

Industrial Policy and Economic Planning: The Case Of Development-Based Public Procurement and National Champions In Supporting Local Manufacturing Base?

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Abstract

Economic planning is still conducted in many countries de jure in some and de facto in others. On the other hand, industrial policy is coming back to stage globally in both developed (e.g. USA, Germany and the UK) and developing countries (e.g. China and Turkey). Both economic planning and industrial policy have different disguises in different countries, but it can be said that the two are in a process of convergence as developing countries intensify their catch-up efforts. One of the differences among country practices of industrial policy is the policy tools. In this paper we look at various country cases to distinguish new trends in economic planning and industrial policy. In particular, we review the employment of development-based public policies and national champions-based policies.

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1. Introduction

Economy history has witnessed different cases of disputes about catching up of nations in industrial development and one of the fundamental question of economics is why some nations are poor and some nations are rich. Economic planning and industrial policy have been two major areas of research in this respect. Despite the fact that neo-liberal agendas have been powered after 1980s particularly by free-market scholars; with the 2008 financial crisis of Western capitalism, economic planning and industrial policy are coming back to stage globally in both developed (e.g. USA, Germany and the UK) and developing countries (e.g. China and Turkey). Both economic planning and industrial policy have different disguises in different countries, but it can be said that the two

are in a process of convergence as developing countries intensify their catch-up efforts.

One of the differences among country practices of industrial policy is the policy tools. In this paper we look at various country cases to distinguish new trends in economic planning and industrial policy. In particular, we review the employment of development-based public policies and national champions-based policies. To achieve this aim, in the next section, we begin by explaining the term of economic catch-up by utilizing the concepts referred in the literature; namely industrial policy, development-based public procurement and economic planning. We will benefit from the South Korean example to put forward how those policies could transform a resource-based economy into a technologically intensive one. Then in the third section, we

will introduce the concept of national champions and the political economy debates over it. We will discuss how national champions might be utilized to transform a catching-up economy and to what extent it distorts competitive policy and free-market liberalism. Finally, we assert that supporting national champions is still in the agenda of all countries, involving even free-market economies. In the fourth section, we will give a current example involving Turkish 11th Development Plan which posits manufacturing as the core and designates development-based public procurement and supporting national champions policies in order to pace its catching-up process. In the last section, we are coming up with conclusions and recommendations for further research.

2. Economic Catch-up: Industrial Policy, Development-Based Public Procurement and Economic Planning

Development economists have been studying the reasons of what can be called a “development gap”; that is, significant differences in economic development levels among countries. In order to close the development gap, developing countries are supposed to implement policies. This so-called catch-up process reveals itself as a quest for higher per capita GDP with a view to reach the levels in developed economies.

Yülek (2018) underlines that as the root cause of underdevelopment is structural, policy response should also be structural in nature. To achieve that, developing countries have used different tools and policy sets. Industrial policy, economic planning and development-based public procurement (Yülek, 2015) are among them.

Industrial policy is defined as a set of structural policies that aim at changing the production pattern in a country (Yülek, 2018). That change covers, among others, the set of industrial products that are manufactured in the country. Industrial policies also cover openness and export orientation of the country. The recent success stories of industrial policy have concentrated in Asia. As an example, South Korea’s industrial policies that led the country become a high-income country has changed the pattern of export products significantly over the course of five decades (Table 1) from mostly raw materials to higher value-added industrial products.

In fact, similar change has been witnessed in different countries during the first, second and third industrialization waves. The first wave comprised the first industrial revolution that started in Britain starting roughly by mid-18th century. Some European countries such as France followed suit. The second wave can be timed to start around a century later – mid-19th century. This time over, countries such as the USA, Germany and Japan started their industrialization process. The third wave came in mid-20th century and covered East Asian

countries; particularly, the “Asian tigers” of South Korea, Taiwan, Singapore and Hong Kong.

As the case of South Korea, among others such as Taiwan or Singapore, has demonstrated, industrial policies are among the key determinants of economic catch-up (Westphal, 1990; Yulek, 2016). The key components of South Korea’s industrial policy consisted of:

1. Sectoral focus: South Korea’s industrial policies were directed towards the development of selected sectors such as steel, shipbuilding, automobiles, electronics. These targeted sectors changed over time in response to the development of manufacturing in the country and the global market place.

2. Export – orientation: In the earlier times export orientation and import substitution co-existed. After 1990s, import substitution was dropped. Import substitution was not always open and simple such as erecting import duties. Even domestic tax measures were employed to protect domestic industry.

