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Industrial policy is a key instrument through which governments promote economic development in their countries. Some elements in this policy can be highly targeted at chosen industries and/or firms. Indeed, many Asian governments have used and continue to deploy such a policy instrument to industrialise their national economies. But in today's highly globalized world economy, is industrial policy still an effective instrument for promoting economic development? In this issue, we look at the implications from a comparative study of the experiences of South Korea, Taiwan, and Singapore.

Rethinking industrial policy in Asia's latecomer industrialisation*

By Henry Wai-chung Yeung

When South Korea, Taiwan, and Singapore were catching up through state-led industrialisation in the 1960s and 1970s, their only benchmarks were the first movers in advanced industrialised economies. In the context of today's intensified global competition, a developmental state's relentless pursuit of sectoral industrial policy to catch up with first movers can fall into the danger of missing a rapidly moving target. Catching up with the "wrong" or obsolescent first movers may turn out to be a temporary gratification, and indeed "fallen behind" the "real" movers can become the reality (e.g. the rapid decline of Taiwan's integrated device manufacturers in the semiconductor industry during the 2000s and beyond).

Because of drastic and rapid market shifts in response to changing technological regimes, new product innovations, and consumer preferences, industrial transformation through such state-induced second mover advantages as scale economies does not necessarily generate sustained growth, even after such transformation has taken place. There is also no guarantee that the state's planning agencies and policy implementation bureaus possess the requisite competence to help domestic firms anticipate and respond effectively to these rapid shifts and unknowable changes in the global economy. In the global electronics and marine industries, this dynamic scenario poses a much more serious challenge to the practice of conventional industrial policy in the global economy today, as compared to over four decades ago when the three East Asian economies were catching up.

Whether in East Asia (or in the US or the UK), it is clear that industrial policy matters in economic development. But its relevance and effectiveness depends very much on policy details and political contexts. Empirical evidence in my work has shown that "picking the winners" by the state, as a form of sector-specific intervention, can no longer be useful because successful industrial transformation is increasingly dependent on the strategic coupling of domestic firms with global production networks. In a world economy dominated by cross-border production networks, this national-global articulation has become the necessary mechanism for development to be kick-started and sustained over time in most economies. While it is now much harder for almost any national economy to develop fully vertically integrated industries that are internationally competitive, there remains significant room for a new kind of industrial policy promoting domestic firms to tap into the developmental opportunities inherent in most global industries.

But there are sectoral specificities to these network-level opportunities. There is no doubt, for example, that in technological and organizational terms, strategic coupling in automobiles can be much more challenging than in apparel or agro-foods. Interestingly, there is also substantial intra-sectoral differentiation. In the information and communications technology (ICT) industry, articulating into global production networks in consumer electronics is relatively more actionable in functional policy terms than those in advanced semiconductors or high-end electronics equipment (e.g. medical devices or computing servers). Developing industrial policy oriented towards promoting a specialized niche in a particular sector or an intra-sectoral segment can make good sense for economic development.

This recognition of new developmental challenges and policy considerations has at least three significant implications for rethinking industrial policy in Asia's latecomer industrialisation: its intended recipients, policy foci, and the politics of choice. First, the question of the recipients of state-led initiatives becomes much more complicated in this national-global articulation. When the three East Asian economies entered into the new international division of labour, there was no question who should be the beneficiaries of state-led industrialisation – domestic firms and national champions, such as Taiwan's TSMC and South Korea's Samsung and Hyundai. But as today's national firms are less domestic in their outlook and activity because of their strategic coupling with global production networks, it is questionable if they should be the only beneficiaries of a renewed form of industrial policy. This greater domestic coupling with global production networks also entails a more extensive presence of foreign firms in the national economy.

Instead of a highly selective sectoral industry policy targeting at promoting specific firms through investment coordination, policy loans and credit rationing, or trade and investment protectionism, a more catalyst-oriented industry policy promoting industry-level growth dynamics, such as a cooperative industrial ecosystem and inter-firm and inter-industry linkages, is likely to be more effective. This kind of industrial policy can support local firms to leverage on new sources of technologies and market access in global production networks; it can also facilitate the location or further upgrading of value-adding activity by existing or new foreign firms in the national economy.

Second, this call for a more calibrated approach to industrial policy brings us to the possibilities of focusing on niche policies that nudge strategic coupling with global production networks. As industrial production becomes ever more fragmented and globalized, state planners and their advisors in newcomer economies will find it even harder to identify exactly the products and technologies that should be developed in their domestic industries. The obstacles to economic development are less about large capital outlays and the scale of investment, but more about developing specialized niches within different global industries.

In most global industries characterized by vertical specialization and modularization (e.g. transport equipment, ICT, agro-food, and so on), a niche approach to industrial policy is likely to yield stronger coupling of domestic firms with global production networks than a big spurt approach to state-led industrialisation. Indeed, this nudging approach may not produce grandiose industrial complexes of the size and scale that match South Korea's *chaebol* shipyards and automobile plants or Taiwan's Hsinchu Science-Based Industrial Park. But it does offer a more realistic pathway to achieving capitalist development in the Global South. One such niche approach is about developing favourable policies, such as start-up support and financial and social incentives for returnees, to engage more systematically with transnational communities of technopreneurs and managerial actors. Tapping into their knowledge and network repertoires can allow economic planners and policy makers to develop a more thorough understanding of the GPN-relevance of their existing national capabilities and positions in value-chain segments.

Third, the politics of industrial and sectoral choice are much more confounded by the growing uncertainties inherent in today's capitalist global economy. When the three East Asian economies began their industrial transformation in the 1960s and the 1970s, highly selective sectoral industrial policy promoting labour-intensive industries and heavy and chemical industries was relatively straightforward. As these industries become much more mature today, value creation and capture tends to be much greater in new innovation-based industries in both the manufacturing and service sectors. In these dynamic new industries (e.g. nanotechnology, biomedicine, green-tech, and digital media), catching up is not just a matter of capital investment led by state-controlled financial institutions and elite industrial development agencies. The sheer complexity and wide ranging set of actors with specialized knowledge and expertise, and interests and priorities in these industries makes it rather unruly for bureaucratic targeting through even well-coordinated industrial policy.

In such a challenging world of extraordinary uncertainties, industrial policy is but one political approach to industrial transformation and economic development. Looking forward, I believe the adaptive post-developmental state should focus on creating broad-based capabilities in new technologies, product and process innovations, and market development, rather than on choosing specific winning firms, industries, or sectors.

* This is based on my recent monograph *Strategic Coupling: East Asian Industrial Transformation in the New Global Economy*, Ithaca, NY: Cornell University Press, May 2016.