Industrial Policy – A Key Element of the Social and Ecological Market Economy

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Introduction: Industrial Policy in the Social and Ecological Market Economy

Neoliberal models of economic development have not been able to achieve persistent economic growth. This became especially evident in Latin America and Africa in the 1980s and 1990s. Furthermore, rapid and undifferentiated economic liberalization, in combination with a movement to downsize government programs, has increased the social imbalances between and within societies and made it more difficult to deal with the ecological threats to humanity. On the other hand, state-led development models that tried to replace market-based resource allocation with heavy-handed government planning and implementation often fared even worse. The social and ecological market economy (SEME) provides a promising, pragmatic alternative to the neoliberal and the state-led development models, as it aims to reconcile the propelling function of markets with the checks and balances provided and executed by the state as the entity responsible for safeguarding (social) equity and (ecological) sustainability. It is therefore gaining credibility, especially among developing countries of Asia that traditionally assign an important role to government intervention, but seek to avoid the errors of manifold non-capitalist experiences in the region.

The concept of SEME, however, is not very well defined, and those countries that claim to have developed some kind of SEME (Germany, the Scandinavian countries, the Netherlands, New Zealand) have implemented different policy mixes to balance efficiency with social and ecological goals. Moreover, these strategies have changed over time, not least in response to the challenges of globalization. The common denominator of SEME is that the state, within a market-based and competitive economy, seeks to ensure equal opportunities for its citizens to participate in the economy. Social security systems also help ensure inclusion in societal life. Furthermore, environmental protection is pursued by

internalizing environmental costs in the market economy. State intervention is based on the principle of subsidiarity, whereby local authorities and non-government organizations play an important role in providing public goods. Industrial policy played and plays an important role in forming and maintaining SEMEs. Successfully implementing industrial policies requires a careful balancing of market forces and state intervention to achieve optimal results in terms of economic efficiency, social equity, and environmental sustainability.

This article presents lessons learnt from the successes and failures of industrial policy. Chapter 1 provides a definition of industrial policy and shows how it usually pursues various objectives. Chapter 2 discusses the theoretical underpinnings of industrial policy, in particular the concept of "market failure" that is used to justify government intervention in markets and its counterpart, "government failure," which addresses the risks that are necessarily involved in any intervention. Chapter 3 then reviews the existing empirical evidence with particular emphasis on Asia. Finally, Chapter 4 distills lessons from theory and from Asian practice. It summarizes how industrial policies should be designed and implemented so as to preclude government failure and to achieve the intended outcomes effectively and efficiently, and it identifies principles that should guide "smart" industrial policy in line with the framework of the social and ecological market economy.

1. Industrial Policy: Definition and Targets

Industrial policy comprises any deliberate state activity that stimulates specific economic sectors and activities and thereby promotes structural change (Rodrik 2007, 3). 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 viniculture.

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.[1]

[1]See, for example, Meyer-Stamer 1998, 2 ff. Especially in development cooperation, the terms *private sector policy* or *SME policy* are commonly used. In practice, these concepts largely overlap with *industrial policy*. What characterizes the latter concept is its emphasis on structural change without ex ante privileging certain firms due to their ownership (private vs. public) or size (small vs. large) structure.

Industrial policies are mostly geared towards increasing economic efficiency and competitiveness. In practice, however – and particularly in a SEME – efficiency gains are not pursued exclusively, but social inclusion and cohesion and environmental sustainability are also taken into account.[2] Four different objectives may be distinguished. The first three reflect traditional key objectives, whereas the fourth objective has gained in importance since the 1980s:

1) strengthening competitiveness of existing industries and stimulating the development of new ones to seize new economic opportunities, for example, through subsidies for research and development (R&D) or through support for start-ups in promising new activities;
2) cushioning the social effects of the decline of mature industries, for example, through specific policies for regions which depend on declining industrial activities, where unemployment rates are increasing to a disproportional degree;
3) balancing regional inequalities, for example, through special incentives for investments in less developed regions; and
4) counteracting negative externalities of economic activities on the natural environment, for example, by establishing tariffs above market equilibrium level for renewable energy fed into the power grid.

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.

[2]See, for example, the European Union's Lisbon Strategy (European Union 2004, 6, 8, 16, 31). The strategy calls for "removing disincentives for female labor force participation," "eradicating poverty," and "addressing specific target groups' issues." Moreover, "it aims for growth to be environmentally sustainable." Meyer-Stamer (1998, 13-14) calls for an "industrial policy for sustainability." See also Aigingers' concept of "dynamic competitiveness" (Aiginger 2007, 313).