Table 1. The change in South Korea’s production pattern: top ten exports over

	1960	1970	1980	1990	2000
1	Iron ore	Textiles	Textiles	Electronics	Semiconductors
2	Tungsten ore	Plywood	Electronics	Textiles	Computers
3	Raw silk	Wigs	Iron and steel products	Footwear	Automobiles
4	Anthracite	Iron ore	Footwear	Iron and steel products	Petrochemical products
5	Cuttlefish	Electronics	Ships	Ships	Ships
6	Live fish	Fruits and vegetables	Synthetic fibres	Automobiles	Wireless telecommunication equipment
7	Natural graphite	Footwear	Metal products	Chemicals	Iron and steel products
8	Plywood	Tobacco	Plywood	General machines	Textile products
9	Rice	Iron and steel products	Fish	Plastic products	Textile fabrics
10	Bristles	Metal products	Electrical goods	Containers	Electronics home appliances

Source: Ahn, S. (2013)

3. Development-based public procurement: In South Korea, ‘set asides’ from the procurement budget is utilized to provide procurement support to SMEs. Forward procurement or planned procurement is a technique to alert businesses to make preparations for future procurement plans.

4. Technological and education policies

Economic planning has accompanied industrial policy in South Korea’s economic transformation. The country practiced economic planning officially until 1992. However, even after planning was officially abandoned, the government has continued to employ strategic plans at the sectoral and even product level (Yülek and Han, 2017).

The integration of industrial policy and economic planning is not a peculiarity of South Korea. In many countries, economic planning and industrial policy went hand in hand

(Yulek, 2015). Some countries officially conduct economic planning such as Turkey, China and India while others, as in the case of South Korea or the USA unofficially conduct different types of planning and strategy development practices.

As in the case of South Korea and the USA, many countries conduct industrial policies de facto not de jure. Further, in different countries, industrial policies come in disguise. For example, in the USA, defense and space policy mostly constitutes industrial policy directed towards certain manufacturing sub-sectors and technologies.

Nevertheless, recent years have witnessed a comeback of interest in industrial policy in a quite open manner especially in Europe (Mosconi, 2015a and 2015b; Bofinger, 2019; Zettelmeyer, 2019; Federal Ministry of Economic Affairs and Energy, Germany, 2019; HM Government, 2017) and in the USA.

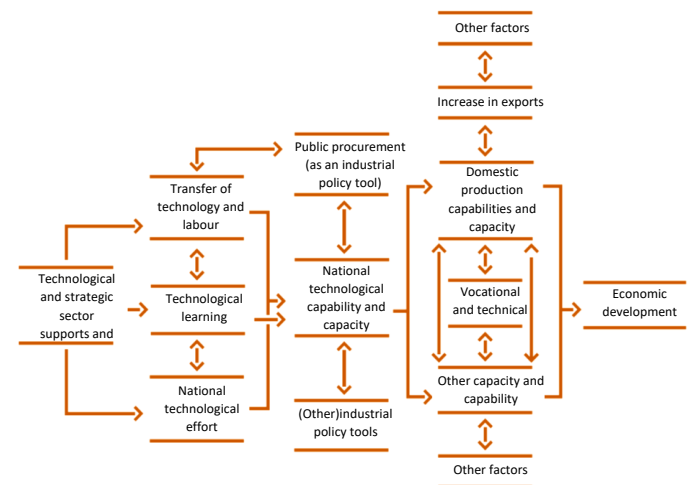
2.1 Development-based Public Procurement

Industrial policy is implemented with a number of key tools. Among them, development based public procurement is an important one (Kattel and Lember 2010; Yulek, 2011; Rothwell, 1984; Tiryakioglu and Yulek, 2015; Yulek and Tiryakioglu, 2014). Above all, size of public procurement in developing countries are generally comparable, if not larger than exports. However, many local manufacturing firms have difficulty in accessing the public procurement market. This hinders the learning-by-doing induced benefits to local companies and makes it difficult for them to build up scale. By increasing the market access of local manufacturing firms, the policy maker fosters industrial and technological development:

“In developing economies local technological capacity can be enhanced by technology and skill transfer through, among others, well designed public procurement policies that can act as a type of industrial policy. Public procurement may be more effective in fostering technological and industrial development than access to markets. Likewise, in developed economies, public procurement policies aimed at supporting innovation processes programs, simply because introducing an incentive to sell can trigger a stronger public procurement is a good complement to industrial and technological development.” (Yulek and Tiryakioglu, 2013; p.32)

Thus, public procurement can be a significant industrial policy tool that enhances national technological capability contributing to economic development (Figure 1). Correspondingly, Yulek (2011) has underlined the role of “development-based public procurement” policies in economic development. There are a number of different public procurement policies (Table 2) that cater to different circumstances

Figure 1. The role of public procurement in the process of economic development in developing countries



Source: Yulek and Tiryakioglu (2013)

In developing countries where manufacturing capabilities are not adequately developed, tools such as offset/countertrade (applied in many countries) and local content rules (such as the “New Industrial Policy” in South Africa) are applicable. Set-asides for SMEs (procurement budgets allocated to smaller companies) have been used in developed (such as the USA) and developing countries (such as India) alike. Forward public procurement (or planned procurement) have been used in the defense industry in the USA. Locality rules proposed by Yulek and Tiryakioglu (2014) have not been utilized until now.

