The 2030 Agenda includes as Sustainable Development Goal 9 (SDG 9) the commitment to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”. The entry of this goal into the 2030 Agenda is an achievement for developing countries who have a very diverse situation in terms of population sizes, per capita incomes, economic sizes and structures, political systems, cultures but share the common feature of an underdeveloped industrial sector. Therefore, in order to implement SDG 9 proactive industry policies are needed that take into account aspects of inequality and sustainability.

This essay uncovers many obstacles to this goal and raises the question of whether this new commitment can be pursued in actual policies both at the national and global level. Will the privileging of privatization and partnerships and the dilution of safeguards against corporate capture collide with the policies need to achieve SDG 9? As will be argued below, SDG 9 will require reviving state leadership over key economic actions, instead of reserving for private parties unfettered scope for action. Controls on portfolio flows, for example, are critical for keeping the domestic cost of borrowing from being unduly high and thus being a hindrance to raising the real investment rate; however, these controls are considered shackles on private decisions on where and how capital should be deployed. Moreover, as will be seen in this essay, privatization as a policy ideal means favoring the international private sector over the domestic private sector. Under investor protection treaties, for example, developing countries are required to treat foreign investors at least as well as, if not better than, domestic enterprises, as it was during colonial times. Imperial preferences and proscriptions rigidified social inequities in all societies in that era.

In a deeper sense, SDG 9 represents a rediscovery of the principal challenge of the post-colonization effort undertaken in the developing world with technical assistance from the United Nations in the immediate post World War II era. Structural change in domestic economies and in economic relations among nations was seen as necessary to close the gap in labor productivity and incomes between newly independent nations and the advanced countries. This would only be possible if all former colonies succeeded in industrial development.

It can be argued, however, that, at present, the policy and global environment is much more hostile to industrial development than in the 1950s. By the 2000s, the UN development agenda had evolved into a highly stylized framework which overlooked the primacy of structural change. It associated failures to industrialize mainly to national policies and governance failures in developing countries. Under the MDGs, the UN development agenda for governments and donors focused on alleviating poverty and social distress.

The (re-)introduction of the industrialization goal in the UN development agenda can be attributed to the determined advocacy of developing countries, particularly African countries. In anticipation of the ramping up of post-2015 negotiations on a new UN development agenda, African countries agreed in January 2014 on a Common African Position on the post-2015 Development Agenda. This position incorporated Agenda 2063 which called for “structurally transformed” economies 100 years after the formation of the Organisation of African Unity in 1963.

What kind of industrial policy is needed?

The historical record and the experience of the less than a handful of countries that have achieved some level of industrialization since the 1940s indicate the kind of industrial policies that are needed to achieve SDG 9.

The main propositions are the following:

1. Industrial policy must create the economic space and provide the means for new economic activities and livelihoods.

   Industrialization requires the permanent and steady movement of the population from working in low productivity sectors to higher productivity sectors. It is a process of building new skills and capabilities on the part of the labor force both individually and as individuals working together. This requires the introduction and adaptation of technology in commercial activities - whether the technology is invented domestically or accessed from abroad.

* This article was first published in Spotlight on Sustainable Development 2017: Reclaiming Policies for the Public, pp. 89-96.
Since the 1980s, international development agencies have placed great emphasis on export-driven growth in developing countries. Former colonies have always been fierce exporters of commodities. Commodity exports provide foreign exchange earnings if commodity prices are adequate but even when commodity prices are very high success in exporting commodities will not engineer an increase in domestic productivity without policies to invest in new economic activities. Because markets, both international and domestic, can mostly confirm the prevailing structure of productivity and domestic capabilities, states have had to play a large role in channeling investment in new, untried activities. These have included protection from foreign imports, subsidies to the private sector, and the use of state-owned enterprises where necessary.

Export-led growth would have been a good bet if it allowed developing countries to reduce their dependence on commodities. China when it was growing rapidly (since the 1990s) was able to do this. However, the disturbing trend is that since 1996, developing countries have increased their dependence on commodity exports. Alan Roe and Samantha Dodd find that this trend of increased commodity export dependence applies to all strata of developing countries but most strongly to the poorest countries. Moreover, by quickly comparing this trend between 1996 and 2012 and 1996 and 2014, they find that the sharp fall in commodity prices since 2012 has not reduced developing countries’ export dependence on commodities.

In recent years, there has been a lot of discussion about global value chains (GVCs) and how it is important for developing countries to participate in these chains. A country can participate by producing a part of a global product and does not have to produce the whole product. GVCs are as old as colonialism and the struggle is over regarding where the value added will be created and which country can capture the bulk of the value created. In many global products, design and branding capture the bulk of the value chain, and developing countries can be deluded in hoping that they can capture a good part of the chain by liberalizing trade and giving foreign investors tax incentives. According to Rashmi Banga, the distribution of value-added in GVCs is heavily skewed towards OECD countries (67 percent of global value-added accrue to OECD countries, nine percent to China, five percent to other BRICs, eight percent to all LDCs). To overcome these disadvantages, the very effort of joining a GVC will require industrial policies that can lead to permanent improvements in national technology and skills and the diversification of the economic activities of the host country.

