T16P22 / Industrial Development as Pathway for Achieving SDG 9: Retention and Deployment of 'Policy Space' in the Industrial Aspirant Countries (IACs) of Global South

Topic : T16 / Sustainable Development and Policy **Chair :** Kazi Haque (Asia Research Centre (ARC), Murdoch University)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

The UN Secretary General's recent progress report on Sustainable Development Goals (SDGs) discusses about the first year's progress. While discussing about SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation – the report rightly points out that "industrialization drives economic growth, creates job opportunities and thereby reduce income poverty" (UN 2016: 13). In the next High Level Political Forum on SDGs to be held on 10-19 July 2017, the Goal 9 is one of the SDGs to be reviewed. It is therefore both important and timely to critically engage with policy dynamics of achieving SDG 9.

In order to meet the targets of SDG 9 within the stipulated 2030, the industrially less advanced countries of the global south will have to go through a 'big push' somewhat akin to the 'East Asian Miracle' economies. That calls for a huge public policy undertaking – industrial policy coupled with other relevant policies like trade, investment, fiscal, monetary, labour, education and technology – led by respective states' governments in partnership with businesses, labour, civil society and donors.

There has been continuous debate in the development thinking about respective roles of 'state' and 'market' with respect to economic policies and strategies. The orthodox neoliberal thinking advocates hands off approach by government and omnipotence of market in resource allocation. On the contrary, the heterodox structuralist thinking stipulates that markets are powerful forces but not perfect and government interventions are necessary to improve market outcomes (Lal 2004). Although neoliberal thinking is still forceful, there has been an increasingly weaker empirical manifestation for success of free market and failure of government intervention (Amsden 1994, Wade 2014 and Mazzucato 2013).

The industrial policy tools that were successfully deployed by Korea, Taiwan and NICs cannot be replicated by today's Industrial Aspirant Countries (IACs). This is largely due to the general erosion of 'policy space' that disproportionately affected the IACs of global south. Despite such policy constraints, the scope of policy space is not totally out of question for the IACs. As successively documented by DiCaprio and Amsden (2004), UNIDO and UNCTAD (2011) and Lee et al (2014), at least under WTO rules, there is still considerable scope to retain and deploy policy space for industrial development. However, realization and political commitment are lacking among many IACs to adjust or reconfigure their industrial policies (DiCaprio and Amsden 2004, Lee 2015). The targets of SDG 9 provide important rallying points for the IACs to shore up political commitment and mobilize adequate resources behind industrial policies and strategies.

Retention and deployment of policy space is crucial for the IACs. Because, in order to kick start their industrial development process, the IACs will have to be able to effectively use industrial policies, something not tenable if these countries cannot retain and deploy their policy spaces. Therefore, the guiding research question of the proposed panel is – whether and how IACs of the global south (especially Africa and Asia) are retaining and deploying industrial policies and strategies which are selective, proactive and strategic?

CALL FOR PAPERS

One of the Sustainable Development Goals (SDGs) to be reviewed by the next High Level Political Forum (HLPF) in 2017 is SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. In order to meet the targets of SDG 9 within the stipulated 2030, the industrially less advanced countries of the global south will have to go through a 'big push' somewhat akin to the 'East Asian Miracle'.

The industrial policy tools that were successfully deployed by Korea, Taiwan and NICs cannot be replicated by today's Industrial Aspirant Countries (IACs) largely due to the general erosion of 'policy space' under WTO rules, Free Trade Agreements (FTAs) and Investment Agreements (IAS) (UNCTAD 2014: 14).

However, the scope of policy space is not totally out of question for the IACs, at least under WTO rules, a

fact often not realized and acted upon by many IACs (DiCaprio and Amsden 2004, Lee et al 2014). The targets of SDG 9 can provide important rallying points for the IACs.

The proposed panel therefore invites papers on recent practices and experiences of industrial policy in the IACs of global south. The panel is mainly interested in the least developed or developing countries (like Bangladesh, Uganda or Vietnam) of the global south which are yet to make the structural transformation despite potential to industrialise. It is necessary to see whether these countries are willing and able to exercise their industrial policy spaces with focus on their recent experiences. The current literature on industrial policy is often devoid of attention to the associated policy process and practices – the politics and the political economy underlying policy formulation and implementation – something this panel also aims to address. It welcomes papers from scholars with different social science backgrounds and methodological approaches.

