The relevance of the concept of developmental industrial policy in times of globalisation: insights from low-income countries

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Abstract

The concept of developmental state has explained the spectacular growth of Asian countries by a key common characteristic, industrial policy. The relevance of the concept in the 21st century is questioned in two steps. Firstly, this concept may have been an ideal-type in view of marketisation and retreat of the state in Asia, and the developmental state remains challenged by ‘cronyism’. Secondly, the concept’s usefulness is questioned because: i) conceptualisations of developmental states and industrial policies occurred before globalisation: though Asian developmental states were themselves ‘latecomers’, the question remains of the relevance of industrial policies for poor countries (typically Sub-Saharan Africa) in a context of globalisation. Simultaneously, though these theories have not been not implemented in the most successful countries (the US, China), the concept of the developmental state is challenged by the theories that have underlain globalisation in the 1980s, i.e. that generalised liberalisation fosters growth; ii) at the time of analyses of Asian developmental state, the world was mainly multilateral, in contrast with the explosion of regional agreements at the beginning of the 21st century, which questions the possibility of developmental industrial policies. The argument highlights a paradox for poor latecomers: while globalisation makes industrial policies more difficult for these countries, it facilitates the move of global capital to cheaper countries when production costs rise and therefore the possibility for these countries to implement labour-intensive industrial policies.

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1. Introduction

The concept of ‘developmental state’ has been elaborated by political economists in the late 1980s and explained the spectacular growth of Asian countries by a key common characteristic, i.e. industrial policy supported by active state intervention. The relevance of the concept in the 21st century is questioned in two steps. Firstly, this concept may have been more an ideal-type than an accurate description of empirical facts in view of developmental states’ increasing marketisation and retreat of the state in Asia, and the developmental state remains challenged by ‘cronyism’.

Secondly, the concept’s usefulness is questioned because: i) conceptualisations of developmental states and industrial policies occurred before globalisation, and the developmental state with its key characteristic of industrial policy as a key driver of growth may be more an empirical set of facts situated in time and space than a concept that guides analysis in other regions and times. Though Asian developmental states were themselves ‘latecomers’, the question remains of the relevance of industrial policies for poor countries (typically Sub-Saharan Africa) in a context of globalisation. Simultaneously, though these theories have not been not implemented in the most successful countries (e.g., the US, China), the concept of the developmental state is fully challenged by the theories that have underlain globalisation in the 1980s, i.e. that globalisation fosters growth (generalised liberalisation of prices and wages, state retrenchment) – what has been coined ‘neoliberalism’ or ‘austerity’ policies, implemented in regions that either mastered their own policies, such as in the EU, or were dominated by policy externalisation to international financial institutions, such as in the periphery (e.g. Sub-Saharan Africa); ii) at the time of Asian developmental states’ growth and its analyses, the world was mainly multilateral. At the beginning of the 21st century, the failure of multilateralism has given rise to an explosion of regional agreements, and the question is therefore as to whether industrial policies as stylised by the concept of the developmental state can be conducted in the context of proliferating regionalism.

The argument highlights a paradox: while making industrial policies more difficult or even less relevant for ‘peripheral’ and latecomers poorest countries, globalisation (trade and investment openness) can also help conduct labour-intensive industrial policies in these countries, because the rise in production costs in former Asian developmental states incites global capital to move to cheaper countries and because its intrinsic pressure on domestic public policies (notably taxation, placed into competition at a global scale) may facilitate the possibility for these countries’ governments to implement selective industrial policies.

The article is structured as follows. Firstly, it examines the features of the concept of the developmental state, notably the key role of public policies (industrial policies), and the questioning these have generated regarding their transferability and resilience. Secondly, it presents crucial challenges to the relevance of this concept for low-income countries in the 21st century, notably in the context of global trade liberalisation together with the proliferation of regional agreements. Thirdly, it shows that industrial policies, and hence major elements of developmental state policies, remain for low-income countries a key ingredient of long-term growth.
2. The concept of ‘developmental state’: common features of fast-growing East Asian countries at the end of the 20th century

2.1. The main features of the concept: the central role of industrial policies

The concept of ‘developmental states’ was elaborated in the 1980s in order to explain growth in East Asian latecomers at the early stage of development. Its aim was to explore the conditions and policies that enable countries to take off and reach sustained and cumulative growth. Asian ‘developmental states’ demonstrated that there are original ways of ‘catching up’ and confirmed that growth may be an outcome of state intervention and active public policies. Initially, the concept referred to Japan, South Korea, Taiwan, later, Hong Kong, Singapore and China. The concept has been the subject of a vast literature (e.g., White, 1988; Amsden, 1989; Wade, 1990, Johnson, 1982; Aoki et al., 1997; Woo-Cummings, 1999; Johnson, 1999; Sindzingre, 2007).

