Industrial Policy and the South Korean Car Industry

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1. Introduction

Over the past four decades a wide variety of literature on industrial policy has been produced inspiring numerous discussions around practical and theoretical issues. Most of it focused on the successful role of industrial policy in the economic experiences of the post-war East Asian economies such as Japan and NICs (Newly Industrialising Countries) including South Korea, favouring an ‘East Asian model’ against Latin American. East Asian successes were also contrasted with the decline of the Anglo-American economies in the 1970s. From the 1990s, however, industrial policy practices were considered old-fashioned and inefficient with such changes interpreted as the retreat of the developmental state. Industrial policy was often regarded as the influential factor causing Japanese economic recession and the Asian financial crisis in the 1990s. Specifically, in South Korea, deregulation policy scheme was strengthened with the IMF austerity programme implemented. More recently, the role of the state is being re-examined in the course of global financial crisis.

This shows that the existing arguments over industrial policy has put the excessive emphasis to the role of either the state or the market. As a corollary, much, if not all, of the existing arguments fails to present the economic realities and rationales underlying industrial policy practices in the specific sectors. Moreover, successful industrial-policy-practising countries are often regarded as a big corporation as noted in the expression like ‘Japan, Inc.’, ‘Korea, Inc.’ without the reference to the complex peculiarities of each industry and country. It should be also noted that the typical question of why industrial policy has been more successful in the East Asian economies than others tends to presuppose a regional dichotomy, ignoring industrial realities. However, many cases of inefficient and ineffective performance of industrial policy can be found alongside success in the same region. Even the same kind of policies can bring about different outcomes across countries and companies. These cases demonstrate that it is meaningless to link a certain type of industrial policy directly to success or failure without analysis of the concrete contexts in which industrial policy is exercised. To some extent, such lack of realism in established perspectives on industrial policy arises from the ways in which it is defined and its objectives understood, only relying on stylised and selected economy-level characteristics of those countries perceived as economically successful.

Thus, different kinds of research questions would be required to avoid such a misleading judgement and introduce a broadened perspective on industrial policy. Firstly, what economic forces promote industrial policy should be examined in each case. Conventionally, the necessity of industrial policy has been explained by the presence of market or coordination failures. It is argued that government directs industrial policy at correcting those failures or reducing economic costs caused by them. More specifically, it has been suggested that investments across sectors should be coordinated by the state with the aim of industrialisation of the economy as shown, for example, in the debate between balanced and unbalanced growth or the strategic industry argument. As Grant (1982) points out, it is understood that industrial policy may imply government measures to influence the investment decisions of individual
enterprises. With reference to cost efficiency, when the market solution to the coordination of investments is more costly than non-market solution, the latter can be economically justified. In this respect, competition hindering coordination has been called ‘excessive competition’, particularly, by South Korean and Japanese policymakers (Okimoto 1989; Chang 1994). Also, excessive competition it is said gives rise to unnecessary price wars and overinvestment. Arguments of this kind, however, do not explain why some countries use industrial policy in a sector while others do not. Nor do they explain different performances between industrial-policy-practising-countries. In contrast, it is suggested here that underlying economic and political interests in capital accumulation are concrete forces to forge and implement industrial policy. Thus, how underlying economic agents are linked each other with different economic interests in the production sphere should be examined in the analysis of industrial policy.

The second question is how industrial policy affects industrial performance. The successful performance of industrial policy is often seen in aggregate industrial figures such as production or exports. However, the latter cannot be a sufficient indicator since they fluctuate significantly regardless of changes in policy. Rather, shifts in underlying economic relations can be better indicators of the effects of industrial policy. For they are relatively stable and a major source affecting profitability of manufacturing, say, motor vehicles. In other words, it is assumed here that the effects of industrial policy lie in providing new conditions for capital accumulation by re-adjusting economic relations although the latter in themselves cannot guarantee specific linkage effects. As far as the car sector is concerned, oligopolistic competition structure, assembler-supplier relations, and local assembler-multinationals relations are the most significant factors having an influence on the mechanism in which cars are built and auto capital accumulates. However, it should be noted that the effects of industrial policy are diverse according to different conditions in different countries. This is why concrete analysis of industrial realities is required.

The third question is why industrial policy has been eroded if it contributed to industrial development earlier. The existing arguments have explained the ‘life cycle’ of industrial policy in two different ways. One is that industrial policy is necessary only at the initial (sative) and senile (sunset) stages of industrial development in view of industry ageing hypothesis (Okimoto 1989). The other is that emerging capitalists and workers in strength and organisation come to limit state autonomy (Evans 1995). Interestingly, both views lead to the similar implication that when the industry matures the state shrinks although they explore different aspects, the economic and the political. However, in the case of South Korea in the early 1980s, market-oriented policy reforms including market liberalisation and deregulation measures were promoted less by the weak state than by the strong state in line with a global trend towards a neo-liberal policy perspective. In addition, they occurred even before national strategic industries had grown fully. Seen in this vein, the erosion of industrial policy can be interpreted as a different form of state intervention regardless of a degree of state strength and industrial maturity.

