

WELLSO 2015 - II International Scientific Symposium on Lifelong Wellbeing in the World

Industrial Policy as a Key Factor of Social Well-Being

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Abstract

<http://dx.doi.org/10.15405/epsbs.2016.02.2>

The article discusses the concept of industrial policy, types of its instruments (horizontal and vertical), and its basic elements. We consider the scale of existing industrial policies that affect the financial, social and other spheres. The role of the state in the development of competitive advantages of the country's economy. Are the main factors of economic development that must be maintained. The comparison of the traditional model of industrial policy and the modern model. Revealed a trend of increasing interest to the industrial policies of developed countries and the substantiation of the reasons for the trend. The main examples of state intervention in various countries, such as Brazil, USA, France, Russia and others. The basic characteristics of a modern industrial policy of Russia. Identified the need for the development of engineering as a key factor in the growth of welfare of Russia. Shows the relationship between the economic situation of the country's well-being of its society. The characteristic of modern economic situation in Russia. The statistical data of the gross domestic product of Russia, investment dynamics, the dynamics of the development of industries such as machinery, transport, mining, production of coke and others. The data on inflation and devaluation of the ruble in 2014. The definition of the concept of welfare from an economic point of view.

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Keywords: Industrial policy; machinery; public intervention; social well – being; trend; renewed interest.

1. Introduction

Today, public policy in industry plays a critical role for both country competitiveness and social welfare. The impact government policies can have across a number of competitiveness drivers – including trade; financial and tax systems; infrastructure development; labour and workforce productivity; research and innovation; energy and materials costs; intellectual property protection; environmental and other regulations; the tort system; and the cost of capital – are significant. All this drivers can increase labour productivity, economic development and social welfare.



2. Industrial policy: definition

Industrial Policy is any type of intervention or government policy that attempts to improve the business environment or to alter the structure of economic activity toward sectors, technologies or tasks that are expected to offer better prospects for economic growth or societal welfare than would occur in the absence of such intervention [1].

The following definitions are used by international development organizations (OECD, UNIDO):

“Industrial policy is a state policy aimed at improving the business environment or structure of the economy for sectors and technologies that is expected to give rise to more favourable prospects for economic growth and social welfare compared to the absence of such measures” [2].

Industrial policy should have:

- Aim: re-industrialisation, increase productivity, machinery sector growth, employment growth, social welfare, distribution.
- Target group: specific sector (transport machinery, heavy engineering, machine-tool construction and etc.).
- Orientation: long-term or short-term state intervention, horizontal, vertical or selective government intervention instruments.
- Policy domain: factor markets (capital, labour, technology) or product.

Industrial policy comprises any deliberate state activity that stimulates specific economic sectors and activities and thereby promotes structural change. Although traditionally its main aim was to spur the transition from agrarian to industrial, that is, manufacturing societies, the term industrial policy refers more broadly to any public support for structural change. In recent years, industrial policies more and more often aim to build competitive advantages in knowledge-intensive services. In other cases, especially in developing countries, industrial policies also support non-traditional primary activities, such as salmon farming or viticulture. Very diverse policy measures may directly or indirectly affect and alter the sectoral composition of the economy. Industrial policy therefore overlaps with manifold other policy areas including trade policy, financial policy, competition policy, infrastructure policy, education policy, and employment policy [3]. The logic of industrial policies may differ. Selective policies target specific sectors, such as coal and steel, electronics, or biotechnology. Horizontal policies support a specific range of activities that are considered important for competitiveness across sectors; examples include subsidies for R&D and industrial training or finance for innovation. Neoclassical economists in most cases reject selective policies, arguing that they distort competition and channel resources towards less efficient activities. Horizontal interventions, in contrast, are widely accepted, because the existence of market failures in R&D, for example, is generally recognized. In practice, however, the distinction is not as clear cut as it may seem. Governments often try to influence the broad direction of structural change without favoring specific industries, for example, by providing support for innovative activities (thus discriminating against well-established types of enterprises) or fostering the use of ICT (which is more relevant in some activities than in others). In other cases, local clusters of specialized firms are supported, in other words, incipient patterns of specialization are further strengthened.

So industrial policy affects many spheres of economic activity and includes a wide range of tools. There are vertical and horizontal industrial policy instruments. Horizontal instruments contain: technology platforms, matching grants to stimulate partnerships between companies and universities, a more innovation-oriented stance in the system of public procurement and in state corporations development programmes, and finally, support for the creation of regional innovation clusters, among other things.