2. Industrialization is not only about manufacturing and the rise of “industries.” It is also about the rise of productivity in agriculture and in services sectors.

Historically manufacturing has indeed provided the most dramatic locus of increases in productivity in incomes. However, improved agricultural productivity and supporting services have also been needed in most countries to free labor to move to manufacturing. The rise of manufacturing, including in the chemical industries, have also provided the means for mechanization and improved yields in agriculture. Each economy starts with an inherited structure and must find the fastest at the same time least-cost path to combining the rise in productivity in the different sectors. Industrial policy, to be successful, must therefore pay great attention to investing in productivity upgrading in agriculture and in services, not just manufacturing.

Climate change is an urgent problem for all countries. So far, industrialization has been heavily reliant on the availability of fossil fuels. To reduce dependence on fossil fuels, all societies must shift their modern technologies to those less dependent on fossil fuels. Reducing depletion of water and other resources, and reducing waste from production and consumption will also be required. That all countries, including the poorest, must undertake this transition can be seen to be equivalent to the imperative of a new industrial revolution occurring globally to address climate change.

Innovation and technological upgrading is an integral part of the movement from low productivity to high productivity in economic activities and for the movement away fossil fuel dependence and the waste of natural resources. A disturbing trend is that the ability to invent domestically and to adapt ideas and technology to improve productivity has either been blocked or become prohibitively expensive under the Trade-Related Aspects of Intellectual Property Rights (TRIPS) regime in the WTO and free trade agreements. This regime exposes countries that do not meet the obligation to protect the registered patents of private parties to trade sanctions.

Industrial policy will require that developing country authorities take advantage of flexibilities available under the existing international regime. Developing countries should avoid acceding to free trade agreements which reduce their access to innovation activities and to foreign technology. Developing countries should also seek to identify the intellectual property obstacles in their industrial development and take concerted action, including through the Financing for Development (FfD) technology mechanism, to obtain access to critical technologies.

3. Industrial policy must address questions and undertake policies on the choice of technology and the most efficient scale of production and service provision.

Exploiting economies of scale have been a critical element in the rise of productivity in industrialization. The provision of infrastructure creates larger markets, lowers cost of inputs, and facilitates the exploitation of economies of scale.

However, there are also cases, especially applicable to parts of agriculture and services, where small scale operations can be equally efficient but also more environmentally responsible and produce more equal economic outcomes. The example is small scale farming which allows...
for greater labor inputs and reduction in the use of chemicals and pesticides.

Industrial policy requires that states establish and support national innovation systems whose starting point are universities and research institutes doing basic research and whose ending point is the achievement of commercial viability for new products and services.\(^6\)

**4. Industrial policy must enable the rise of a strong domestic enterprise sector.**

New jobs, improved products and services are mainly created in enterprises, and not only in the public sector.\(^7\) Industrial policy must enable the emergence of manufacturing activities through infant industry protection, support for technological upgrading, government procurement and coordination\(^8\) to prevent ruinous competition among private companies.

An indigenous enterprise sector will not arise unless it has access to adequate, even large surpluses, to finance further investment and capacity building. Every developing country has an array of small private sectors. The question of development involves enlarging their scale through investment and upgrading their capability and productivity to global levels. Historically, greatly driven by domestic politics, government intervention has been necessary to develop an indigenous private sector. The inability of participants from developing countries to earn sufficient and predictable surpluses from their participation in global value chains could be an important hindrance to building an indigenous private sector.

In many developing countries, farmers and herders constitute the largest private sector, in terms of number of people employed and contribution to the economy. In many parts of the world, this is also the sector where a lot of women’s livelihoods are found. The liberalization of food imports has often devastated the domestic food and agricultural sector. Private investment in agriculture in developing countries is stymied by the threat of subsidized agricultural exports from the USA and the EU.

It has also become fashionable in free trade agreements to include a competition chapter, which requires that states provide foreign enterprises entry to domestic markets. In the Western world, this approach of protecting free entry was important to protect consumers from monopolies and combines. Imposed in many developing countries, this approach could quickly lead to the monopolization of local markets by transnational companies with enormous advantages in finance, administration, international networks and technology.

Two other policy tools of industrial policy critical to building an indigenous enterprise sector are also increasingly subject to international disciplines. The first is government procurement, which often requires that foreign bidders be allowed to compete for contracts above a certain level. Government procurement has historically been an important part of industrial policy so that domestic enterprises could cover the fixed costs of their start-ups. A second tool concerns state-owned enterprises (SOEs). State-owned enterprises have been important industrial policy tools to provide intermediate inputs and other basic inputs, such as steel, if the domestic private sector is unable to build up a sufficiently large pool of capital to put up these basic industries.

An industrial policy must also include a component on the role of foreign investment. There are three ways in which foreign investment enters: (1) “greenfield” investment leading to the establishment of new plants and facilities, (2) reinvestment or additional investment/capacity in existing foreign investment and (3) cross-border mergers and acquisitions. Of these, only greenfield investments have a firm and consistent connection with capital formation; by contrast, whether reinvestments and mergers and acquisitions change the scale of operations are highly contingent on subsequent decisions by investors.