In practice, industrial policy serves not only to achieve any of the above mentioned four objectives. Rather, politicians sometimes use industrial policy instruments to satisfy particular demands of their respective electoral constituencies.

2. Market and Government Failures – Theoretical Underpinnings of Industrial Policy

According to neoclassical economic theory, market forces should lead to the best possible allocation of available resources, thereby enhancing the specialization of countries according to their comparative advantages (Pareto efficiency) and inducing growth. There are mainly two reasons why markets may fail to deliver these outcomes predicted by the neoclassical framework (see, for example, Chang 1996, 7 ff. on *market failures*):

1) The existence of economies of scale or collusive behavior may lead to *imperfect competition* (for example, monopolies or monopsonies where individual market agents may affect quantities and prices in the market). Governments may need to regulate markets under conditions of imperfect competition.
2) Decisions and action of individuals generate costs or benefits for other stakeholders (*externalities*). As a result, private cost-benefit structures deviate from the social cost-benefit structure. In such situations, governments may be well advised to provide (or create incentives for the provision of) goods in the public interest.

The assumptions underlying the neoclassical approach are restrictive. Even neoclassical economists themselves admit that their assumption that markets function on the basis of perfect competition among actors with full information about all relevant parameters and with completely rational preferences is an abstraction of the real world situation. This is especially the case with regard to most developing countries, where market-enabling institutions are deficient and basic public infrastructure as well as high-level technical training is lacking.

This mismatch between simplified models and complex reality has led some authors to reject the concept of market failure as the rationale for industrial policy (for example, Cimoli et al. 2006). However, accepting the difference between model and real world, the concept of market failure can be an important analytical tool to analyze critical weaknesses in markets and to target policies accordingly.

One essential field where market forces alone will lead to underperforming economies is innovation and technological learning (Rodrik 2004, 6 ff.).

Technology and innovation are key drivers of productivity growth. Productivity growth, in turn, is necessary to enable local producers to cope with increasing international competition, while allowing salaries and social welfare to rise. As evolutionary economics teaches, technological learning is a complex process. It involves the skillful recombination of knowledge that is partly bound to individuals and/or organizations and therefore requires a high degree of interaction, trust-building, and coordination. Moreover, learning processes are cumulative, often with uncertain economic outcomes and multiple externalities (see, for example, Lundvall 1992). The development of new technologically relevant knowledge suffers from problems of non-appropriability. While the actor investing in knowledge creation inevitably has to bear the sunk costs and the risks of innovation failure, in most cases he will only be able to appropriate part of the benefits in case of innovation success. This is all the more the case in societies where institutions for the protection of intellectual property and enforcement of contracts are weak.

In sum, innovation and technological learning are highly prone to market failure, while bearing a huge development potential. Public support to R&D, human capital formation, and technology transfer is thus an essential element of industrial policy in practically all high performing economies. World Trade Organization (WTO) rules explicitly exempt support to research activities, including those carried out by private firms, from the list of prohibited subsidies, provided that it does not exceed certain levels.[3]

Probably the most serious negative externalities of purely market-driven development are the degradation of natural resources and damage to the environment that affects all stakeholders in a given territory alike, independently of whether or not they benefit from the economic returns of an activity (as entrepreneurs, workers, or consumers). The reports by the Intergovernmental Panel on Climate Change (IPCC) and the Stern Review on the Economics of Climate Change (Stern Report) have recently emphasized that external environmental effects go far beyond national boundaries and that the costs will largely be borne by segments of the global population that have not benefited from economic growth to any relevant degree.

The need to incorporate environmental and, in particular, climate-related externalities is not yet fully reflected in industrial policymaking, neither in developed nor in developing countries. Fostering competitiveness, on the one hand, and environmental policy, on the other hand, are in most cases still being handled by separate and often competing political entities and stakeholder groups.

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[3]WTO, Agreement on Subsidies and Countervailing Measures, Article 8.2 (a), http://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm#articleVIII (January 4, 2008).