Other than procuring services at good prices for public use and supporting manufacturing sector, public procurement can also be perceived as a tertiary policy instrument rendering different kind of innovation. Public procurement of innovation consists of purchasing activities carried out by public agencies that lead to innovation in the country (Kattel and Lember, 2010; Rolfstam, 2013, 2014). Forward procurement (Table 1) may trigger R&D and innovation as well and hence can be considered as procurement of innovation.

Edler (2010, 2013) refers to procurement as a “demand-side policy” which is defined as “a set of public measures to increase the demand for innovations, to improve the conditions for the uptake of innovations and/or to improve the articulation of demand in order to spur innovation and the diffusion of innovations”. He underlines that:

“Procurement for innovation was an element of the European Commission’s Action Plan to raise R&D expenditure to the 3 per cent Barcelona target. Subsequent programmatic European innovation policy papers (Kok et al. 2004; Aho et al. 2006) emphasized a need to promote policies driving demand for innovation, including public procurement. Consequently, the EU Commission set up the European Lead

Market Initiative (EU COM 2007a; CSES and Oxford Research 2011), focused largely on sectors in which the state is an important purchaser, and considered public procurement to be one of the key instruments for the creation of ‘lead markets’ in Europe.” (Edler, 2010)

Further, Rolfstam (2014; pp. 23-24) argues that:

“Evidence also suggests that public procurement can play a significant role in stimulating innovation. In the past, public agencies in the United States promoted the initial development of the computer, civilian aircraft and semiconductor industries. Drawing on innovation surveys and patent data from Canada, the importance innovation has been established. More recent quantitative studies drawing on German data have compared different innovation effects, suggesting public procurement and university spillovers can be more important than other measures such as regulation and results have been found by drawing on data collected from European Union (EU) member states as well as Norway and Switzerland. Leading experts have found that the biggest impact is achieved with policies considering the simultaneous application of research and development subsidies and public procurement. There is also a range of case studies reporting on how public procurement has helped to stimulate innovation.”

Table 2. Development-based Public Procurement Policy Tools

DbPP Tool	Remarks
Countertrade/offset	Used primarily in the defense industry. Characterized by a contract between a nation-state and a foreign supplier, where the supplier is asked to generate primary capabilities (that is, the capabilities gained by the direct local partner) in addition to selling their base goods and services. There are also secondary capabilities (direct local partner) that could be developed via proper policies. Procurement-induced countertrade can foster technology transfer, conservation of foreign exchange, market penetration and foreign investment.
Local content requirements	Require international exporters to the host country to identify local manufacturing partners and outsource part of the manufacturing to them. The ensuing industrial participation process can help build local industrial capacity.

Set asides and price preferences for SMEs	Set asides comprise minimum public procurement budgets allocated to SMEs, while price preferences represent a positive price margin when supply comes from SMEs.
Forward public procurement commitments	The public authority makes a credible commitment to future procurement. The credibility of the commitment is critical as this will be the primary driver of preparation and pre-investment by private companies. Forward public procurement commitments can be an especially convenient tool for a government in triggering innovation and R&D without spending a single penny.
Locality rules	Procurement directed to manufacturing made in priority regions. Not used for the time being. Has a large potential to develop industry in selected regions. Can be linked to regional development policy.
Procurement of Innovation	In developed economies that possess sophisticated industrial structures and technological capabilities, growth accounting studies show that economic growth is driven by the growth of total factor productivity rather than factor accumulation. In these countries, public procurement could be primarily used to support innovation.

Source: Authors; Yülek and Tiryakioğlu (2014); Rolfstam (2014); Yülek and Taylor (2011); Taylor (2011).

3. Economic Catch-up: National Champions

The term of “National Champions” has been an ongoing debate on both policy arena and economic literature. It is located under the debates of industrial policy and competition policy. The main problem is that a consolidated definition of the concept is absent. Of course, there are wide array of definitions for both industrial policy and national champions within it. However, the definitions are changing according to the circumstances and discussions we face in different literatures (OECD, 2009; Falck and Heblich, 2007; Ravenhill, 2001; Sorgard, 2007).