And the vertical traits contain:

- An orientation towards the interests of large stakeholders;
- The low level of competition among public institutions with a tendency towards monopolizing views on possible approaches and assessments;
- Under valuation of demonstrable effects and transmission mechanisms of best practices, reliance on (quasi-) public resources;
- Lack of transparency surrounding decision-making processes and results appraisal processes despite relative openness towards proposals [2].

Table 1. Characteristics of traditional (vertical) and new (horizontal) industrial policy.

Traditional (vertical) policy	New (horizontal) science and technology policy
Sectoral priorities	Technology priorities
Existing sectors and industries	New industries, creative sector of the economy
Production	Services and production
Import substitution	Exports and new demand
Big and mega business	Newly created small and medium-sized business
Public sector, state development institutions	Private sector, foreign investors
Integrated structures, holding companies	Science and technology networks, clusters, sub-contractor chains
Current interest groups	Search for new stakeholders
Redistribution of revenue	Future changes in the distribution of revenue
Investment, public initiative	Innovations, private initiative
Sectoral development strategies, special-purpose budget programmes, regulation on sectoral levels	Plurality of instruments, quasi-budgetary nature, regulation on company levels
Resolute decisions	Decision-making rules

Source: Yuri Simachev and etc. "Russia on the Path Towards a New Technology Industrial Policy: Exciting Prospects and Fatal Traps"

3. Industrial policy initiatives

During economic crisis of 2008 a lot of developed countries renewed trend of state industrial intervention (table 2). Many countries faces budget constraints that made them search less costly mechanisms of state intervention in the development of its economy [4].

Table 2. Examples of industrial policy initiatives.

Country	Initiatives
Brazil	Plano Brazil Major

China	Plan for National Strategic Emerging Industries
Russia	Federal Law "Industrial policy in the Russian Federation"
India	National Manufacturing Policy
Japan	Industrial Structure Vision
Netherlands	Top Sectors Policy
UK	Plan for Growth and Industrial Strategy
US	American Recovery and Reinvestment Act and National Innovation Strategy

Source: Ken Warwick "Beyond Industrial Policy: Emerging Issues and New Trends"

July 2009, the Government of France (Foundation for Strategic Investments) supported (about the credit of the \$ 31 million) French subsidiary of the British company «Meccano», producing children's toys. Due to this, the company has returned to the country a lot of jobs from China. In the same 2009, the US government nationalized «General Motors», which went bankrupt because of the crisis [5]. Turkey in 2010 adopted its industrial strategy for 2011 – 2014. Japan has recently developed a plan for a new industrial policy [5], aimed at the departure from the "monopoly" of the structure of the economy based on the automotive industry and electronics. The plan calls for the development of five strategic areas: export infrastructure services, environmental conservation (including environmentally friendly vehicles), culture (which includes fashion, food and tourism), health care, as well as traditional Japanese industries (these include, in particular, robotics, space exploration, aerospace). Anyway industrial policy in Europe always was one of the main instruments of economic growth [6]. In India, the national development policy processing industry would increase the share of the latter in the country's GDP from 16 % to 25 % by 2022. The main element of this policy is the creation of national areas of manufacturing and investment (NIM), which will be exempt from taxes, receive financial benefits and will develop as autonomous self-governing region in partnership with the private sector. The ministry also aims for ten years to increase the country's share in global foreign direct investment from 1.3 % to 5 %. Since 2010, questions of establishing and implementing a state industrial policy in Russia took on particular importance. By 2014 business and government showing more interest in industry's development. According to Federal Law "Industrial policy in the Russian Federation" industrial policy provides (aimed to) normalization of relations arising between enterprises, infrastructure organizations, state authorities, local governments in formulating and implementing industrial policy in Russia.

Reasons of the resurgence of interest:

- Search for new points of economic growth and employment in response to the crisis;
- Structural imbalances;
- Prevalence of market failure;
- Political economy of bail-out finance;
- Challenge of emerging economics expansion.

The growth of interest in the new industrial policy can be seen in mass media publications, research projects, government programs. Some of the latter has a long-term nature. It should be noted the important points:

- Industrial policy in different countries, aims to stimulate various industries;
- Industrial policy should be coordinated with the market trends;
- Industrial policy should take account of national competitive advantage;
- State intervention should take place in those areas where it is needed and where the market cannot cope alone.

4. Industrial policy as a key factor of social welfare growth in Russia

Industrial policy in Russia aims to develop engineering. Today, manufacturing in Russia generates only 14 % of GDP. Whereas manufacturing has been a key driver of higher-value job creation and a rising standard of living for the growing middle class in emerging economies around the world such as China, India, South Korea, Mexico and Brazil. Thus, the development of mechanical engineering can be considered as the basis for the economic well – being in Russia.