In view of this, this chapter will attempt to provide an alternative perspective in addressing the role industrial policy has played in practice, with special reference to South Korea’s car manufacturing sector, which has been seen as one of the most impressive industrial successes across the NICs. Section two mainly deals with the first and second questions, suggesting an alternative research framework on industrial policy. Then, by way of illustration, section three shows the characteristics of various relations between local assemblers, suppliers, and multinationals in the South Korean
car sector. Section four explores the third question and the South Korean case in more detail. The final section summarises major points of this chapter and offer some concluding remarks.

2. The economic imperatives and effects of industrial policy

Much of the existing literature has suggested that the economic rationale for state intervention in industry involves market or coordination failures, giving rise to some analytical problems. Most significantly, state intervention is understood as opposed to economic activities undertaken by the private sector. This view implies that non-market institutions such as the state have different economic aims, visions and interests from industrialists, or market forces. Accordingly, it is assumed that the state should ‘regulate’ and ‘coordinate’ private interests for the sake of public interests. It should be noted, however, that industrial policy promoting public or national interests cannot be an appropriate analytical starting point because of the following points.

First, the criteria for the division between public and private interests regarding the conduct of a certain industrial policy is not clear. For example, regulatory measures such as import bans and entry licensing are understood as aimed at the establishment of a local industry, which can be interpreted as government decision based on a national interest. In effect, however, these measures primarily favour the economic interests of local producers and incumbents against importers and prospective entrants, respectively. In addition, the promotion plans for strategic industries are regarded as necessary for nationally coordinated investment in the public interest. It cannot be denied, however, that they come to protect selected private interests through a wide variety of fiscal and financial incentives.

Second, the dichotomy between public and private interests tends to neglect the need to explore what specific forms industrial policy takes across different sectors and circumstances. In reality, although their broad aims are similar across countries and sectors, industrial policies in practice have been formulated differently, depending on socio-economic and sectoral structures consisting of various levels of competition between industrialists. This structure-specific nature of industrial policy cannot be analysed only with identification of public as opposed to private interests.

Third, the argument favouring public interests against private interests tends to suggest that policy successes or failures are attributed to non-economic factors such as policymakers’ capabilities to design policies and state autonomy to implement them rather than economic and sectoral structures. In effect, even if designed appropriately and implemented firmly, industrial policies in themselves cannot guarantee their assumed effects without structural changes in industry.

In contrast, the alternative perspective on industrial policy adopted here suggests that economic imperatives to make and implement industrial policy can be derived from the exigencies of capital accumulation. Large-scale capital and the state may forge a common interest in sustaining accumulation of capital. However, the relations between capital and the state are neither a direct economic relation, apart possibly from state-owned corporations, nor a result of simple political negotiations. Rather, it is assumed that large-scale capital has various economic relations with other economic agents such as small and medium sized enterprises, foreign multinationals and the like in the process of capital accumulation. Economic interests of large-scale capital against those of other economic agents have an influence on the conduct of industrial
policy although other economic interests may be protected in a disproportionate way. Thus, without an analysis of concrete economic relations, it is almost impossible to uncover the imperatives of industrial policy in a specific conjuncture.

With respect to identification of economic interests, three points should be made. First, economic interests should be distinguished from ‘self-interest’ based on the methodological individualism which mainstream economics regards as a starting point. As Smith (1986) observes,

\[ \text{Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer ... It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest (pp. 118-19).} \]

Such a notion of self-interest may expand to a national economy, creating a notion of ‘national interest’. The latter has dual meanings. On the one hand, it indicates public or impartial interests against private interests. On the other hand, it is used in the context of international competition between nation-states. For a national economy is treated as an individual participating in global competition. In contrast, in this chapter, underlying economic relations making a socio-economic structure are the basis on which competing economic interests are constructed. For example, profitability in manufacturing cars, in which assemblers’ economic interests are primarily expressed, relies heavily not only on industrial relations but also assembler-supplier relations, market structure, international linkage with multinationals, and so on. In turn, differing levels of profitability is the basis of continuous competition between economic agents. In this respect, the analysis of economic interests should not be confined to either microeconomic scope or interest group politics. Rather, it should embrace both economic structure and complex pattern of competition between economic agents concerned in broader contexts.

Second, it is assumed here that changes in industrial policy reflect changing or emerging economic interests of socially dominant economic agents. For example, an emphasis placed on export promotion cannot be sustained without the support of large-scale exporters. Not surprisingly, it is accompanied by new legislation and institutions making large-scale export possible.

Third, providing large-scale capital with institutional incentives and promoting an industry in a specific way involve political decision-making of high-ranking policymakers intertwined with economic agents’ political lobbying including resistance from those agents or companies discriminated against by the policy. This is the basis of political interests which have an influence on the making of industrial policy along with economic interests. Although creating considerable conflicts at times, the interaction of economic and political interests results in concrete policies, pursuing a common goal of capital accumulation. Of great importance is, therefore, to ‘unravel the formation and representation of economic and political interests through both of the state and the market’ (Fine 1997b, 125).