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Session 1

Thursday, June 29th 08:15 to 10:15 (Block B 4 - 2)

Creative industry development and inclusion of regional economy

Motohiro Kurokawa (Takasaki City University of Economics)

Promotion of creative industry is one of the relevant policies for developed countries, since it can fully utilize their knowledge-intensive assets. Started from UK, it has contributed to renovate some European economies, and the Japanese government have been recently improving their creative industry for increasing exports and upgrading domestic economy, contents industries, tourism industries, and other cultural industries are main targets, which is driven by national innovation policy.

On the other hand, cultural and historical assets necessary for creative industry are also abundant in developing country, there is a possibility that the industry can be another driving force for industrial development. Not depending on capital asset is another suitable reason why creative industry can be appreciated by developing economy. If it can link to agro-industry or cottage industry in regions, it can lead to poverty alleviation. In this point of view, reconfirming is

Thus, this study takes up the case of Thailand in recent period, and review activities under umbrellas of SACICT (Support Arts and Culture International Centre of Thailand) and OTOP (One Tombon, One Product) to know inclusions of regional economy. Then, it also discusses relevancy to contribute regional economic upgrading in line with SDG 9.

As results of this study, above two policies based on regional assets have resulted to improve regional economic activities and support them to connect with urban market. But, less impact to export promotion was left as a further agenda.

Industrial policy formulation and implementation: A global south perspective

Kazi Haque (Asia Research Centre (ARC), Murdoch University)

Renowned heterodox economist Robert Wade recently observed that ""industrial policy" has been one of the most toxic phrases in the world of economics vocabulary. (.....) However, recently, and in particular since the Great Western Crash of 2008, "industrial policy" has enjoyed something of a renaissance (Wade 2014: 2)." He nicely summarized that within a span of half a decade into the financial crisis, a host of economic stalwarts ranging from prominent development economists like DaniRodrik, Joseph Stiglitz and Justin Yifu Lin to global economic policy organizations like OECD, UNCTAD and UNIDO. While heterodox economists like Robert Wade, Ha-Joon Chang and Alice Amsden have been propagating industrial policy for decades with empirical and historical studies, an increasing numbers of mainstream economists are also receptive of it.

The industrial policy tools like tariff and non-tariff protections, production and export subsidies, subsidised credit, tax incentives, public research supports, capital controls, and relaxed Intellectual Property Rights (IPR) regimes, enormously contributed to all industrialisation efforts ranging from Great Britain, Germany and US (Chang 2002, Reinert 2007) to East Asian tigers (Chang 1994, 2002; Amsden 1989, 2001; Wade 2003) and latest, China and India. Industrial policy has been a key policy area that has been affected due to erosion of policy space under neoliberal policy orthodoxy championed under Washington Consensus. The erosion of policy space has been more harmful for the global south countries. They had to accept new policy constraints even before they could benefit from earlier availability of policy space.

This development has specially affected their industrial aspirations by constraining their ability to utilise the

aforementioned industrial policy tools.

The predominant economic literature on industrial policy even those by the heterodox economists tend to show the following things: effectiveness of industrial policy, experiences of its applications and less so its theoretical justifications. The overarching attention to industrial policy as part of economic policies tends to overshadow that it is indeed a public policy. So, what often evades scholarly attention in discussion of industrial policy is the associated policy process (broadly defined) – formulation and implementation dimensions. Specially for industrial aspirants of global south like Bangladesh who tend to comply with neoliberal development paradigm, industrial policy is more of a policy ritual than actual policy approach. This is evident from the fact that year after year the country has adopted industrial policy but never made them legally binding through gazette notifications as was the case with import and tax policies.