National champions can be defined as corporates that have enough capabilities, resources, know-how with the addition of economies of scale and scope advantages to compete in global

markets. They are derived from the idea of economic nationalism and admitted as contrary to the market competition and laissez-faire approaches of modern capitalism despite the fact that more or less the flagship countries of free market capitalism have tried to generate their national champions during certain period in the history. Freeman (1997) and Mazzucato (2013) subsequently asserted that technological developments spreading from companies in flagship liberal economies were explicitly supported by governments. According to Mazzucato (2013), states have played an entrepreneurial role in the development of flagship companies all around the world.

The main idea of generating national champions comes from the argument that corporates and big conglomerates have some advantages in global competition that can be helpful in creating national welfare. First, they have more power and they are resilient to the economic turbulences they face in a volatile environment of global economy. In addition to that, it is generally admitted that performing R&D requires human and capital assets in higher volumes that only big firms could compensate. Of course, it does not necessarily mean that R&D and innovation could only be performed by big firms. Small firms have certain advantages over big firms in order to innovate (Saxenian, 1994). However, breakthrough innovations which requires more complicated know-how base, capabilities and resources could only be compensated by big firms or corporates. If we accept this as the fact for the beginning, nations seem to have right to intervene the markets to generate their national champions. For this reason, national champions cannot be excluded from the side of the politics since it contains some ideological purposes concurrent to economic nationalism. So, when we mention about national champions, the politics is inside the discussion to a considerable extent.

With the abovementioned fact, the definition of the term “national champion” is enlarged with the interest of the nation it belongs. National champions can be composed of several domestic firms merging together or they might be the single firm that is expanded by government support mechanisms as well. Most of the time, during mergers, the merging operation is ignited by the government or they are not blocked by the competition law with the indirect support of the government as well (Galloway, 2007). So, they are mostly oligopolistic – if not monopolistic. The expectation from them is to create national welfare by competing effectively in global markets. Absolutely, this kind of view is highly debatable as we see in the following.

To run into this debate, we will firstly describe the perspective of national champions in context of neo-classical understanding of national champions in which competition is introduced and admitted as the supreme aim of the economies. In this debate, there is a strong emphasis and bias towards

competition policy which, according to our understanding, underemphasize the importance of industrial policy for a nation. To further enlarge our understanding of national champions, we give some examples of them especially in catching up countries as successful cases as well as advanced economies. With the help of those examples, we turn into a long-standing debate in the perspective of political economy and argue that, despite the neo-liberal argumentation, not only the government interventions on the market but also the neo-classical argumentation is ideological in terms of the industrial policy. Therefore, we come to the conclusion that implementing policies to create national champions is a political choice which is capable of supporting the efforts towards catching up and economic development.

3.1 National Champions in Industrial Policy vs. Competition Law

There has been an ongoing debate about the relationship between industrial policy and competition policy. As the neoliberal agenda develops, the free market capitalism has ruled over the government intervention. However, at the very beginning, the situation was not similar.

After the Great Depression in 1929 and World War II between 1939 and 1945, the capitalist system recovered itself by implementing Keynesian policies with extensive government intervention. With the rising tension at the beginning of the Cold War, countries in Western Capitalism put forward the understanding of planned economy which triggered the Welfare State and it was named as the “Golden Age of Capitalism” (Clift, 2014). In this period, more or less advanced economies implemented the planning perspective including the government intervention on markets. This had also triggered the economic planning initiatives in developing countries such as Turkey, South Korea, Pakistan and so on (Yülek et al., 2015).

However, the emerging conditions towards the formation of neoliberalism by the year of 1978 with Washington Consensus has cleared away this trend. As laissez-faire approaches question the validity of government intervention on economy, the importance of the concept of industrial policy has been weakened. Industrial policy and economic planning had been reduced to the state of “bulk of advices” offering not so much real term regulation and the planning perspectives on industrial development that had been about to disappear. Of course, this trend was shocked by the 2008 financial crisis and the government interventions of western countries with the help of extensive quantitative easing policies has terminated the hey-days of neoliberalism (Clift, 2014; Yülek 2015).

The mainstream economics argue that industrial policy is only valuable and valid under the condition that it does not rule over competition policy (OECD, 2009; Sorgard, 2007).

The common consolidation of competition policy in open market economies claims that the customer welfare is the most significant aim as the others are only secondary concerns. The main reason behind this is the belief of mainstream economics only perfect competition could sustain lower prices and higher benefits for customers. However, this understanding might be problematic when it comes to national welfare.

In contrary, there are other perspectives against this understanding of market liberalism. In the scope of economic patriotism, generating national welfare is at least as important as generating and sustaining competitive markets (List, 1909; Clift, 2014). The main argument behind this is to provide national competitiveness around the globe. It is assumed that this can be realized by developing national champions - the firms that are competitive enough and have some advantages coming from economies of scale. Furthermore, these initiatives are prone to create a skill base, knowledge pool and absorptive capacity to realize technology transfer and development within the given country and has some other positive spillover effects and externalities in national economy. In the next subsection, we will outline some of the successful examples of this kind.