Then, how can industrial policy affect the underlying interests? Conventionally, the effectiveness of industrial policy is evaluated by industrial performance such as production and exports. However, as long as the effects of industrial policy are examined superficially by performance of ‘nationally picked’ players, the question would be improperly grounded. For such figures as production or exports fluctuate massively according to international economic conditions other than policy changes. For example, rapid increase in production and exports of South Korean cars in the mid- to late 1980s is to some extent attributed to improvements in international terms.
of trade (Green 1992). Without consideration of the latter, the effectiveness (or efficiency) of the rationalisation measures in the early 1980s could be overestimated.

Unlike much of the literature, it is assumed here that the effect of industrial policy is to provide specific conditions for sustainable capital accumulation by coordinating economic and political interests based on economic relations in a sector. While industrial policy is driven by economic and political interests as explained earlier, its effect is to coordinate them. It should be noted, however, that the term coordination here is understood in a broader context than in the existing arguments. According to them, coordination is narrowly applied to inter- or intra-industry investments as shown in strategic trade policy and industrial structure upgrading arguments. In other arguments, the significance of coordination is confined to political negotiation between government and business, ignoring the presence of socio-economic structure. In contrast to those arguments, it is suggested here that coordinating economic and political interests involves changes of various levels of economic relations underlying an industry, which themselves determine a pattern of capital accumulation. For economic relations are the basis on which economic and political interests are constructed and, furthermore, on which the structure of profitability primarily relies. More specifically, changing economic relations as an effect of industrial policy signify industrial restructuring or structural (re-)adjustment in a sector, which could exploit further economies of scale and external economies along the provision of resources in a manufacturing sector. In this respect, the concrete analysis of changing economic relations is necessary for identification of the effects of industrial policy; in other words, the latter cannot be analysed appropriately just with indication of some stylised linkage effects between industrial policy and performance, whether economic or political. Not surprisingly, however, the form and content of major economic relations and their industrial significance are different across industries.

Figure 1 An alternative research framework on industrial policy
3. The case of the South Korean car sector

Now consider the case of the car manufacturing industry with reference to South Korean experiences, focusing on the changing characteristics of economic relations in the sector. There are three main levels of economic relations in the sector as follows.

**Inter-assembler competition**

In effect, issues regarding inter-assembler competition has dominated policy discussions among South Korean policymakers since the early 1960s. More specifically, although there are many factors having an influence on the form of competition between large-scale assemblers, limiting the number of final assemblers has been the most significant policy tool. In view of narrow and uncultivated car demand and from the concern about excessive competition and overinvestment, there was a policy consensus to limit the number of assemblers to between one and three.

As a result, as shown in Table 1, the number of car assemblers had not substantially surpassed three until the early 1990s. In particular, the early promotion period of the sector from 1962 to 1967 witnessed only a single assembler endorsed by legislation and national planning. More significantly, control of the number of assemblers involved coercive exit from the sector in the process of state-led restructuring. In the mid-1970s, Asia Motors, then one of the three existing carmakers, was deprived of a licence to produce cars on the grounds of its investment plan falling far below the government guidelines. Then, Kia, a truck and motorbike assembler, was allowed to produce passenger cars. The company, however, was again forced to leave the car sector in the aftermath of the economic and political crisis of 1979-1980, although it was exclusively allowed to produce light commercial vehicles. This successful application of entry regulation in South Korea has been regarded as distinct from other NICs (Wade 1990). In particular, the threat of forced exit weakened possible resistance to policies against the interests of large-scale capital. Limiting the number of car assemblers has some policy effects on the sector. Above all, such monopolistic or oligopolistic market structure has an economic rationale for reaping scale economies, which are crucial for the development of the sector. In other words, tough entry regulation was conducive to hindering fragmentation of the final assembly sector. In addition, a small number of carmakers was advantageous to policy communication between the government and business (Chang 1994).

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Note: 1) Assemblers that produce Jeeps or SUVs were excluded.
2) According to the change of capital ownership and management, Shinjin was subsequently renamed as GM Korea in 1972, Saehan in 1976, and Daewoo in 1983.
3) Ssangyong and Samsung were allowed to produce passenger cars in 1993 and 1994, respectively.
4) In 1998 Ssangyong and Kia were taken over by Daewoo and Hyundai, respectively.
5) In 1999 Daewoo went bankrupt and, thus, Ssangyong was separated from the company.
6) Samsung was taken over by Renault of France in 2000, Daewoo by GM of the US in 2001, respectively.

