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The Automobile Industry Cluster in Malaysia

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2.1 Introduction

Industrial cluster policies have been put into practice in many countries around the world, including in Asia. Our previous studies, such as Kuchiki (2005) and Kuchiki and Tsuji (2005, 2008) postulated a hypothesis regarding the formation of industrial clusters which is referred to as the ‘Flowchart Approach’. This approach explains the formation in such a way that anchor firms establish production bases first; followed by supporting firms establishing facilities near them, which constitutes the core of the industrial cluster at the initial stage, and then in accordance with clustering, more firms agglomerate in those regions and accordingly more information related to transactions, technologies, know-how, etc. are exchanged. This process leads economic activities of industrial clusters to increase more and more, and they come to play important roles such as the economic development of regions as well as a national economy. The Flowchart Approach is thus based on the success of Industrial Parks, Special Economic Zones, or Special Export Zones in East Asia such as Taiwan, Korea and China. The Development of their electronics and automotive industries are good examples. The Flowchart Approach emphasizes factors which attract firms to particular regions, including: (1) domestic demand and natural resources such as raw materials and human resources; (2) physical infrastructure including highways, roads, airports, electricity, water supplies; (3) social infrastructure such as legal, financial and intellectual property rights systems, and the degree of deregulation; and (4) incentive schemes for investment provided by governments. The Flowchart Approach as a principle of constructing policy measures involves setting a proper target, prioritizing the policy measures, and finding actors to implement the policy measures.

Let us discuss the difference between the Flowchart Approach and other theories in order to clarify the former. First, Komiya et al. (1988) define the industrial policy as a policy under which the central government intervenes in the existence of market failures due to dynamic inefficiency by
protecting strategic industries, for example, when they are young from foreign competitors. The Flowchart Approach, on the other hand, emphasizes local governments as well, which play a crucial role in the success or failure of the cluster policy, since it is not a national growth strategy but a regional one. The role of local governments is increasing relative to that of central governments, as the worldwide trend toward decentralization is bringing a shift from industrial policy to industrial cluster policy.

Second, Porter (1998) constructed a diamond model, finding that four factors – (1) demand conditions, (2) factor conditions, (3) firm strategy, structure and rivalry, and (4) related and supporting industries – offer sufficient conditions for innovation in industrial clusters. However, it is not easy to satisfy the four conditions at the same time. The aim of the Flowchart Approach is to prioritize the four factors in order, not on a diamond plane but in a line. Markusen (1996) classified industrial districts into three types: Marshallian industrial district, Hub-and-spoke, and Satellite platform. In the case of the Hub-and-spoke type, she found a relationship between anchor firms and their related firms. Markusen (1996), however, neither provided conditions for the formation of industrial clusters nor prioritized factors of the conditions. Kuchiki (2005) proposed the Flowchart Approach of the industrial cluster policy by ordering and prioritizing policy measures in a line for the practical use.

Third, in comparison with spatial economic theory, such as Fujita (2008), it presents general equilibrium models, while the Flowchart Approach is a partial equilibrium model, and the above four conditions which determine the success of the policy exogenously determined by other models. In this sense, the Flowchart Approach and spatial economics are complementary.

In sum, it can be said that no definite practical method for prescribing the industrial cluster policy has yet been established. This chapter, therefore, makes an attempt to challenge this problem by examining and elaborating further the Flowchart Approach by taking the Malaysian automobile industry as a case study. In East Asia, Thailand continues to grow as the ‘Detroit of Asia’, and Malaysia, on the other hand, plans to establish automobile clusters by implementing an industrial cluster policy, which is referred to as the ‘National Car Project’. Malaysia’s policy, however, has not been as successful as that of Thailand, which offers a good opportunity to discuss whether the industrial cluster policy is effective or not from the viewpoint of the Flowchart Approach.

Let us describe briefly the industrial policy aimed to foster the automobile industry in Malaysia. Malaysia’s government started a national car project in 1981. Proton was established as a national car company in 1983. Perodua was established as a second national company in 1993. The Third Industrial Master Plan of Malaysia (2006) referred to automobile clusters, and the Ninth Malaysia Plan of 2006–2010 discussed industrial clusters including automobile clusters in more detail. But Proton faced the difficulty