3.2 Utilization of National Champions in Catching Up

Catching up is the general concept that is trying to explain how lagged nations are able to develop faster and sustain an economic growth to reach to the level of wealth that the advanced economies have. Though, there are many debates over this topic, the number of nations that have been able to achieve this are present in a limited number.

Within the historical perspective, the first nation that had managed to catch up could be counted as Germany. In the 19th century, the United Kingdom had supreme advantages over other countries and was admitted as the only industrialized nation in the world. They were obtaining resource-based materials and producing manufactured goods within that period of time (List, 1909). The East India Company which was established at the end of the 16th century; was compensating resource and supply requirements of the country by colonizing India and Far Eastern countries (Clift, 2014). This company might be counted as the first national champion all over the world. The supplies provided by it was being used in UK to produce manufactured goods and the textile and steel industry was built up with the help of this massive supply of goods. On behalf of Germany, in his seminal book, List (1909) was the first scholar who questions the roots of the superiority of UK. He claimed that UK was attaining its power by supplying resource-based and primitive goods and then they turned it into complete products that were including supreme value-added. The answer was simple for gaining national prosperity: buy unmanufactured good from outside; manufacture and produce products with technical

know-how and sell them abroad with high value-added. List (1909) argued that nations should track the same path with UK by establishing and developing its productive forces including transportation infrastructure, human resource development, technological knowledge base etc. Germany tracked this path, especially by the second half of the 19th century, and paced its development. At the end of the 19th century and with the early 20th century, Germany had established its industrial base and spreading the usage of electricity, it had an advantage of generating big companies and corporates such as Siemens, Thyssen Krup etc. These companies were utilized as national champions and fostered the industrial in their host nation.

For the 20th century, it should be also noted that Japan was a significant example for catching up. By their defeat in the World War II, Japan had showed an amazing performance in development. By its state-led strategies implemented upon industrial policy, Japan had narrowed the gap and became an industrialized nation by 1980s. The main unit behind this success was MITI, Ministry of Industry and Technology in Japan, which implemented government intervention strategies, particularly on industrial policy. For example, during 1960s, MITI directed its automobile manufacturers like Toyota, Honda, Nissan and so on into different segments of the automobile industry in order to boost cooperation and complementarities rather than competition. Toyota was appointed as the mass producer for global markets. By its superior performance in quality, manufacturing, zero defects, supplier relations based on trust rather than competition and methods like just-in time to reduce inventory costs, Toyota has surpassed its American and German rivals and have become the largest manufacturer of the global automotive industry. Toyota had been producing only about two thousand of vehicles in 1930s but it has managed to produce over ten million cars annually in the last two decades. The main reason behind the success of Japanese industrial development was state-led growth and development-based public procurement policies accompanying with Japanese human resources skill pool, absorptive capacity and technology development capabilities (Womach et al., 2007).

A similar approach has been followed by some other Far-Eastern countries. Maybe, one of the most striking examples is South Korea. The resource-based and agrarian composition of exports were similar with many other developing or lagged nations of the same period. However, South Korean industrial policy was composed of state-led driven initiatives and development policies. Economic planning and government intervention on markets were present. National resources allocated to chebols – big corporate like organizations that have industrial development goals operating in many industrial sectors. The government directed and monitored them in order to enhance the skill pool, knowledge base, absorptive capacity and technological capabilities of the

nation. Several public procurement and development policy measures were implemented upon those cheabols to make them compete globally. By the beginning of 1980s, those cheabols began to compete globally and for example, Hyundai entered into the United States market. The first decade of the presence of Hyundai on US market was not a success. The loss of the company in profits margins was compensated by the Korean government. However, with the rising technological learning and development of the local capabilities of Hyundai in US, the company began to increase its presence. After a successful two-decade period, Hyundai held on safely with its increasing quality and affordable cars. Design capabilities and technological intensity of the company also developed and as a result, in 2012 Hyundai Elantra took “The Car of the Year” award in US automobile market.¹

We should emphasize one further country, which is currently a hot debate within economics literature. China has paced its development, particularly after 1980s. Its communist model led by Chinese Communist Party has transformed itself into a state-led development model. The focal point of this model has been to create national champions – the companies such as Huawei that competes globally. China first started its development model with imitation of technology and industrial goods and then transform its industry to technology intensive model with its rising national champions. The model contains government intervention and economic planning in all its phases. The Chinese champions are also comprised of military representatives and government bureaucrats in the board of Chinese companies. Public procurement is also a commonly utilized way of enhancing and supporting these state-led national champions. Generally, these kinds of intervention have also triggered many disputes in international organizations such World Trade Organization, UNDP, World Bank and others. As known widely, there is also overwhelming disputes on behalf of international trade participated by Chinese firms. However, with its rising power of an industrial production base, China has become the world’s second largest economy.