With the help of a neo-liberal policy perspective, the practice of entry regulation was scrapped in 1989. There were two beneficiaries of this deregulation. Ssangyong, a utility vehicle maker, was allowed to produce sedan-type passenger cars in 1993. More significantly, the Samsung group, the largest chaebol in South Korea, entered into the motor industry for the first time in its business history, by attaining a licence to produce commercial vehicles in 1992, and passenger cars in 1994. In the aftermath of the 1997 financial crisis, however, they could not grow successfully because of their highly leveraged capacity investment and stagnating demand for cars. Ssangyong was taken over by Daewoo in 1998, and Samsung by Renault of France in 2000, respectively. In addition, even existing carmakers such as Kia and Daewoo, second and third largest carmakers, were unable to avoid the sectoral problems including excess capacity and financial difficulties. Consequently, Kia was taken over in 1998 by Hyundai, the largest carmaker in South Korea, while Daewoo was taken over in 2001 by GM of the US.

Based on this phenomenon of chain bankruptcy in the sector following the 1997 crisis, there is an argument that relaxation of entry regulation - for example, Samsung’s new entry - resulted in a policy failure leading to excess capacity and excessive competition (Chang et al. 1998: 740-41). It should be noted, however, that this argument needs to be judged in the broader and more concrete contexts of the effects of industrial policy. There are two points which should be examined. First, the analysis of a concrete form and content of (excessive) competition between assemblers is needed. Without the analysis of peculiarity of competition in different situations, the degree of competition tends to be a superficial factor in explaining the sectoral crisis. Second, the analysis of competition between assemblers should be combined with the analysis of other sectoral production relations, say, between assemblers and suppliers. For example, the exclusive and hierarchical transactions between assemblers and their subcontracting component manufacturers, consolidated as a custom in South Korea from the late 1970s, makes it difficult for new entrants to procure parts and components from the existing component makers. As long as such custom remains, deregulation measures of the assembly sector cannot be effective, in particular, because of the fragmented component sector. In a nutshell, deregulation in itself is not problematic; more important is whether or not it can change the established relations among economic agents in a sector so that a ‘new’ virtuous circle is realised. Regarding entry deregulation as a policy failure against successful regulation in the past is too simplistic.

**assembler-supplier relations**

Given the fact that car manufacturers purchase more than half the total inputs from outside components makers, the importance of establishing cooperative assembler-supplier relations is obvious. However, the South Korean policymakers at the initial stage of auto industrialisation did not seem to consider it. They ignored the presence
of the local component sector, which, in effect, was one of the most active manufacturing sectors in the 1950s and 1960s so that it had a nation-wide association, making policy recommendations to the government. Not surprisingly, the newly established car assembly company, called Saenara, under the auspices of the military regime taking power in the early 1960s, provoked serious resistance from the component sector, since it relied heavily on imports of knocked down (KD) kits from Japan, ignoring the presence of local production facilities. As a result, industrial policies in the 1960s were not able to coordinate the competing economic and political interests between the traditional component sector and the new assembly sector. Thus, most of them were not effective; for example, policies directed towards a high degree of local content could not attain their aims because of the absence of productive relations between the assemblers and component manufacturers.

It was from the 1970s that the government substantially promoted the subcontracting system, following the Japanese practices in its car sector. It encouraged the horizontal type of subcontracting system, in which a component manufacturer could supply its specialised product to every assembler (see Figure 2). It was initially intended to improve economies of scale and product quality in the component sector along with promotion of small and medium sized enterprises (SMEs). However, this policy stance was not fruitful. Many suppliers were unable to meet the amount and the quality assemblers demanded at that time. In contrast, assemblers preferred in-house manufacturing of the most functional and profitable components such as engine, transmission with non-profitable or bulky ones supplied at a lower price from the SMEs. In such a context, the government could no longer favour component makers over assemblers because of export imperatives applied to the heavy industries from the mid-1970s; it allowed from the late 1970s assemblers not only to manufacture their own functional components in-house but also to manage their own pool of component makers. This is called the vertical subcontracting system, the main feature of which is exclusive transactions between assemblers and suppliers (see Figure 3). Not surprisingly, the system made the component sector more fragmented and dependent on large-scale assembler capital.

Nonetheless, the South Korean car industry developed remarkably, especially from the mid-1980s. As far as assembler-supplier relations are concerned, paradoxically, the exclusive relations between the two sectors played an important role in industrial success. First, considerable externalities occurred although they were limited to an assembler’s exclusive subcontracting system. For example, imported and imitated technology by assemblers was channelled into their affiliates and suppliers at a lower price. Second, to some extent, rapid increase in domestic and foreign demand for cars since the mid-1980s was conducive to overcoming fragmentation in the component sector. By and large, first and second reasons made component makers prefer being under an umbrella of an assembler to being independent. Third, more component-sector-oriented policies were implemented in the 1980s out of the reflection on the criticism that the auto policies in the 1970s overemphasised the large-scale assembly sector compared to the component sector. As a result, there were some improvements both in productivity and quality of auto components, which no doubt improved the standard of cars in the final assembly line in favour of exports.
Figure 2 The horizontal subcontracting system