In addition, national authorities must presume that eventually the investment by the non-residents will be repatriated back. Yılmaz Akyüz finds that from 2000 to 2013, outflows of repatriations among the five main ASEAN countries, especially among Malaysia, Thailand and Singapore largely exceeded the inflow of new foreign investments.\(^9\)

Since the 1990s, foreign investment in the form of portfolio flows have caused heightened macroeconomic and financial instability and created the conditions for financial crisis like the 1997 Asian financial crisis. In any given period, portfolio flows play an unceasing netting “game” especially for countries that do not regulate capital flows. Because portfolio positions are driven by the portfolio motives of non-residents, they can be subject to “mood swings,” the most spectacular recent event of which was the so-called “taper tantrum” of April-May 2013.\(^10\)

For these reasons, industrial policy must weigh the benefits from foreign investment with the costs to the host economy. The best role of foreign investment is to help fill in gaps in the chosen industrial development path. There could be other purposes. In order to meet these objectives, host countries historically had imposed performance requirements on foreign investors. However, international disciplines in the WTO under Trade-Related Investment Measures (TRIMS), in international investment agreements and bilateral investment treaties severely restrict the use of performance measures on foreign investors.\(^11\) For example, these disciplines prevent authorities from requiring foreign investors to balance their use of foreign exchange on imports with their export earnings or to hire local managers or workers. Many of these disciplines actually privilege foreign investors more than domestic investors, running contrary to the view that the emergence of an indigenous enterprise sector is indispensable to development success. Industrial policy must find ways to skirt around these policy restrictions or at least make sure the indigenous investors have a level playing field.

**5. Industrial policy must take effort to coordinate different policy areas and will require long-term planning.**
Trade policy is critical to the industrialization effort. It has become the fashion to view low tariffs as the “best practice.” It is best practice for countries that are already industrialized - they have competitive industrial sectors - because it gives their consumers wider and lower-cost choices but it is not best practice for developing countries. A more flexible pattern would be appropriate for industrial development. Tariffs could be set mainly on goods to support the learning and technology upgrading process of industrial development. For other goods, tariffs could be low or zero as long as these do not drain foreign exchange needed for essential imports. When an industry has attained international competitiveness, the tariffs can be reduced drastically and other sectors can then be given tariff advantages. In fact, developed countries themselves follow this strategy. Recent trade disputes over the requirement of domestic content as conditions for public subsidies in solar panel production is a typical example.

Making available long-term finance at reasonable interest rates is another key policy element of industrial policy. Countries with open capital accounts have a hard time providing these facilities because their banks have to provide their lenders an interest rate to compensate for possible foreign exchange value losses when foreign investors’ moods change. As part of industrial policy, it is timely for developing countries to re-establish their development banks which they had shut down in many structural adjustment programs. Development banks are able to provide long-term finance, while raising long-term resources themselves. Authorities will need to avoid governance weaknesses in the operation of these banks.

Capital controls are an indispensable ingredient of industrial policy. They are important to keep domestic borrowing rates low and exchange rates as reliable signals of costs and future profits. National authorities must resist the temptation of and lean against the over-expansion of external debt during episodes of abundant international liquidity and high commodity prices. These episodes always end in tears and, over the long-term, it is preferable to protect the path of industrial and social development because the scale of collapses in the busts exceeds the temporary growth surges in the booms.

Conclusion

The rediscovery of industrialization as an ingredient of achieving sustainable development reintroduces the debate over industrial policy. Developing countries must seize this opening to restart experimenting with policies to introduce new economic activities and diversify their economies.

Developing countries will be facing obstacles, both material and ideological, in applying industrial policy. As discussed above, international rules and disciplines impose severe constraints on industrial policy; developing countries should take concerted action to relax these constraints by making these rules more conducive to national industrial policy. Upgrading the capability of the state to design and implement industrial development will require a broad political consensus to sustain an effort that is by nature long-term.

Endnotes:
1 African Union (2014).
4 Banga (2013).
7 Memis/Montes (2008).
8 Wade (2003).
10 “Taper tantrum” is the term used to refer to the 2013 increase in US Treasury yields, which resulted from the US Federal Reserve’s use of tapering to gradually reduce the amount of money it was feeding into the economy. The “taper tantrum” ensued when financial investors panicked in reaction to news of this tapering and drew their money rapidly out of the bond market.

References


Previous South Centre Policy Briefs
No. 20, August 2015 — Internationalization of Finance and Changing Vulnerabilities in Emerging and Developing Economies: The Case of Malaysia by Yılmaz Akyüz
No. 21, September 2015 — Lack of Progress at the Twenty-Second Session of the WIPO SCP for a Balanced and Development-Oriented Work Programme on Patent Law Related Issues by Nirmalya Syam
No. 22, September 2015 — The WIPO Negotiations on IP, Genetic Resources and Traditional Knowledge: Can It Deliver? By Viviana Muñoz Tellez


