

Industrial Policy: Past, Diversity, Future; Introduction to the Special Issue on the Future of Industrial Policy

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Abstract Industrial policy is one of the most controversial policy fields. Its scope, instruments and rationals vary across countries, changing over time; intentions and outcomes often differ. This volume brings together reports on countries, highlighting specific problems and concepts. Most papers explicitly state that there has recently been renewed interest in industrial policy, be it the new “matrix” approach in the EU, or other strategies in Japan, the US and France. Problems and solutions differ between frontier countries like Finland and the catching-up economies of the new EU member countries, or the policy strategies in developing countries designed to foster economic growth or complement globalisation. The upcoming new approach to industrial policy all hints at a more systemic industrial policy, forward looking and emphasizing the synergies with other policy areas, but also fine-tuning to specific needs, comparative advantages and future technologies.

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This volume brings together reports on the diversity of industrial policy. The reports are structured along a regional scale, but each paper commissioned also highlights specific features and problems of industrial policy relevant at different times, in different stages of development, as well as positions relative to the technology frontier.

We start with the paper by Cohen, since France is probably the strongest supporter of “classical” industrial policy. France emphasised the sectoral approach, tried to pick winners, be it projects, industries, or technologies. The government, public firms, banks and elite schools all played strong roles. France was rather successful in achieving very high productivity per hour and a technological lead in several fields; less in achieving dynamic growth and in generating employment, specifically in very recent years. And by far not all grand projects were dramatically successful. Cohen describes how “high-tech Colbertism”

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has worked, and why it is no longer feasible. A sceptical attitude towards competition, privatisation and globalisation remains a specific feature of French policy. Some recent attempts to revive industrial policy – like competitive poles and technological core fields – are however more than just echoes of the past approach.

Bailey and Driffield's description of development in the United Kingdom is contrapuntal: a country taking the liberal approach—with exceptions. The United Kingdom shifted happily to the competitiveness definition of industrial policy (meaning productivity)¹ in the nineties. Among the horizontal policies, science and technology and small and medium enterprise (SME) policy prevailed. But even as competitiveness became the “holy grail” of European policy, the attraction of foreign direct investment (FDI) remained the “dominant part of industrial policy”. Industrial policy is now shifting towards cluster policy and is focussing on the regional level. The authors maintain that targeting is an intrinsic element of industrial policy. It should be open to democratic control and include a component of training and job creation.

Ylä-Anttila and Palmberg analyse the pro active approach in Finland, which makes knowledge the driving force of transformation. Industrial policy has a systemic character, with increasing “public spending as the most important innovation”—even during periods of fiscal consolidation and declining GDP. Finland followed a cluster approach not too distant from prudent sectoral targeting (even though the sectors given priority, namely ICT and health, are broad sectors). During the nineties, the importance of micro management surpassed that of macroeconomic management. The future will show a shift from technology to innovation and commercialisation. Since the Asian countries have started making inroads in information technology, forward looking strategy planning has started to search for the next sectors in which Finland might take the lead.

Török shows that new member countries of the EU have shunned industrial policy during the transformation period, as a reflex to former experiences with inefficient planning. Instead, they have focused on encouraging FDI and establishing regional zones. Instruments shifted from grants, subsidies, and tax credits to low and flat taxes. Applications for structural and regional funds necessitated the definition of regional strength. Thanks to the demands of the Lisbon Agenda, it was finally permissible to develop an implicit industrial policy compatible with the market regime. In contrast to frontier countries like Finland, catching-up economies will profit from a different version of the Lisbon Strategy. This has now been acknowledged at the level of the European Commission, since each country has been asked to develop a “National Plan”, compatible with the “Broad Policy Guidelines” defined by the European Commission. The national programmes will then be co-ordinated and evaluated at the Community level.

Soete defines industrial policy as structural policies designed to strengthen the efficiency, scale and international competitiveness of domestic industrial sectors. As a consequence of the Single Market Programme, different approaches to creating national champions have been developed. The importance of absorptive capacity, of formal and informal networks – present in the Silicon Valley, but absent in the more hierarchical structure of Boston – must be recognised. In high income countries, industrial policy is merging more and more with innovation policy. Innovation is not restricted to technological innovation, but is also linked to social and environmental innovation, illustrating the connection between industrial policy and the three goals of the Lisbon strategy.