To conclude, one of characteristics of catching up nations are their government initiatives towards creating national champions. Public procurement is a flourishing tool when they are supporting their globally competitive firms. Though, we should state that national champions are not limited to catching up nations and also in modern and unionized Europe, it is also a dispute especially on mergers and acquisitions issues in an open and integrated market.

3.3 National Champions In Advanced Economies

Though we have just figured out national champions as a catching up tool, the discussion cannot be excluded from discussions of advanced market economies. Advanced economies of the west comprised of Europe and North America are also examples of nations that try to foster their competitiveness with their national champions.

In Europe, there is an ongoing debate about the tension among national champions, competition policy and integrated European market (Galloway, 2007). Some of the member countries requests or blocks mergers and acquisitions to enhance their national security. One common example is Endesa – the Spanish energy company. Once it was requested and offered by an Italian company, Spain blocked the sellout of the company due to national security reasons concerning energy – even though the stakeholders of Endesa had approved it. This case, along with other similar cases of course, has opened up the discussion in the EU regarding blurred borders of national interests and union integration.

Furthermore, the discussion of national champions cannot be limited to the European Union with the aim of open markets. For example, the former President of France, Nicolas Sarkozy worked as a business development expert when French national champions came into the fore. In Alstom-Bombardier dispute with Canada, Sarkozy favored its national company and announced that Bombardier could only participate the tenders of French Government of the time if Canadian government accepted Alstom as a tenderer in Canadian tenders.² In addition to that, Sarkozy also carried out the deals with Algerian government for Gaz de France to supply gas to Algeria until 2019.³

In addition, Germany, with its high technological capabilities, knowledge and skill base as well as their national champions in machine, electronics and automotive industry such as Bosch, Siemens, Daimler Benz, Volkswagen Group etc. has intended to foster their national champions to adopt the new Industry 4.0 technologies. The policy document issued by German government has given important clues about this target by implementing effective public procurement measures (Federal Ministry of Economic Affairs and Energy, Germany, 2019).

Abovementioned examples might be extended but one can deduce that national champions has taken a great attention not only in catching up nations but also in advanced economies to sustain national competence and welfare. To conclude, we see the discussion of national champions at the intersection of industrial policy, public procurement as well as politics.

¹ International Business Times, 2012.

² Reuters, 2008.

³ Financial Times, 2007.

4. Case Study: Turkey's 11th Economic Development Plan

4.1 Economic Planning in Turkey

Economic planning is a systematic method of resource allocation to accelerate development process. Development by its nature is multi-dimensional and necessitates several economic and non-economic actors' coordination. At the one extreme point, it is expected that market mechanism coordinates actors' behaviors and the invisible hand allocate scarce resources efficiently. At the other extreme point, the government steps in and coordinate actors' behaviors by using its coercive power. After the Cold War all economies in the world started to lean towards the first extreme point. In practical reality however, the first theoretical extreme point is never being the case. The government which is by far the largest actor in the economy, by its actions greatly influences other actors' decisions. Besides, several market failures have to be corrected and requires government action. As a consequence, economic planning is a tool that ought to be mastered by the governments.

Development process in a developing country context poses several distinctive features that has to be taken into account for proper economic planning. Resource constraints such as finance, knowledge and coordination problems are much more severe. Vulnerabilities related to basic needs are more pressing. Besides, global economic fluctuations affect more severely the developing countries and can halt the development process at all. International economic crisis such as the great depression may even have devastating consequences such as famine on developing countries.

Turkey as a developing country has all these problems which hinders its catching up with the developed countries. Planning hence as the main development tool being adopted in Turkey even after the proclamation of the Republic. First Planning attempt was more of a nature of a list of projects to be implemented rather than a comprehensive economic development model. Second Plan was bettered in project planning and design but never implemented due to the Second World War. After an interim period planning fully institutionalized and had a place in the Constitution in 1960. 1980 is the breaking point in terms of economic planning and after this year Plans are prepared for much more indicative and guiding purposes.