In Asian ‘developmental states’, the role of government has varied from country to country. Developmental states shared common features, however. They showed that ‘statism’ is not inherently rent-seeking: governments successfully implemented an ‘entrepreneurial’ role and a mix of government and market. Developmental states show the importance of historical trajectories and that of a ‘strong’ government having a clear conception of economic development and management of industrial transition.

Among key common traits of developmental states, there have been targeted policies (explicit ‘distortions’), notably industrial policies and trade policies (selected tariffs, subsidies and exonerations), but these were conditional to economic performance (Knowles and Garces-Ozanne, 2003). Developmental states also exhibited significant levels of domestic savings – public and private (Singh, 1998), high levels of education, low levels of inequality (You, 1998), competent bureaucracies, which could be autonomous vis-à-vis political pressures while being ‘embedded’ in local political institutions (Evans, 1995). South Korea’s policies thus can be described as a ‘socialisation of private risk’, with the government having identified strategic industrial sectors, made discretionary allocation of resources to those sectors, and minimised collective action problems (Mah, 2011).

Developmental states’ policies were characterised by flexibility (‘flexible rigidities’, Dore, 1986 for Japan, Chang, 1995 for Korea). These can be described as examples of the ‘self-discovery’ of appropriate policies, which is an important element of the effectiveness of policies that are oriented towards growth (Hausmann and Rodrik, 2003). In South Korea for example, the state was able to implement welfare state-type of policies in the 1990s when these could further developmental objectives (Suh and Kwon, 2014).

Active industrial policies have been crucial factors of growth, for example in South Korea. Yet contrary to orthodox views, this state intervention has not been a market-preserving intervention. The state intervened in domains such as tariffs and subsidies (e.g. subsidised interest rates). State-created rents were an instrument for industrial development through a limited number of conglomerates (Amsden, 1997). Industrial policies have also underlain Singapore’s growth, which in this specific case has been achieved through the control of wages and interest groups (Huff, 1995). Similarly, state-led policy strategy has been at the root of China’s growth, and in this case public policy has been centred on the supply of modern manufactured products and other tradables.
(Rodrik, 2010). The state has indeed played a crucial role in China’s growth, with the specificity that Chinese state-controlled enterprises have exhibited a performance in terms of efficiency and profitability that is comparable with private enterprises. The dominant role of the state in China’s industry and economy is a permanent form of strategic planning aimed at fostering industrial development (Gabriele, 2010).

Developmental states also demonstrated that economic policies are successful when they combine with an adaptation to specific political contexts (Leftwich, 1995): developmental public policies not only targeted the functioning of markets, but also the creation of suitable political conditions and institutions. In particular, they aimed at the building of coalitions and cooperative strategies between politicians and bureaucracies on the one hand and the private sector on the other (i.e. the building of an ‘alliance capitalism’, Wade, 2000).

In this regard, the construction of credibility by governments, notably of credible policies, has been a key ingredient of success, via commitment and the building of reputation (Huff et al., 2001a), or via economic features (e.g., the size of domestic markets for manufactured goods, Grabowski, 1994). Developmental states are examples of economic complementarity between the state and the private sector via the mechanism of credibility. They are examples of virtuous cycles where growth reinforces credibility and thus investment, and of successful export-oriented strategies where credibility vis-à-vis international environments reinforces domestic credibility. Rather than directly investing in the domestic economy, policies were of a directive nature (Huff et al., 2001b). Policies were more centred on the provision of incentives than on the ‘owning’ of the economy or recycling the country’s wealth via high levels of taxation.

Developmental public policies and subsequent growth were equally instrumental in regard to political objectives, notably the reinforcement of political legitimacy (Kang, 2002a). Geopolitics mattered in addition, and some Asian states received massive aid flows after the WWII (especially from the US in the context of the Cold war).

Moreover, developmental states showed that a successful shift from agriculture to industry is a crucial ingredient of growth, and that it can be best achieved via state intervention. Agricultural development and the increasing of the size of domestic markets have contributed to the credibility of developmental states policies. East Asian governments understood that the major mechanisms for obtaining the resources required for industrialisation were successful intersectoral transfers out of agriculture, the creation of agricultural surpluses (e.g., mobilisation of agricultural savings) that could finance industrialisation, and the spread of primary education throughout rural areas, which enabled non-farm activities and, at early stages of development, labour-intensive industries (Thorbecke and Wan 2004; Teranishi 1997).