The proposed paper has two broad research questions in mind, one regarding formulation/framing dimension, and the other regarding implementation/use dimension. First, What is 'understanding' and 'practice' of industrial policy in the global south esp. Least Developed Countries (LDCs) like Bangladesh? In other words, whether the industrial policy has adequate conceptual underpinning or it is mere policy ritual? Second, What is the usefulness of industrial policy? In other words, to what extent industrial policy is implemented or 'implementable'. The research will be based on literature review, policy analysis and key informant interviews of stakeholders.

A Firm-Centred Approach to Inclusive Industrial Growth

Nahee Kang (King's College London)

Lila Caballero Sosa (ActionAid UK)

There is an emerging consensus that industrialisation is a the heart of sustained growth, shaping all sectors of the economy; agriculture, manufacturing, and even the services as service provision is an industrial process, subject to industrial optimisation procedures and learning. Today, governments of industrially aspirant countries - not only in the emerging part of the world, but also in the de-industrialised advanced world - are all experimenting with a variety of policies to support industrial upgrading. And both the old and new developmental state literatures have revealed that international competitiveness in the higher-value added sector is just as much, if not more, the result of state planning and investment than it is the invisible hand of the market.

What is less explored is how to understand inclusion in this process. While the equitable growth agenda has long occupied the interest of development scholars, the assumption here is that with industrial growth, commitment to, and investments in progressive redistributive policies will follow, putting countries on a positive cycle of equitable growth. Yet, growth does not always accompany jobs, wage increases and further skills development, and especially so in the era of hyper-globalisation and fast-evolving industrial landscape that is radically changing the nature of work and employment. As consequence, and despite active labour market policies, redistributive policies and politics become parallel – and developmentally decoupled – pursuits with an over-emphasis on social compensation.

Hence, the paper examines if and how inclusion can be built into the industrialisation process in developmentally coupled way. In conceptualising inclusive industrial growth, the paper gives focus to large, domestic and privately owned industrial firms, as they are the agents of growth in late capitalist economies, with the potential to become vehicles of inclusion. Where firms are concerned, the bulk of the development studies literature has focused on the enhancement of productivity to ensure their survival and competitiveness. Conjoining the "firm capabilities" literature that explicates the technological and organisational capabilities required for catch-up with the literature on "embedded firm" that takes a relational view of the firm, we interrogate the link between firm capabilities and inclusion.

While much of this research is focused on the experience of the advanced West, a small number of research on other parts of the now emerged world reveal useful insights to be further explored. Evidence from East Asia shows that the on-going demands placed on the firm, initially by the state, but gradually by the international markets have led firms to experiment with scaling-up strategies, and geared firms' learning and routine towards re-investment of profits back into the firm. This has led to a steady flow of jobs, slow but paced wage increases, gradual improvements in working conditions, and provision of skills and training. Firms have, in effect, substituted for the absence of the welfare state. In similar vein, but evidencing a very different outcome, research on Latin America shows how in the absence of these similar pressures, firms have become avenues for extraction for private gains, locking them into strategies that undermine development of firm capabilities, limiting opportunities for inclusion. The paper critically reviews their experiences, and discusses potential policy implications for today's industrially aspirant countries.

Greening industrialization: Understanding how a technology's product architecture and use environment affect local low-carbon industry development

Tyeler Matsuo

Tobias Schmidt (ETH Zurich)

Abhishek Malhotra (ETH Zurich)