Assembler A  Assembler B  Assembler C

D  E  F  G  H  I
Component Suppliers

Figure 3 The vertical subcontracting system

Assembler A  Assembler B  Assembler C

Component Suppliers
Local assembler-multinational relations

Given that local carmakers in the developing countries lack both massive capital and advanced technology, auto multinationals’ financial and technical assistance is necessary for their survival. For that, considerable advantages have been given to foreign investors in the form of government policies. Latin American NICs such as Brazil, Mexico are illustrative. Seen from such a conventional view, a low involvement of foreign direct investment has been regarded as one of the most conspicuous characteristics of the South Korean car sector. For example, until 2000 when Samsung Motors was sold to Renault, there had been no companies in which foreign stakes surpassed 50 per cent. In 1972, GM acquired 50 per cent of shares in GM Korea (renamed Daewoo from 1983), the joint venture between Shinjin (subsequently, Daewoo) and GM, which ended in 1992. Hyundai and Kia had minority foreign shares; Hyundai sold 15 per cent share to Mitsubishi, Kia 10 per cent to Ford and Mazda, respectively.

It should be noted, however, that the government did not discourage foreign companies from investing in the local market, although there was a regulation prohibiting more than 50% foreign ownership. In effect, it preferred a joint venture with multinationals on economic and political grounds. In contrast, multinationals were not interested in the South Korean car market because of its low demand and political instability, at least until the 1970s. These aspects show that limited involvement of foreign direct investment cannot be explained only as an effect of the ‘nationalist’ industrial policy. Rather, it was an outcome of conflicts of economic and political interests between local companies and multinationals as demonstrated in the three rounds of joint venture negotiations in the early 1970s following government recommendations. One of them was between Shinjin, then the leading car assembler, and Toyota, Shinjin’s technical partner. Both companies obtained a licence for a joint venture with Toyota’s capital participation of 70 per cent. All of a sudden, however, Toyota decided to pull out of the South Korean market, ignoring the previous result of negotiations for a joint venture. It was simply because it preferred the Chinese market, taking the advantage of the then detente mood. Another joint venture was attempted between Hyundai and Ford. But Hyundai adhered single-mindedly to its own corporate interests, say, in terms of exports conditions and, in the end, failed to create a new business as a joint venture. Instead, it decided to develop its own cars along the line of the new government policy in supporting the company’s strategy. The other joint venture was negotiated between Shinjin and GM in 1972. Unlike Hyundai, Shinjin was pressed with a financial problem and a shock of negotiation failure with Toyota, allowing too generous conditions to the US negotiating partner. As a result, the company went bankrupt four years after the establishment of the joint venture and handed over its shares to the Korea Development Bank, the state-run industrial lender.

The local-multinational relations in the 1980s were rather different from those of the previous period. In the aftermath of the economic and political crisis in 1979-80, the domestic companies pursued a strategy of mass exports to the US market for their survival. For the local market was repressed with too low personal income to buy cars as well as a heavy tax burden on them. Two key conditions were required to promote the strategy. First, higher safety and environmental standards should be met for the US market. Second, sales network should be established in the export market. Although concrete solutions to these problems were different for each company, the local companies attempted to rely on multinationals’ advanced technology and sales networks. In the process, multinationals wanted only minority shares to reduce the risk of their own investments. Thus seen, less involvement of foreign direct investment in

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the 1980s should be also understood as reflecting economic interests of local companies and multinationals.

To a considerable extent, a low presence of multinationals in the local market made government policies more effective. For local companies are more submissive than foreign to accept government recommendations such as local content requirements, export obligations, development of indigenous cars. Comparison of Hyundai (and Kia) and GM Korea in terms of corporate reactions to policies and performances in the 1970s straightforwardly shows this. While Hyundai succeeded in developing and exporting a new indigenous model, Pony, even with financial loss, GM Korea just adapted GM’s unsuccessful models to the local market.

4. The erosion of industrial policy

According to the existing literature, it has been too readily concluded that state intervention is only effective at an initial stage of industrial development regardless of the degree of state commitment to economic development. Most arguments assumed that state intervention is to shrink as an economy develops, providing the idea of the ‘rise and fall’ of state intervention. For some, if prices are set right, or market coordination works well, the state has no need to intervene in economic activities. For others, if industrialists or workers grow enough to challenge state autonomy, the effectiveness of state intervention would be diminished. Those arguments might eventually prove the superiority of the market over the state as a single regulator of the world economy as well as the singularity of industrialisation model rather than its plurality.

More specifically, the industry ageing argument, or the retardation thesis, justifies a U-curve view of the level of state intervention in accordance with industrial development (see Norton 1986). Okimoto (1989: 50) suggests that Japanese MITI used ‘the concept of industrial life cycle as a basis for determining what might be considered an appropriate level and form of state intervention’. As he neatly summarises,

> extensive involvement during the early stages of an industry’s life cycle when market demand is still small, falling off significantly as the industry reaches full maturity and demand reaches its peak, and rising again as industry loses comparative advantage and faces the problems of senescence - saturated markets, the loss of market share, and excess capacity (Okimoto 1989: 50).