In this shift from agriculture to industry promoted by public policies, taxation has played a key role (Grabowski, 2010). The shift from import-substitution to export-oriented growth has been based on the overcoming of fiscal constraints: it has involved tariff reduction and investment in infrastructure and human capital, and the establishment of taxation of income rather than trade – reliance on the taxation of trade being a crucial constraint in low-income countries. These public policies have facilitated the transition towards outward-oriented growth.
2.2. A contested relevance of the concept for East Asia and beyond it over time

The concept of developmental state was elaborated in the late 1980s, and it exhibits key divergences vis-à-vis the conceptual framework that international financial institutions (IFIs, the International Monetary Fund and the World Bank) have promoted from the first structural adjustment programmes prescribed to developing countries in the 1980s onwards – i.e. retreat of the state and efficiency viewed as primarily created by the freeing of markets.

In 1997-98, East Asia was destabilised by the ‘Asian financial crisis’ (which started in Thailand in July 1997 and then affected the whole of East Asia). The ‘Asian crisis’ was an argument for the IFIs to underscore the flaws of the developmental state ‘model’. The ‘alliance capitalism’ characterising developmental states, e.g. in South Korea, between banks and large conglomerates was presented by the IFIs as examples of bad corporate governance and corruption, and the Asian crisis was analysed as an outcome of these flaws. In particular, the IFIs claimed that capital controls and the various forms of targeted protection practiced by many Asian countries were causes of inefficiency – an example being the limitation of foreign ownership, e.g. in the banking sector, and were typically feeding cronyism and corruption.

For their part, academic studies also underscored that these states, while they presented features of a ‘developmental’ character, could have also been described as examples of ‘crony capitalism’ (Kang, 2002b for Korea) or, in particular for South-East Asian states, as examples of ‘ersatz capitalism’ (Yoshihara, 1988), with public policies firstly driven by cronyism and subsidies going to politically connected firms (Johnson and Mitton, 2001, for Malaysia).

The World Bank continued throughout the 1980s-1990s to recommend public policies that were radically different from those pursued by Asian developmental states. A World Bank report on the East Asian ‘Miracle’ (1993) thus minimised the key role of state intervention in these states economic successes in order to confirm its own policy stance. It was criticised, however, by the theoreticians of developmental states (Amsden, 1994), and several studies likewise refuted IFI policy recommendations of financial openness and liberalisation of capital flows (Kaplan and Rodrik, 2001) (these policies were indeed abandoned later by the IMF, which increasingly took their risks into account).

Yet even in the 21st century, World Bank studies present China’s economic performances as examples of the relevance of the policies recommended by the World Bank, e.g., altering incentives and shifting the economy from state to private ownership, liberalising trade and direct investment, and ‘cost recovery’ policies for infrastructure (Dollar, 2008).

In addition, the relevance of the concept of the developmental state has also been contested via the argument that the policies that underpinned the success of the small group of Asian developmental states (Japan, Korea, Taiwan, Hong Kong, Singapore, and later China) cannot be replicated. In particular, most emerging countries appear to be subject to the so-called ‘middle-income trap’.
The lessons of Asian developmental states’ public policies for low-income countries may be limited as well. In contrast with most low-income countries, e.g. in SSA, Asian developmental states notably have a low natural resources base, and it may be argued that limited endowments in natural resources are an incentive to labour-intensive industrialisation. East Asian states similarly possessed high levels of human capital before starting their growth (Noland, 2012). The existence of a capable bureaucracy, connected to but independent from the business sector, has also been viewed as an institutional prerequisite of developmental policies: it has been difficult to achieve this even in East Asian states and it may therefore be even more difficult to build in low-income developing countries (Evans, 1998).

In the case of China, for example, the fact that its developmental strategies may be a model for other developing countries remains disputed. Even within the World Bank, it has been shown that China’s growth may be explained by the increase in agricultural productivity, as well as a strong state and civil service. Yet low-income countries are confronted with constraints that China did not face, particularly those in Sub-Saharan Africa\(^2\). The latter display higher inequality, higher dependency rates and a lower population density than China (Ravallion, 2009). These characteristics may be key constraints on development and notably on industrial policies, as high density stimulates technological innovation and lowers the cost of basic infrastructure (Herbst, 2000), and high concentrations of people in cities foster state formation (Frankema and van Waijenburg, 2016). Similarly, the modes of intertwining the state and market in China

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\(^2\) Among the 31 countries that are classified as low-income by the World Bank, 26 are in Sub-Saharan Africa. Low-income countries thus represent more than half of the group classified as Sub-Saharan African countries (48 in total): [http://data.worldbank.org/about/country-and-lending-groups](http://data.worldbank.org/about/country-and-lending-groups), June 2016.
and how these modes became developmental have been viewed as specific to China, e.g., the use of the state sector to generate growth (and revenue) outside of it (Naughton, 2010). These state-market articulations may not be replicable in other countries, as these do not have the same institutional endowments (Naughton, 2009).