Features of Russian modern industrial policy:

- Aim of industrial policy in Russia: re-industrialization, machinery sector growth.
- Target group: strategically important sectors (transport machinery, heavy engineering, machine-tool construction, shipbuilding, aircraft and etc.).
- Orientation: long-term intervention aimed to support and stimulation of economics real sector.
- Policy domain: manufacturing market products.

Main aims of the implementation of industrial policy in Russia's engineering industry:

- Attracting foreign investment;
- Creating new facilities;
- Cooperation between Russian and foreign manufacturers;
- Improving production culture;
- Progress in raising research and design skills;
- Decrease gap between the old and new segments in the sector;
- Impact on import substitution.

Ricardo Hausmann and Cesar Hidalgo (Harvard and MIT) research work confirms the importance of engineering for welfare. Their extensive examination of manufacturing export trade data of nearly every nation in the world over the past 60 years indicates that as a nation begins to build the knowledge and capabilities necessary to manufacture goods – and trade those goods on global markets – its path to prosperity begins [7]. Further, Hausmann and Hidalgo show that acquiring more knowledge and producing more complex products, and developing and deploying more advanced manufacturing processes, lead to greater economic prosperity for a country and its citizens. Finally, their research argues that the link between the knowledge networks and capabilities necessary to drive advanced manufacturing and the economic prosperity of a nation is a better predictor of the variation in incomes across countries than any other leading indices. More simply put, manufacturing matters: advanced manufacturing is a key driver of high-value job creation, economic prosperity and social welfare.

Of course social welfare is a broad term and is not the same as standard of living but is more concerned with the quality of life that includes factors such as the quality of the environment (air, soil, water), level of crime, extent of drug abuse, availability of essential social services, as well as religious

and spiritual aspects of life. But from the economic point of view, social welfare implies the economic situation of the population. It's important to understand that social policy is to a large extent dominated by economic policy, because economic policy determines the amount that government is prepared to spend. Today, the well – being of Russian society is not stable due to the severe monetary crisis, which Russian economy is facing in 2014 that can grow into a deep economic crisis. Throughout the year, there was a decrease in GDP growth and to the end of this figure, the first time since 2009, moved to negative values (- 0.2%). So, in 2014 GDP slowed to 0.6 % from 1.3 % in 2013. The ruble lost 70 % of its value [8].

In 2014 there was also a slowdown in the main economic indicators. Table 3 shows that the GDP growth rate declined, investment in fixed assets have moved into negative territory, while the share of investment in the economy declined from 22.6 % in 2013 to 16.7 % [8]. However, in the sectoral structure of investment share of extractive industries increased from 18.9 % to 22.2 %, while investments in the production of machinery and equipment fell by 0.1 %.

Table 3. Dynamics of key economic indicators.

	2013	2014
GDP growth (%)	1.3	0.5
The share of savings in GDP (%)	22.6	16.7
Investments in fixed assets (growth rate in%)	0.8	- 2.5
The share of investment in the leading sectors of the economy (%):		
Extractive industry	18.9	22.2
Manufacture of coke and refined petroleum	4.4	5.3
Manufacture of machinery and equipment	0.7	0.6
Real estate business	9.6	10.8
Transport	20	17

Source: gks.ru

Weakening of the ruble led to a rise in inflation, which in 2014 accounted for 10 % (for the food it's significantly higher) and a rise in foreign debt. Russia's sovereign debt is 57 billion dollars, which is a bit across the country. However, the debt of the corporate sector is ten times more and it is accounted for by public corporations and national energy companies, which gives it a quasi-public status. By the end of 2015 Russian companies will have to pay \$ 130 billion [8]. Its foreign debt, which will have an additional burden on the Russian economy.

The reasons for the economic crisis in Russia, its dependence on the primary sector, technological backwardness of the Russian economy, the imposition of sanctions and their consequences, increasing barriers to technology transfer and the need for independence from external sources of military production and the deterioration of public welfare are forced to seek new growth point of national economy.

Increase in the number of jobs, real incomes and improving well – being in Russia can be achieved by developing industry. However, it will take more than a decade and this should be approached incrementally and strategically justified. And industrial policy in that case is a response to the crisis.

Finally, we note some important provisions:

- Industrial policy should be aimed at creating a system of interaction between government and business;
- Industrial policy should improve the welfare of the whole society, not individual companies;
- Subsidizing certain industries within the industrial policy should be controlled by the state.

And of course one of the main question about industrial policy is should it conform to comparative advantage or defy it? [9]. Industrial policy in Russia should focus on the domestic market and the competitive advantages of the country. It is very important because industrial policy is the centre of economy modernization and it should be directed to the development of the whole industry, not for salvation, and subsidies for individual companies.

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