The argument of this kind is combined in the broader contexts not only with the analogy of ‘flying geese’ pointing out the development pattern of leading sectors in the sequence of imports, import substitution, and exports but also product cycle theory assuming that ‘the less-developed countries may offer competitive advantages as a production location’ (Vernon 1966: 202) at the standardisation stage of some products. Accordingly, the practice of sectoral targeting became a necessary policy tool for effective industrial upgrading by promoting specific growth-industries or rationalising retarding-industries. This argument may be extended to the situation of de-industrialisation and promotion of knowledge-intensive industries in the developed countries. Seen in this vein, the role of industrial policy can be generalised as dealing with the ageing process of traditional industries and the promotion of new growth industries on the basis of the law of industrial growth and decline encompassing both the developing and developed countries.
South Korean policymakers in the 1980s drew on the same logic as above when they promoted policy reform in the aftermath of economic and political crisis of 1979-80. New legislation of ‘Industrial Development Law’ of 1986 assumed that the sectors in which the government should intervene are, if any, emerging growth industries and declining industries. As a result, for instance, the car manufacturing industry was included in the former category, enjoying a temporary governmental support up to 1989. Also, the government’s stance on industrial policy shifted from promotion of specific industries and large-scale capital to functional promotion of technological development and the small and medium sized enterprises.

However, the notion of the erosion of industrial policy, corresponding to an industrial life cycle, appears oversimplified. For example, as far as the car manufacturing industry is concerned, the notion of the rise and decline of industrial policy is difficult to apply. First, the industry ageing argument does not seem to fit the industry. Although it began in the form of mass production from the early twentieth century, the industry has been regarded up to the present as a growth or strategic industry by advanced economies as well as developing countries. Second, the flying geese hypothesis do not fit with the real development in the car sector. As Jenkins (1987: 248-49) suggests, since the source of main technological change has been the advanced countries and some effects of economies of scale and managerial cost recovery have diluted price competitiveness of the NICs, relocation of the car industry did not automatically take place. Third, thus, policymakers in each country have implemented a wide variety of measures not only to improve international competitiveness of their own sector but also to provide critical assistance to troubled carmakers. For instance, the US government bailed out Chrysler in the early 1980s and played a significant role in creating an industry-wide consortium for developing next-generation cars even in the 1990s. Also such leading carmakers as Volkswagen, Renault, etc. would not exist without state involvement. The South Korean case is no exception. The car sector still accounts for a significant proportion of national production, exports and employment. Together with implementing deregulation policies, the South Korean government has also been deeply involved in restructuring the car sector in the late 1990s.

**Table 2 Economic significance of the motor industry in South Korea**

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<td>share in the manufacturing sector (%)</td>
<td>2.48</td>
<td>3.87</td>
<td>8.23</td>
<td>8.20</td>
<td>11.21</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of workers</td>
<td>62,889</td>
<td>81,700</td>
<td>186,288</td>
<td>220,601</td>
<td>277,319</td>
</tr>
<tr>
<td>share in the manufacturing sector (%)</td>
<td>3.12</td>
<td>3.35</td>
<td>6.17</td>
<td>7.47</td>
<td>9.63</td>
</tr>
<tr>
<td>Exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amount (million dollar)</td>
<td>88</td>
<td>580</td>
<td>2,163</td>
<td>8,962</td>
<td>48,972</td>
</tr>
<tr>
<td>share in the whole economy (%)</td>
<td>0.50</td>
<td>1.92</td>
<td>3.33</td>
<td>7.17</td>
<td>13.18</td>
</tr>
</tbody>
</table>

Source: KAMA (2009).

Thus seen, the divisions between labour-, capital-, and knowledge-intensive industries and/or between emerging and declining industries is too superficial to grasp
industrial realities and is liable to provide misleading policy implications, especially, in the car industry. The simple analogy of industry to a biological entity (with a ‘life’ cycle) also worsens the understanding of industrial realities because it neglects to explore a peculiar pattern of competition between economic agents concerned and underlying economic relations in production. As shown in the case of the car industry, the degree of state intervention relies on neither industrial maturity nor ‘strong’ class interests. Instead, from the perspective of industrial policy being an integral element of a specific pattern of capital accumulation, it is assumed that the apparent disintegration of industrial policy is regarded as changes in forms and content taken by the state in representing and coordinating economic and political interests. In other words, it shows a change to a different pattern of capital accumulation.

In effect, in South Korea, industrial policies from the late 1980s began to be more politicised, fragmented and uncoordinated than the previously conducted policies. Moreover, lack of strategic policy perspective on industrial promotion coupled with implementation of deregulation policies in the sector contributed to exposing the peculiar pattern of competition between local assemblers and uncoordinated changes of relational structure between local assemblers, suppliers and multi-nationals in the sector. Finally, the newly established pattern of capital accumulation led to sectoral crisis including bankruptcy of major autoparts makers and all the local car-assemblers except Hyundai in the late 1990s.