Finally, the resilience over time of the features of the developmental state concept has been questioned, as these have been challenged by the dynamics of globalisation that occurred from the end of the 20th century onwards throughout the world. Growth has been associated with higher inequality, as in China. The global liberalisation of economic relationships has considerably eroded the capability and possibility for the state to direct macroeconomic policies and regulate private firms (Kim, 1999). With large inflows of foreign direct investment (FDI), the balance of political power shifted, with the state no longer guiding the economy through its control over the distribution of capital (Stubbs, 2009). With the development of global value chains and global production networks, national firms have been gradually disembedded from state apparatuses and re-embedded in these global production networks (Yeung, 2014).

The state retreated in Asia from the 1990s onwards and has been increasingly subjected to forces of financialisation. The latter have promoted a development driven by markets and finance – financial flows being directly allocated to private sectors, easier ‘access to finance’ and ‘enabling environments’ for capital: what was coined as ‘deep marketisation’ forces (Carroll, 2012; Carroll and Jarvis, 2014). International financial institutions have also promoted a type of state that would primarily be ‘regulatory’, thus weakening states’ developmental capacities (Jarvis, 2012). Asian states no longer exemplify the concept of the ‘developmental’ state and its industrial policies.

3. The many challenges to the concept of developmental state and industrial policies in the 21st century

3.1. Theoretical and empirical factors of erosion of the concept's relevance: theories and dynamics of global liberalisation

From the 1980s onwards, trade liberalisation was promoted at a global scale by the IFIs, the IMF and the World Bank, notably via the conditionalities and reforms programmes attached to their financing in countries in fiscal difficulty. Trade liberalisation and openness put severe constraints on key elements of the developmental policies elaborated by East Asian governments, and in particular targeted policies, including industrial policies (Amsden, 2000). The WTO has thus elaborated rules against the use of export subsidies – yet not for the poorest countries – and the rise of international trading networks has created new barriers for young firms to enter the world market (Ul Haque, 2007). In low-income countries that are characterised by a narrow tax base – most often relying on trade taxes –, trade liberalisation may represent significant fiscal losses and thus a constraint on the range of possible public policies (Baunsgaard and Keen, 2005).

This move was a step within a more general theoretical and empirical dynamic regarding the appropriate role of the state. Since WWII, development economics has incurred deep changes regarding the conception of this appropriate role (Adelman,
2000a), and the 1980s witnessed a major paradigm change with the neoclassical ‘counter-revolution’: post-Keynesian thought was marginalised and government intervention seen as ineffective, inducing rent-seeking and distorting the ‘right’ systems of incentives and allocation of resources, which should be the most neutral in terms of discrimination among economic activities or foreign and domestic markets. Though history showed that government investment in infrastructure, human capital and industry are important elements of development, trade liberalisation and the marketisation of goods and services, including public goods, have become viewed as inducing *per se* development in cost-effective and efficient ways (Adelman, 2000b).

From the 1980s onwards, this paradigm change has constituted the basis for the programmes of the IFIs and of the ‘Washington consensus’ (Williamson, 1990). Among others, the recommended reforms included fiscal discipline, the reordering public expenditure priorities; tax reform, liberalisation of interest rates, trade and inward foreign direct investment, privatisation and deregulation.

Due to the failure of their implementation in Latin America and Sub-Saharan Africa and the spread of theories of information asymmetries and market failures in the 1990s, more balanced conceptions of state intervention were put forward within the IFIs and academia. Government action was considered to be important at early stages of development, markets could be inefficient in presence of externalities, and states could do better regarding these externalities and associated coordination failures, economies of scale and collective action problems. In this ‘Post-Washington consensus’, the role of the state is to build infrastructure (educational, technological, financial, physical, environmental, social) (Stiglitz, 1997), though its functions remain limited to macroeconomic stability, provision of regulation and incentives.

In addition, the rise of China in the 2000s promoted, in mainstream economics, conceptions of the role of the state that were closer to the post-WWII theoreticians of development who demonstrated the necessary role of the state in the early phases of development (and closer to Latin American ‘structuralist’ views, which highlighted the specificities of developing countries, e.g. the ‘rigidities’ of their labour and products markets): for the so-called ‘new structural economics’, economic development requires the upgrading of industry and infrastructure. In addition to an effective market mechanism, governments must facilitate this upgrading and bring about ‘structural transformation’ (World Bank, 2011). Yet even after the 2008 financial crisis and the huge state bailouts of private firms, the views on the minimal state have remained pervasive in mainstream economics and the IFIs operational thinking.