This diversity of approaches in different countries – partly following national priorities and history, partly mirroring different stages of development – need to be co-ordinated,

¹ For a definition of competitiveness see Aiginger (2006).

complemented and monitored at the level of the European Community, including all 27 member countries. At the European level, the co-ordination of the Lisbon Strategy, responsibility for industrial policy, as well for promoting competitiveness, are now all in the capacity of the same directorate, the Directorate-General for Enterprise and Industry. Zourek – the Director General of this directorate – describes the new industrial policy approach launched for Europe in October 2005. It contrasts old policies that sought to pick winners, and starts from a horizontal approach—that means a policy approach based on measures impacting broadly on all industries. Then the new approach screens horizontal policies and framework conditions in terms of their implications for specific sectors and looks for complementary measures at the sector level. Aiginger and Sieber (2005) labelled this combination of horizontal measures and sectoral emphasis as “matrix approach”. Zourek specifically emphasises the involvement of key stakeholders at an early stage of policy implementation. He directly links industrial policy to the Lisbon focus on growth and jobs as a strategy necessary for the preservation of social cohesion and the realisation of environmental ambitions.²

Ketels makes the point that the US – despite a public denial of industrial policy – has many instruments which have an industry specific impact and clearly engages in policies targeted at specific industries and sectors. Thus, in this respect, the US is not much different than other countries. What is different is that the microeconomic business environment enables a high degree of regional specialisation. Important are “Round Tables”, in which firms, universities and government agencies co-determine and shape industrial policy. Priorities of the “de facto industrial policy” are science and technology, SME and regions. Instruments range from tax credits for R&D, antitrust and lobbying, to programs for regions in distress and rural areas. Trade policy helps industries to open markets abroad, most prominently in the life sciences, aerospace and defence. Generally speaking, the measures applied are not the result of a consistent, coherent industrial policy strategy, but rather of a series of interventions with an industry specific impact, made on behalf of US firms.

Nezu describes the pressing challenges to Japan resulting from its shrinking population, Chinese competition and changing attitudes towards work. These challenges square with the requirements of a country near the technology frontier. Industrial policy developed from an anti-competitive stance and top-down planning to promote competition and small firms, encouraging the mobility of researchers and closer firm/university links. Universities became the centre of development, in the new economics ministry (Ministry of Economy, Trade and Industry), horizontal bureaus are now larger than industry specific bureaus, reflecting the shift from sectoral to horizontal policy. A new economic growth strategy mentions areas with high growth potential, but there are – in contrast to traditional Japanese industrial policy – no instruments and no intention to support these areas in a discriminatory way.

Hutschenreiter and Zhang analyse the “open door policy” adopted by China in the seventies, which first called for imports of large scale industrial equipment. This was soon found to be unsustainable leading to a shortage of foreign currency. The second phase of industrial policy focused on attracting inward FDI, specifically in plants producing for the world market, thus leading to high export growth and rising currency reserves. The “open door policy” culminated in China’s accession to the WTO and made it the most open large, developing economy. Nevertheless, up to now, many high-tech exports have been based on the import of high tech inputs, with little own innovation and product design. Now the overarching goal is to transform China into an innovation-oriented society by 2020. The intention is to increase research expenditures up to 2.5% of GDP, and to base 60% of GDP

² For a recent update of the new matrix type strategy see EC (2007).

growth on innovation. China's strategy defines sixteen special projects for developing key technologies and eight cutting-edge technology areas, not too different from projects and technology areas targeted in other regions of the world.

Aiginger finally attempts to carve the trends out of the industrial policy strategies presented in the different papers and countries. He delineates tendencies in industrial policy, and differentiates according to stage of development. He reports on findings regarding the input and output of industrial policy in Europe, as presented in Aiginger and Sieber (2006). Elements of a new, systemic industrial policy emerge, different from the past, compatible with the Lisbon Agenda and the WTO. Strategies for catching-up economies, as well as for frontier economies, are implemented in the globalising world. Industrial policy could prove to be the complementary, regional policy that is needed in the process of globalisation. It should be future-oriented and systemic; it should not slow structural change or emphasise picking the winners, as has been the case in the past, it should build on positive externalities but also promote, shape and develop externalities proactively.

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