Table 3 Selected financial indicators in the auto sector (1992-98) (%)

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</tr>
</thead>
<tbody>
<tr>
<td>growth rate of turnover</td>
<td>9.5</td>
<td>20.0</td>
<td>26.0</td>
<td>18.0</td>
<td>15.5</td>
<td>3.8</td>
<td>-25.5</td>
</tr>
<tr>
<td>debt to equity ratio</td>
<td>530.5</td>
<td>415.8</td>
<td>460.5</td>
<td>460.6</td>
<td>530.4</td>
<td>857.8</td>
<td>655.0</td>
</tr>
<tr>
<td>financial expenses to turnover ratio</td>
<td>7.64</td>
<td>6.72</td>
<td>6.43</td>
<td>6.37</td>
<td>6.32</td>
<td>7.98</td>
<td>17.88</td>
</tr>
<tr>
<td>profit rate to total assets</td>
<td>-0.28</td>
<td>-0.37</td>
<td>-0.07</td>
<td>0.20</td>
<td>-0.44</td>
<td>-2.64</td>
<td>-27.42</td>
</tr>
</tbody>
</table>


Table 4 Capacity utilisation ratio in the car sector (1992-98) (000 units; %)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Production capacity (A)</td>
<td>1,840</td>
<td>1,985</td>
<td>2,265</td>
<td>2,605</td>
<td>2,735</td>
<td>3,300</td>
<td>3,330</td>
</tr>
<tr>
<td>Production (B)</td>
<td>1,307</td>
<td>1,593</td>
<td>1,806</td>
<td>2,003</td>
<td>2,265</td>
<td>2,308</td>
<td>1,625</td>
</tr>
<tr>
<td>B/A (%)</td>
<td>71.0</td>
<td>80.3</td>
<td>79.7</td>
<td>76.9</td>
<td>82.8</td>
<td>69.9</td>
<td>48.8</td>
</tr>
</tbody>
</table>


5. Concluding remarks

This chapter has attempted to establish an alternative research framework on industrial policy with reference to South Korean car sector. Main suggestions are as follows. First, the economic imperatives to formulate and implement industrial policy can be derived from the underlying economic and political interests arising out of economic relations around industrial production, or capital accumulation. Second, the effects of industrial policy can be identified with substantial changes in economic relations rather than short-term performances of production and exports in themselves. Third, the apparent erosion of industrial policy should be interpreted as changes in forms and content taken by the state in representing and coordinating economic and political interests, rather than a simple degeneration of the role of the developmental
state. Accordingly, identification of economic and political interests in accordance with changes in economic relations in a sector is of great significance in understanding the dynamic of industrial policy.

In retrospect, there was no industrial policy solution to fit in all places and all times. In case of the car manufacturing sector, although most developing countries have practised similar policies for protection and promotion of the local industry, their performances such as production and exports have been different across countries (see Jenkins 1995). Specifically, the effects of export promotion policies in the South Korean car sector are different from those in the Brazilian sector since the economic positions of exporters are different from one another. Moreover, state intervention occurs in the specific contexts in which the underlying economic agents’ interests are formed and (mis)represented alongside and through the market. As a result, the form of state intervention in industry varies, depending on the demands of economic agents and differing economic structures. This implies that the effects of industrial policy cannot be generalised without considering the specific conditions that each economic agent faces and attempts to challenge.

The outcomes of industrial policy practices of the same kind can be different at different times even in the same country. In effect, South Korea’s various regulatory policies implemented in the car sector had not been effective until the early 1970s because they failed to remove a vicious circle of small scale of production, high production costs and narrow domestic demand. This policy failure is mainly attributed to the uncoordinated relations between local assemblers and component makers in terms of profit-making businesses. In contrast, industrial policy practices from the mid-1970s to the mid-to-late 1980s recorded a remarkable performance in production and exports of cars. In particular, the Long-Term Promotion Plan for the Motor Industry of 1973-74 played an important role in setting a particular industrial strategy of local development and exports of ‘Korean-type’ cars and, thereby, reshaping the economic relations in the sector. This case shows that success or failure of industrial policy relies on specific patterns in which policy practices were channelled into capital accumulation through changes of relational structures between economic agents. In other words, the effectiveness of industrial policy in the sector relied on the changing content of inter-assembler competition and the erosion of the uncoordinated structure between assemblers and component manufacturers as well as the nature of multinational carmakers’ involvement in local production.

Nevertheless, acknowledging the importance of representation of business interests does not necessarily mean the passive role of the state. The success of industrial policy depends on the ability of the state to forge a new set of economic and political interests where they did not previously exist (Fine 1997a). For example, when a state attempts to initiate industrialisation or upgrade industrial structure, economic interests to back the structural shift need be formed and, thus, the process cannot be assumed automatic.