### 3.2. Another factor in the erosion of developmental industrial policy relevance: regionalism and the weakening of the national framework

The credibility and feasibility of the set of policies that drove the growth of Asian developmental states from the 1960s onwards were eroded by the increasing pre-eminence of the paradigm for which global trade liberalisation is an engine of growth. A sub-set of this paradigm has contributed significantly to this erosion: the proliferation of regional trade agreements at the end of the 20*th* century and notably those reflecting ‘deep regionalism’. The explosion of regional trade agreements not only implies policies of trade openness, but multiple and heterogeneous rules for countries that belong to several regional arrangements (the so-called ‘spaghetti bowl’). This
proliferation constitutes a heavy constraint on national policies, i.e. on the policy space and choice of governments, with which Asian developmental states, by contrast, were not confronted at the first stages of their growth.

The period after WWII witnessed a global move towards trade multilateralisation, but this dynamic then became a global move towards regional integration and an increase in the number of regional trade blocs. In the 1948-1994 period, the GATT received 124 notifications of regional trade agreements (RTAs) (relating to trade in goods), and since the creation of the WTO in 1995, over 400 additional arrangements covering trade in goods or services have been notified.

**Figure 2: Evolution of regional trade agreements in the world, 1948-2016**

This ‘rush to regionalism’ has been explained by a ‘domino effect’. Above all, it has been driven since the 1990s by a trend toward ‘comprehensive’ regional trade agreements, which often include rich and poor countries (‘North-South’) and try to secure a ‘deep integration’ of economic activities (as opposed to the previous ‘shallow’ regional integration). Such agreements include trade-related and investment-related provisions, extending to services, intellectual property rights, competition policy and government procurement. These involve countries or existing trade blocs and go well beyond tariffs (which have dropped considerably): in the context of 21st century global value chains, global production networks that now organise the production of manufactured goods and offshoring-based international trade, trade rules are less about tariffs and more about legal and regulatory protection of investments, intellectual property, and two-way flows of goods and services (Baldwin, 2016; Orefice and Rocha, 2014). Factories and offices have been unbundled internationally, thus creating a trade-
investment-service nexus where two-way flows now take place across international borders (Baldwin, 2011).

This ‘deep integration’ includes risks for developing countries and the abolition of trade restrictions and competition policies reduces governments’ economic policy space (on South Africa, Claar and Nölke, 2013). ‘Deep integration’ harmonises national policies in line with a reform agenda that favours greater freedom for market forces – thus also promoting the freedom of movement of multinational firms – and reduces options for government intervention. This is compounded by the increasing number of RTAs involving countries from different geographical regions (UNCTAD, 1997).

In addition, the economic and developmental effects of regional trade arrangements are ambiguous. By definition, they are preferential, i.e. discriminatory in favour of their members. In a static perspective, if partner country production displaces higher cost domestic production, there are gains and trade creation. But if the partner country production displaces lower-cost imports from the rest of the world, there is trade diversion, depending on the ‘comparative advantages’ of member countries relative to each other and relative to the rest of the world. In a dynamic perspective, increasing returns to scale and imperfect competition may induce location effects as well, hence they can be factors of convergence or divergence among countries and create ‘winners’ and losers’ (Venables, 2001; 2003). Due to the existence of asymmetries among countries, regional trade agreements, and notably free trade agreements, may generate effects of agglomeration, relocation of production and polarisation. Labour-intensive production may move toward lower-wage countries and therefore raise wages there. Industry may be pulled toward a country that enjoys better conditions. Tensions may therefore lead to failure of the agreement (Venables, 1999).

As for trade liberalisation in general, regional trade agreements also have fiscal effects, and in particular a reduction in trade taxes: these are direct effects (tariffs on intra-trade are reduced), and indirect effects (importers switch away from external imports subject to tariffs). In low-income countries where these trade taxes represent a substantial share of total revenues, losses in tariff revenues reduce their policy space and thus the capacity to implement developmental policies (Keen and Mansour, 2009).

