (World Bank 2011) shows that state control is significant for several minerals, in particular with regard to the refining of aluminum and tin, but also with regard to mining operations (e.g. tin, coal and iron ore).*

    - *For example, Chinese state owned enterprises are very active in this respect and are recently also acquiring ownership of mines and refineries abroad to contribute to the significant demand of Chinese industry. In the late 2000s, Chinese state controlled firms owned more than 40% of world production of coal mining and more than 20% of iron ore mining. Other developing countries with a strong involvement*

2 There a many possible motivations for the consideration of SOEs in industrial policy. Governments could aim at providing public and merit goods and increasing the access to public services. SOEs can also help sustaining sectors of special interest, e.g. to preserve employment or support the launching of new and emerging industries where the start-up costs may otherwise be extremely high.

of state owned enterprises in minerals mining and refining are Bolivia, Ecuador, and Venezuela in Latin America and Namibia, South Africa, and Zimbabwe in Africa.

- *Apart from directly controlling the supply of industrial inputs, governments can also become active as an intermediate buyer of the required resources. One such case is the creation of a national industrial input development enterprise in Ethiopia whose main responsibility is supplying inputs for manufacturing industries by procuring from local and international markets. The enterprise is particularly focusing on inputs for the textile and leather industries, including cotton and semi-processed leather.*

- *The creation of* ***state owned development banks*** *is a commonly cited example for the government's direct provision of capital inputs for the economic development process. Development banks are the financial arms of the State, channeling domestic savings towards medium and long term industrial projects. By facilitating access to capital, they can increase productive activities and foster structural change. In several economies, development banks have played a crucial role, allowing domestic firms to launch and expand operations and to thus enter strategic industries. Commonly development banks fill a gap in domestic financial systems by offering loans with longer maturities and facilitating access to loans through lower interest rates.*[3]

Example 3 ("boost demand"):

- *Besides fulfilling the government's demand for goods and services,* ***strategic public procurement*** *regularly addresses a wide range of objectives. It has been used by governments to achieve socio-economic objectives such as increasing productive activities; protecting national industries from foreign competition (cf. objective 3 "maximize domestic value capture"); and remedying national disparities (cf. objective 6 "ensure inclusive production"). Hence, apart from simply aiming at price discounts to reduce government expenditure, governments can choose between four types of strategic procurement approaches: 1) preferential vendor and/or industry purchasing arrangements (e.g. preference to specific types of domestic firms); 2) domestic preference (i.e. "buy domestic terms"); 3) local content and 4) countertrade and offsets.*

- *If governments want to use public procurement more specifically to promote the emergence of innovative new activities, an* ***innovation perspective on public demand creation*** *could be adopted. This approach would require that products for public procurement initiatives are defined more carefully to ensure that they go beyond the procurement of standardized products serving a generic market (efficient procurement) and/or addressing specific demand niches but employing known production methods and practices (adapted procurement). In order to encourage innovation, encouraging new technical solutions to meet a generic need (technological procurement); and adapted technical solutions (experimental procurement) are most relevant as they can generate demand for new productive activities in the country (this type of procurement intervention also relates to objective 7 "build economic resilience").*

3 Compare UNIDO WP 8/2016 "The role of industrial development banking in spurring structural change" which provides a detailed description of the roles of development banks including 8 examples from different countries.