In conclusion, the analysis of industrial policy should be undertaken in broader perspective embracing economic and political interests involved in different levels of competitive and cooperative relations rather than in a simplistic analytical framework of ‘state versus market’. What makes industrial policy effective can be reduced to neither state autonomy nor policy efficiency as such; rather, differing economic and political interests arising out of economic relations between underlying industrial players should be brought in to investigate what forces drive and benefit from industrial policy.
Footnotes

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2 In effect, the idea that private investments should be coordinated by the state has been formulated since the 1940s. Rosenstein-Rodan (1943) favours a large-scale planned industrialisation comprising a simultaneous promotion of several complementary industries on the grounds of the presence of external economies. His argument for ‘balanced growth’ or ‘big push’ is followed by Nurkse (1953), Scitovsky (1954), Fleming (1955) and Murphy et al. (1989). In contrast, Hirschman (1958: chapter 3) criticises the balanced growth argument. (See also Streeten (1959) for a critical view on the argument.) According to him, the underdeveloped countries lack the initial resources and capabilities for simultaneous and balanced expansion across industry. It is also argued that centralised investment decisions may be biased against innovations. Instead, he suggests an unbalanced growth pattern in which sectorally sequential development is required to handle the problem of industrialisation. However, the final outcome of the industrialisation process in his argument does not differ from the balanced growth model since the unbalanced growth strategy also ultimately pursues a balance between industries in the end (Hirschman 1992: 28-30).

3 Industrial structure upgrading can be seen as a specific pattern of investment coordination, which has been a major theme for policymakers in South Korea and Japan (Chang 1994). In effect, the heavy and chemical industrialisation promoted in those countries was to upgrade industrial structure from light to heavy industries along the lines of the ‘Hoffmann ratio’ (O 1996a: 188-201). The latter indicates the ratio of the net output (value added) of the consumer goods industries to that of the capital goods industries, which it is argued continually declines throughout the process of industrialisation as a general pattern of development of manufacturing industry (Hoffmann 1958: 2-3). As a rule, when the ratio of a country is 0.5 to 1.5, it means that the country is industrialised to some extent.

4 Most of large-scale exporters in South Korea in the 1970s began to wield economic power forming a business group, or chaebol.

5 In addition, competition between the US and Japan in the global car industry favoured South Korean assemblers by creating new low-end niche market with the rapid yen appreciation.

6 Even after the recent break of the financial crisis in South Korea, reducing the number of assemblers was one of the most important policy issues.

7 As far as economies of scale are concerned, their practical measurement in the sector is complicated although many suggest similar or different figures of minimum efficient scale (Silberston 1972; Maxcy and Silberston 1959). It is not surprising that scale economies vary per model, plant, firm, and industry. Accordingly, the number of assemblers and models are main concerns for policymakers considering the small local market, with import ban and export promotion emphasised for mass-produced car outlets.

8 Moreover, antagonistic sentiment between the incumbents and the entrant, based on inter-chaebol competition, made it harder for Samsung to procure components from the existing companies.

9 According to Mihn and Oh (1993: 2), the outsourcing ratio of the South Korean assemblers in the early 1990s was about 65 per cent, while that of the Japanese assemblers in the mid-1980s reached around 70 per cent. In South Korea, engine, transmission and large pressed parts are normally made in-house.

10 Historically the component manufacturing sector appeared from the late 1930s with the specific aim of supplying auto components to the Japanese army in Korea, while the car assembly business began from the early 1960s.

11 From the late 1960s to the early 1970s the government was placed in both an economic decline and a military crisis with North Korea. It was thought that an intervention of a multinational in the local market could relieve both difficulties at the same time.
This feature contrasts sharply with the cases of Latin American NICs where the bargaining process between the state and multinationals was regarded as most significant factor in their motor industries (Bennett and Sharpe 1985; Shapiro 1994).

Original negotiation results suggested an 80 per cent Toyota share, but according to the government’s demand to reduce the rate of foreign shares it was revised to 70 per cent.

The argument is also associated with an assumption that industrial improvements are achieved slowly at first, then accelerate and finally slow down again (S-shaped pattern). This path is claimed to rest on the so-called Wolff’s law of diminishing returns to innovative efforts or investment in incremental innovations (Perez and Soete 1988: 471).

The combination of these two arguments provides an explanation of regional pattern of industrial diffusion from Japan to the East Asian NICs (see Cumings 1984). For a critical position on this explanation, see Bernard and Ravenhill (1995).

In effect, the crisis raised a doubt over the positive effects of industrial policies adopted, in particular, policies for the Heavy and Chemical Industrialisation (HCI) in the mid-1970s. Above all, overinvestment in the heavy and chemical sectors was regarded as an inevitable outcome of government-led HCI projects. As Sakong (1993) pointed out, the fiscal crisis in the government and the mismanagement of the financial industry, which were attributed to massive policy loans, worsened the crisis. In such contexts, the newly established military regime of 1980 promoted an economic reform including privatisation of banks, import liberalisation, competition policy and so on, in accordance with policy recommendations of international financial institutions such as the IMF and the World Bank. In the process, the government placed an emphasis on the creative role of the private sector in economic development although its authoritarian rule remained intact.

References