4. The developmental state: a concept that remains relevant for low-income countries

4.1. Industrial policies as key tools for escaping poverty traps

Some countries appear to diverge from others (or from groups of countries) and stagnate in traps. Low-income countries are particularly striking examples (Sindzingre, 2016a).
Figure 3: GDP per capita, Sub-Saharan Africa vs. the world and other developing regions, 1960–2014 (constant 2005 US dollars)

The relationship between the share of industry in GDP and income per capita seems to become less linear over time: it is more difficult for latecomers, e.g. for lower-income countries that wish to implement catching-up policies (Rodrik, 2009). Similarly, the conduct of industrial policies appears to be more difficult in commodity-dependent countries (McMillan et al., 2014).

It is argued, however, that industrial policies remain crucial and necessary in low-income countries in order to escape such traps even in the new and adverse context of globalisation. Despite criticisms of its weakened relevance in this context, the concept of the developmental state still delineates the types of policies that can be conducive to growth for low-income countries (Hayashi, 2010). Moreover, the erosion of developmental states may have been driven by internal forces more than globalisation, with the impact of globalisation being a consequence of those forces (Weiss, 2000).

Post-WWII theoreticians considered that in developing countries, the state was needed to correct coordination failures in interdependent investments in industry and move the economy out of the low-level equilibrium trap. These theoreticians viewed development as a growth process that requires systemic reallocation of factors of productivity from a low-productivity (traditional) to a high-productivity (modern) sector, mostly industrial and with increasing returns. For economists after WWII, industrialisation had to be planned by the state, and ‘big push’ policies were a central way of triggering growth. Contrary to neoclassical economists’ hypotheses, resources reallocation is hampered by technological and institutional rigidities, which is emphasised by classical and structuralist approaches. In particular, Rosenstein-Rodan (1943) highlighted the importance in developing countries of spillover effects, the possibility of coordination...
failures, low equilibria and trapping processes, which justified government intervention. These concepts have been fully recognised even within mainstream economics (Hoff, 2000; Matsuyama, 1997). Industrialisation may take various forms, e.g. resource-based, export processing zones, and industrialisation through innovation. In developing countries, and especially in low-income countries, industrialisation therefore does not stem from market forces alone, but requires public policies, notably industrial policies.

Industrial policies have been put forward as a key strategy for developing countries since the 1950s, e.g. with the import-substitution policies of the 1950s and 1960s that were based on the ideas of Raul Prebisch and Hans Singer. One of their foundations has been the theory of the protection of ‘infant industries’ at early stages of industrialisation (initially elaborated by the 19th century economist Frederick List): the existence of dynamic externalities justifies a tariff or a subsidy, in particular because these foster learning processes. Industrial policies help developing countries in their exposure to foreign competition. Most of the developing world’s successful export industries were indeed supported by public policies during their early years, and low-income countries have to implement selective industrial policies if they want to achieve industrialisation - notably policies that aim at accessing knowledge and developing capabilities to use this knowledge and at addressing externalities (e.g., informational spillovers involved in discovering the cost structure of an economy, and the coordination of investment activities with scale economies) (Rodrik, 2011). Industrial policies are justified because market failures may occur, certain inputs may not be supplied by markets and public inputs may be missing (legislation, infrastructure, R&D) (Hausmann et al., 2008; Timmer et al., 2012).

Since the 1990s, some industrial countries have moved towards greater shares of services in their output. They have substituted away from manufacturing and towards services, and with some developing countries exhibiting similar dynamics. Yet as argued by Rodrik (2015), such sectoral change may be premature for economies that never fully industrialised. He shows that countries with smaller manufacturing sectors substitute away from manufacturing to a larger extent; they run out of industrialisation opportunities earlier and at much lower income levels compared to early industrialisers (the developmental states), which can be detrimental for these developing countries’ prospects for long-run growth.

Indeed, until the turning points where developed countries enter into phases of deindustrialisation due to this shift towards services (as in the case of the United States or Singapore), there is a positive relationship between the export of manufactures and income levels. The share of export of manufactures is the lowest for Sub-Saharan Africa, which includes the greatest number of low-income countries.
Specifically, a positive relationship has been shown between countries’ levels of incomes and the ‘sophistication’ or ‘complexity’ of exports (Hausmann and Rodrik, 2006; Abdon et al., 2010). Rich (poor) countries tend to export goods exported by other rich (poor) countries, and countries converge to the level of income implied by their exports. Given the complexity of inputs or capabilities, industrial policy is more an imperative than a choice (Hausmann et al., 2007). Technology and trade costs matter in shaping the composition of exports of a country, and low-income countries appear to have a very important technological disadvantage, particularly in more sophisticated commodities (Weldemicael, 2014).