In many Industrial Aspirant Countries (IACs), national policymakers envision building development trajectories that "leap-frog" the traditional fossil fueled industrialization pathway. As a result, IACs in the global south are increasingly enacting green industrial policies, or policies that not only seek to decouple emissions from economic growth, but also to create a local industry around low-carbon technologies. While major emerging economies such as Brazil, India and China have achieved some success in localizing a low-carbon industry through renewable energy deployment policies mandating local content (e.g., job creation or local manufacturing of components), an understanding of the effectiveness of such green industrial policies in other developing countries is limited. Some studies have provided detailed accounts of successes and failures in fostering industry localization in developing economies, analyzing specific countries or comparing this effect across countries (e.g., Surana and Anadon, 2015; Hansen and Nygaard, 2014; or Hansen and Ockwell, 2014). However, few studies have investigated how localization potential in IACs may vary across technologies (Schmidt and Huenteler, 2016). In this paper, we draw from literature on catching-up/capability building (Bell and Figueiredo, 2012) and technology lifecycles and argue that it is the combination of country and technology characteristics that influence the potential for local industry development. Within these literature streams, we focus on how the interaction between a technology's product architecture (Murmann and Frenken, 2006) and variation in its use environment influence the build-up of technological capabilities through learning-by-using processes (Rosenberg, 1982). Specifically, we first conduct interviews with industry experts to determine differences in innovation patterns between two renewable energy technologies with high design complexity, namely wind and biomass power. We show that the lifecycles for wind and biomass power technologies are characterized by product innovation at different levels in the technology's product architecture, often driven by adaptations required due to changing user needs or use environments. Thus, local industrial activity can potentially develop in niches related to context-specific product innovations. In a second step, we trace the process of wind and biomass industry development in Chile and South Africa using project-level data compiled using Bloomberg New Energy Finance data and through a search of media sources. We find that moderate variation in a technology's use environment - for example in the case of wind for Chile and biomass for South Africa often necessitate adaptation of a technology's design and thus create opportunities for new entrants and industrial activity within a technology's value chain. However, we find also that high variation across use environments can create barriers to market development, possibly because the design capabilities required for innovation exceeded existing local capabilities. We discuss the implications of our results for national policymakers, in particular highlighting strategies for creating more targeted technology-specific or even component-specific green industrial policies. Furthermore, these results have implications for international organizations wishing to support green industrial growth - including finance providers as well as technical assistance providers - as the prioritization of technologies should consider not only cost and mitigation potential, but also potential for generating local economic activity.

Overcoming Path Dependency for Sustainable Development:

Sung Gul Hong (Kookmin University)

South Korea has been well-known for its economic development since World War II, and became the one and only country to become a member of OECD DAC (Development Assistance Committee) among former recipient countries. Because Korea has achieved a successful sustainable development, many countries are now asking to share Korea's experiences, especially major industrial policy agenda and how to overcome difficult barriers. One of the most-often requested theme from developing countries is its e-government policy because Korea has been named as having the best e-government services and infrastructure for many years.

In responding to these demands, Korea has actively provided e-government ODA (Official Development Assistance) in recent years. For example, EDCF (Economic Development Cooperation Fund) of Korea, which is in charge of providing long-term, very low interests loans to developing countries, has provided 26 e-government ODA projects amounted US\$??? in 1998-2015. KOICA (Korea International Cooperation Agency) which is in charge of grants also has provided more than 150 projects in the category of e-government in 2008-2015 period. E-government has been emphasized by the UN as well because it is an important tool to increase transparency in governance, which has been recognized an important factor for

enabling sustainable development.

E-government ODA can contribute to sustainable development mainly in two ways. First, as already mentioned, e-government can improve transparency and efficiency in public administration and public services. As such, it can contribute to increase the aid effectiveness and sustainable development in the long-run. This is why UN also strongly recommend to invest in e-government among developing countries. Second, most e-government ODA include manpower training program as a part of specific project because lack of proper ICT manpower would hinder the recipient country from getting maximum potential benefits out of the e-government project. During the implementation process of an e-government ODA projects, a group of people are usually invited to Korea for certain period of time, about 4 weeks, to be trained and to experience the advanced ICT environment and services. In addition, various on-the-job training programs are usually provided by dispatching Korean experts to the recipient countries.

But in most cases, empowering ICT/e-government expertise to local ICT engineers have not been successfully made, and thereby the effectiveness and impacts of e-government ODA project were usually not fully realized. And this tend to negatively affect sustainable development of the recipient country.

The author has implemented ex-post evaluation of about 15 e-government ODA projects provided by KOICA and EDCF. Based upon the results of ex-posted evaluation studies that I have undertaken, I would like to answer to two questions related to sustainable development: 1) why e-government ODA from Korea could not contribute to sustainable development in the recipient countries? And 2) how we can increase the sustainability of e-government ODA, particularly empowering ICT expertise of the recipient countries. Overcoming institutional path dependency of the recipient countries would be much important than providing simple manpower training programs. This study would be an important contribution to be considered in achieving SDG 9.