4.2 11th Development Plan of Turkey⁴

Main features and important differences from earlier Plans

11th Development Plan of Turkey had prepared in a time of increased global economic competition and rising protectionist measures, China's unprecedented economic growth, juxtaposing of several technological developments which enables a new revolution in industry, rising concerns about climate change, ageing population, differentiated consumer preferences and a demand for uniqueness and personalization and increased uncertainties about global economic governance. Starting by the millennia Turkey has witnesses one of the most striking economic developments of its history, and became a good example for other developing countries mainly due to the abundance of international capital and its liberal and supporting economic policy. Favorable international economic conditions however started to fade away and necessitated a new policy framework in order to proceed the economic development. Besides, fluctuations of international capital flows have thought a lesson that relying on international savings to finance economic growth has a great problem of unsustainability and lacks necessary job creation. 11th Development Plan has thus the main feature of emphasis on manufacturing industry which undoubtedly has the unique characteristics of high potential for foreign currency earning, source of stable growth, sustainable and high paid job creation, productivity led development. All other plan practices of Turkey have given priority to the manufacturing industry. What is substantially different from previous plans is that, 11th Development Plan put the manufacturing industry at the core of all policy areas, thus all other policy areas have the main goal of increasing the competitive production and productivity of manufacturing industry.

Despite high level of international competition, starting from the millennia Turkey has successfully increased its manufacturing industry base. Share of manufacturing industry in GDP rose from 14,1 % in year 2002 to 16,3 % in year 2019 in real terms and 16,9 % to 19 % respectively in nominal terms. Turkey's share in global manufacturing value added rose from 0,69 % in year 2002 to 1,13 % in year 2017. Share of Turkey's manufacturing industry exports in world manufacturing exports increased from 0,54% in year 2002 to 0,91% in year 2017, export unit value rose form 0,87 US dollars per kg to 1,74 US dollars per kg in these years respectively.

Besides, Turkey has better diversified its manufacturing industry. Increase in manufacturing share in GDP both in real and nominal terms is an indication of high value-added

⁴ This part of the study is reviewed from 11th Development Plan of Turkey available at: <http://www.sbb.gov.tr/wp-content/uploads/2019/07/OnbirinciKalkinmaPlani.pdf>

structural transformation. In year 2003 only one out of 24 manufacturing sectors has a value-added greater than 5 billion US dollars, and in year 2002 none of the manufacturing sectors has exports value greater than 5 billion US dollars. In 2017 number of sectors which has value-added greater than 5 billion US dollars reached to 10, exports greater than 5 billion US Dollars reached to 11.

Turkey put great effort in transforming technological structure of its manufacturing industry and made some progress. However, it stayed the Achilles' heels. Manufacturing corporate sector R&D expenditure to its turnover in year 2003 rose from 0,19 % to 0,59 % in year 2017. The number of resident manufacturing patent applications filed in year 2018 reached to 8.215 from 1.279 in year 2003. Despite these developments share of high-tech sectors' share in total manufacturing exports is 3,6 % and in imports is 15,3 % in year 2019. Medium high-tech sectors share in exports is 36% and in imports is 40,6 %.

Turkish government has initiated several measures to support industrial development, however market forces mostly shaped the structure of the manufacturing industry. Extensive knowledge of feedback from several measures enabled the design of the 11th Development Plan. 11th Development Plan is therefore demonstrating a gradual shift of policy from the previous Plans rather than a substantial policy change.

As mentioned earlier the 11th Development Plan puts the manufacturing core. The first and the most important policy intervention is the establishment of the Industrialization Board, a high-level decision-making and coordination mechanism. The multidimensional and dynamic structure of the industrial policy and budget constraints require the highest level of ownership, strong institutional structures, inter-institutional coordination, flexible resource allocation, effective monitoring and strong cooperation with the private sector. Establishment of the Board signals the implementation of the more interventionist type of industrial policy than before.

Second, 11th Plan had prepared in order to effectively institutionalize the plan and budget coordination. Significant changes have been made in the institutional structure after the transition to the Presidential Government System in Turkey. In this new institutional context, the task of preparing the plan as well as the budget incorporated and assigned to the newly established Strategy and Budget Office of the Presidency. Therefore, the 11th Development Plan has the main aim of fully instrumentalize budget as a plan implementing tool. 11th Plan prepared at the meso level of policy interventions with budget estimates for each policy intervention which was different from 10th Plan with micro level action plans or 9th Plan with macro level policy choices. Micro level action plans

were ineffective in monitoring due to high number of actions and macro level planning lacks proper targeting and resource allocations.

Third, as the most important factor for productivity increase the 11th Plan gives great importance to technology development similar to prior Plans. However, what is different from prior Plans is that it specifies priority manufacturing sectors following the OECD definition of high and medium high technology sectors. Namely, chemicals, pharmaceuticals and medical devices, electronics, machinery and electrical equipment, automotive and rail system vehicles. As these sectors also have a share at around 60% of international trade and Turkey's imports, growth in these sectors has the greatest potential to the current account balance.