For mainstream economics, industrial policies are simultaneously trade policies and foreign direct investment policies, as they belong to a broader category of policies that are no longer neutral vis-à-vis trade, FDI and resource allocation across industries. They can be defined as any ‘intervention which shifts incentives away from policy neutrality’: e.g., tariffs; tax breaks; trade promotion. Even mainstream economics justify them, notably whenever there are industry-level externalities. ‘Hard’ industrial policies include tariffs; subsidies; tax breaks for foreign investors; domestic content requirements. ‘Soft’ industrial policies deal directly with coordination failures: e.g., special economic zones offering lower cost infrastructure; roads and ports designed to increase trade; special credit for exporters (trade credit); the promotion of clusters in order to export (Harrison and Rodríguez-Clare, 2009). Industrial policies, however, continue to be criticised by many mainstream studies, in particular within the IFIs (Pack and Saggi, 2006; Bigsten and Söderbom, 2010).

Industrial policies include a variety of strategies, such as inward-looking or import-substituting industrialisation behind protection; or outward-oriented or export
orientation and promotion strategies (which have underlain the factors of Asian successes). Industrial policies include tariffs, output-based subsidies, export subsidies, direct resources to sectors with growth potential, and more recently, FDIs restrictions and performance requirements, tax incentives, domestic content requirements on foreign firms. Also, currency undervaluation may be added to industrial policies: exchange rate policies matter for export performance (Rodrik, 2006).

4.2. Globalisation and liberalisation: facilitating industrial developmental policies in low-income countries?

Trade liberalisation is supposed to boost exports and ease imports. At a global scale, it may have eroded the relevance of the concept of the developmental state for latecomers, notably low-income countries. However, it has enabled larger movements of capital towards these countries, notably from emerging countries, under the form of trade flows and foreign direct investment. This may have paradoxically facilitated the prospects for industrial policies and industrialisation in low-income countries. Trade and investment flows coming from China towards Latin America, and more specifically towards Sub-Saharan Africa as a representative region of the low-income countries are an example.

Generalised trade openness has a negative impact on the manufacturing sectors of low-income countries. In particular, emerging and developing countries may compete with each other, e.g. in the sectors of labour-intensive industries, such as textile, where low-income economies are confronted with competition from countries with lower labour costs and higher productivity, which export cheaper manufactured products.

China exports of manufactured products to the rest of the world and import liberalisation (notably from China) are said in numerous studies to have de-industrialised developing countries (Wood and Mayer, 2009; Kaplinsky and Morris, 2009a). China’s expansion of exports, e.g. in low-end manufactured goods, indeed represents a major threat for low-income countries’ industrial sectors, in particular in the textile sectors (notably in Sub-Saharan Africa, Zafar, 2007; Villoria, 2009). Such has particularly been the case since the end of the Multifibre Agreement/MFA and its quotas in 2005. For example, South African manufactured exports lost ground to China during the 2000s, notably in low-technology products (Jenkins and Edwards, 2015).

Regarding Chinese FDI, flows are difficult to estimate and official figures may be overstated, as they may include in FDI the provision of services, e.g., construction, in contradiction with the definition of FDI, which implies a long-term interest. In some SSA countries, China is far from being a major investor (table in annex).

China’s FDI may imply effects of lock-in for Sub-Saharan African countries, notably in the commodity sector with all its detrimental dimensions – low productivity, low value-added, vulnerability to terms-of-trade shocks. It often involves state-owned enterprises in line with China’s ‘state capitalism’, which have access to important amounts of finance (Kaplinsky and Morris, 2009b). Indeed, as the other multinational firms from other countries (US, EU, Russia, Brazil, etc.), the Chinese investments that are driven by state-owned enterprises have a significant focus on the resource sector (oil, metals).

In addition, China implements a specific mode of investment, which links trade, FDI and sometimes aid via ‘resource-for-infrastructure’ contracts (the so-called ‘Angola mode’ as Angola’s barter of its oil in exchange of building of infrastructures - railways,
roads, ports, etc. - by Chinese firms was said to be a paradigmatic example) (Foster et al., 2008; Alves, 2013). These contracts are a China EXIM Bank’s financing arrangement that ties a commodity agreement with the provision of infrastructure in the contracting African country, in the context of the high needs and low level of infrastructure in Sub-Saharan Africa.

Yet taking Sub-Saharan Africa as a representative region of low-income economies, foreign investors from emerging countries also invest in manufacturing sectors: the liberalisation of trade and investment flows from these countries may contribute to the industrialisation and better growth prospects of these low-income economies (Sindzingre, 2016b) – not only China, but also other emerging countries (such as India, a major investor in South Africa, Gelb, 2014).

Large state-owned Chinese firms tend to focus on the resources sector and the building of infrastructure, while a great number of large and medium-size private firms tend to concentrate on manufacturing and service industries (Mlachika and Tabeke, 2011; Shen, 2015). Chinese investments also include manufacturing sectors such as construction materials, machinery, textiles, and food products, as well as business services (Dollar et al., 2015). China has also invested in Sub-Saharan Africa through Special Economic Zones – key elements of China’s own economic success – in order to boost FDI in manufactures and these zones can significantly support African host countries’ industrialisation (Brautigam and Tang, 2014). In addition, even if these may be viewed as locking-in Sub-Saharan African countries in the primary commodity exports pattern, the ‘resource-for-infrastructure’ contracts improve infrastructure, which is a key determinant of the expansion of industries and of policy efficiency. They can therefore have significant developmental impacts (Konijn, 2014).

Chinese firms have invested in manufacturing clusters in Ethiopia (glass, fur, footwear, and automobiles), Mali (sugar refineries), and Uganda (textiles and steel pipe manufacturing) - these investments in the manufacturing sector may express Chinese firms’ relocation strategies and goals of developing global value chains as labour costs in coastal China have increased from the 2010s onwards (World Bank, 2015). ‘South–South’ FDI and imports from the ‘South’ such as those from China may foster diversification in key low-tech industries (agro-industry, textiles) and the ability to diversify manufactured exports (Amighini and Sanfilippo, 2014). Even investment in commodity sectors can generate supply chains and therefore linkages between extractive activities and local suppliers (Fessehaie and Morris, 2013 on the mining sector in Zambia): as shown by Hirschman (1958), such linkages can have a positive impact on industrial sectors.

For example, China’s financing (FDI and loans) in non-resource-rich Ethiopia is driven primarily by large public investment projects rather than resources, and the manufacturing sector accounts for the largest amount of Chinese FDI, attracted by low-cost labour and land leases (IMF, 2011). For example, Ethiopia has fostered a globally connected textile industry due to a mix of business incentives and strategic management of FDI. In 2013-15, the top world cities for FDI inflows in textiles and garments were the Ethiopian cities of Alem Gena and Addis Ababa, which accounted for around 10% of total global FDI inflows in the sector3. Ethiopia’s growth, and notably the growth of

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its manufacturing sector since the 2000s onwards, have thus been described as an example and outcome of ‘self-discovery’, in line with the abovementioned analysis of Asian developmental states by Hausmann and Rodrik. As shown by the success of Ethiopia’s flower industry, this manufacturing sector is not driven by emerging countries investment only, but by the coalitions and coordination between the government and private entrepreneurs in order to address uncertainties, identify areas for intervention and set targets for the sector's development (Gebreeyesus and Iizuka, 2011). Such policies and ‘alliance’ strategies share several features with the 20th century’s Asian developmental states.

5. Conclusion

This article has examined the main features of the concept of the developmental state as it was elaborated at the end of the 20th century in order to explain the spectacular growth of a few countries in Asia from the 1960s onwards. In particular, it has underscored a key element of the literature on the concept, i.e. that the ability to successfully implement industrial policies has been at the root of developmental states growth.

The article has shown that three decades later the relevance of the concept may be questioned from different perspectives. In particular, even at the time of its elaboration, it has been said that the concept bypassed the political economy that underlay the growth of these Asian countries. Equally, the concept may not only not be applicable to different contexts, but may also have been affected by obsolescence, due to the drastic changes in the external environment since the concept’s elaboration, notably globalisation – i.e. generalised liberalisation and trade openness. These have indeed led to the retreat of the state, financialisation and marketisation of the Asian economies that were paradigms of developmental states. The nexus of policies synthesised in the concept may thus be impossible to implement in the 21st century, compounded as it is by regional agreements and the related dynamics towards a deep integration that works against member countries’ industrial policies (the European Union’s stance against state aid and industrial policies within member countries being an example).

The article has shown, however, that despite these pertinent questionings and, moreover, despite the increase of services over manufactures as new engines of growth, the policies that have been at the centre of the concept remain fully relevant for the latecomers of the 21st century, in particular low-income countries, which are typically caught in traps and ‘low equilibria’. With Sub-Saharan Africa taken as an illustration, it has shown that these industrial policies remain not only feasible but necessary to the ability of these economies to escape from the poverty trap.

Bibliography


Gelb, Stephen. 2014. South Africa’s Foreign Direct Investment Links with the BRIC Countries, Bern, World Trade Institute/Mandela Institute working paper.


## Annex

**Table: FDI flows in the host Sub-Saharan African economy by geographical origin, China and four main developed investing countries, 2001-2012, millions US dollars**

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