4.3 National Champion Aspects of the Plan

11th development Plan still maintains the grand strategy of "competitive free market economy" while trying fully instrumentalize effective policy tools in order to accelerate industrial development. Competitive free market economy without proper government intervention may not fully create the desired results. However, the government itself lacks the motivation for profits which ultimately results in ineffectiveness. Proper risk sharing and coordination mechanism is needed in order to overcome several market failures associated with pure market economy and accelerate growth and investment. National champion firms may help overcome coordination problems and helps dissemination of information about market which serves as an interface between market forces and government and fully capture the benefits of economy of scale.

Turkey has started to implement project-based investment incentive system which allows flexible incentive design based on specific needs of the private investment projects during 10th Plan period. This incentive scheme will continue to be the main instrument to support large scale investments in the 11th Plan period. The 11th Plan however puts the scheme in a different context and sets a priority list for type of investors to benefit from the scheme. Priority will be given to first time investors and production of strategic products, global value chain integration, high technology level and export capacity enhancing investments.

Turkey has also established the Wealth Fund during the 10th Plan period. The Fund however never was operationalized before the official approval of the 11th Plan. It is foreseen in the 11th Plan that Turkey Wealth Fund will support large-scale investments, particularly in priority sectors, by financing or becoming a shareholder. If can be implemented properly Wealth Fund can be the most effective tool in designing and supporting national champions.

Certain breakthrough projects may serve as a basis for creation of national champions and coordinate the eco-system. First and foremost of these projects is development of the first indigenous car of Turkey. To implement this project a Joint Venture established by 5 largest corporations of Turkey. The project will be finalized during the Plan period.

4.3 Development-based Public Procurement Aspects of the Plan

Demand in many cases is the most important factor in determining a business project. However, in many cases especially for high tech entrepreneurs and SMEs, understanding demand and crafting the project according to the wants and needs of the consumers is cumbersome. As the two main problems of Turkish industry is technology and scale, demand factor becomes much more important for Turkey. Besides understanding demand and crafting projects accordingly is an area generally left to the private sector in a market economy and public support is generally designed towards supply side.

11th Development Plan gives great importance to demand factor. Demand may come from private or public. Most of the demand comes from private sector. Shaping private demand is therefore important to increase the competitiveness. However, the main focus of policy in shaping private demand is to prevent unfair competition and levelling the playing field. 11th Plan gives great importance to shape private demand and, in this respect, introduces the concept of quality infrastructure and several measures designed to improve the quality infrastructure.

Even though public sector demand constitutes the smaller part of the total demand, its certain qualities make it an excellent policy tool in implementing a more interventionist and results oriented industrial policy. The government itself can set the quality specs, technology and price of the product and it can monitor, evaluate and give firsthand feedback. This ability to see each and every aspect of the product and firm, can lift the information asymmetry which is generally the main cause of market failure in industrial policy design and implementation.

On the other hand, there are several drawbacks of public procurement as an industrial policy tool. First and foremost, the risk averse public servants naturally do prefer goods and services with the highest reliability and public institutions hesitate to pay extra in order to source domestically.

To overcome this problem 11th Plan envisages a strong institutional structure. Industrial Board will serve to ensure that public administrations to implement joint procurement. The Ministry of Industry and Technology which will be responsible for secretariat services to the Board, will conduct medium and long-term needs analyses in public procurement,

identify critical technologies and products that can be produced in Turkey, create a specification pool and competency inventory, cooperate with companies to improve product quality and prepare technology roadmaps.

4.4 Conclusions

In this paper, we assert that the concepts of economic planning and industrial policy are still in the agenda of policy makers and in the last decade, it has steadily gained prominence. The major factors behind this argument is the decreasing validation of neo-liberal policies and indigenous manufacturing is still important since poorer countries is still in need for convergence and catching-up with the advanced free-market economies. For this reason, it is far more imperative to implement industrial policies to enhance nations' technological capabilities and skill bases to participate in global value chains and global competition.

In this respect, development-based public procurement policies are put forward as a favorable option to enhance innovative manufacturing capabilities of poorer nations. The effective utilization of those kind of policy tools is capable of generating advanced skill and manufacturing base for a given nation. South Korea has been given as a milestone of this kind of achievement. Furthermore, in contrary to the debates for effective competition policy, supporting national champions is standing as a vital tool for increasing national welfare not only for developing nations but also for developed nations. Some examples have been introduced about this argument which clearly depicts that even policy-makers of advanced economies is still associated with the policies supporting national champions of their own countries.

Finally, an actual development planning effort which has addressed to increase national competitiveness by focusing on manufacturing as a core and planning to utilize public procurement and national champions as effective policy tools has been exemplified by using Turkish 11th Development Plan. To conclude, we foresee that policies towards development-based public procurement and national champions will be a flourishing debate in economic policy arena in the following decades. For further research, we claim that it is vital to draw the borders for the interplay between free market economies and government intervention during the utilization of abovementioned policies towards industrial development.

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