It should be noted that industrial policy is not always geared towards enhancing national competitiveness. Instead, governments in social and ecological market economies may also pursue industrial policies in order to maximize social and environmental spillovers from economic activities. They may, for example, link innovation policy with efforts to improve resource productivity and ecological performance. Public procurement may be employed to purchase ecological "best-practice technologies," and prizes may be offered for innovative technologies that secure particular environmental objectives (Gross and Foxon 2003, 125-128).

While the inclusion of the environmental dimension in industrial policy is quite recent, the social dimension has for quite some time been integrated in the discussion on industrial policy. Two examples are given below to illustrate how industrial policy can contribute to achieving socially desired outcomes:

- Policies to alleviate regional disparities. Market forces usually lead to increased power concentration and spatial polarization. Once regional disparities exceed acceptable limits, social cohesion is endangered, and political unrest (or radicalization) may be induced. In Germany, the constitution obliges the government to ensure equivalent living conditions in all parts of the national territory. Likewise, in most other industrialized countries, governments pursue programs to reduce spatial polarization, often including significant transfers of public financial resources.[4]
- Policies to shape urban space. Market forces induce the concentration of retail services in large super- and hypermarkets, often greenfield investments outside of the urban core areas, where land prices are lower. In many countries across the developed and developing world, this has led to loss of infrastructure and decaying downtown areas. As a consequence, in many countries, among them the USA with its market-liberal tradition, urban revitalization programs were set up, including tax incentives and grants for companies wishing to invest in the inner cities.

Summing up, these observations on innovation and learning processes, environmental externalities, and regional disparities show that market failures are common and justify public intervention. On the other hand, critics of industrial polices point to the risks of *government failure*. Even if markets fail to provide the best possible solution for certain problems, government interventions may do more harm than the actual market failures. Five arguments are put forward by critics of industrial polices:

[4]As in the case of public support to research, the relevant WTO agreement (see footnote 3) exempts from prohibition "assistance to disadvantaged regions within the territory of a Member given pursuant to a general framework of regional development."

First, the state is composed of politicians and bureaucrats who, at least partly, pursue their own personal interests rather than working in the best interest of the public. Individuals enter the bureaucracy in order to achieve reputation and power, to enjoy the perquisites of the office and, most importantly, to draw a good salary. All of these variables are affected by the size of the total budget of the bureau. Bureaucrats thus benefit from the size of their institutions and the available resources. The bigger the budget, the higher are the salary and reputation as well as the opportunities to satisfy clientelist networks. Therefore, it is rational for bureaucrats to attempt to extend their responsibilities and to produce goods and services in more than a socially optimal quantity (Chang 1996, 22-23 and Fritsch, Wein, and Ewers 2007, 407). Even if an agency's work is not successful, it may try to hide its inefficiency in order to ensure further allocation of funds.

Second, bureaucrats, unlike private investors, do not bear the full risk of their decisions. Incentives for civil servants are determined by the civil service career law and informal patronage norms. Usually there are few provisions to reward good or penalize bad performance (Fritsch, Wein, and Ewers 2007, 406). This implies a considerable risk that less care is taken when public funds are invested.

Third, governments are not insulated from the specific interests of pressure groups. The state can be seen as "an arena, within which economic interest groups or normative social movements contended or allied with one another to shape the making of public decisions" about "the allocation of benefits among demanding groups" (Skocpol 1985, 4). Since the most powerful groups will be most effective in influencing relevant decisions, state policies and regulations reflect the interests of these powerful players. For example, private sector groups may seek privileged access to subsidies or protection from more efficient competitors.

Fourth, the fact that governments allocate benefits to pressure groups creates an incentive for private agents to divert efforts away from productive purposes (for example, to enhance productivity and competitiveness) towards influencing state policies and capturing the rents emanating from these state interventions (Krueger 1974 and Chang 1996, 27-28).

Fifth, even if all state actors were benevolent and tried to improve the efficiency of the economy and overall welfare, they may lack the ability to achieve their well-intended objects. It is doubtful whether the state is better informed than markets, which would be a prerequisite for correcting markets. Of course, firms may also take wrong decisions, but this is part of a competitive dynamic of entry and exit that permanently drives innovation. In contrast, governments that channel resources towards certain industries and "pick winners" may distort market signals and thus make resource allocation inefficient (see Pack and Saggi 2006, 281 ff.). In addition, collecting and processing the necessary information

is a cost-intensive exercise for the state. These costs may exceed the benefits of correcting market failures and result in a waste of resources needed for other policies (Chang 1996, 26).

3. Empirical Evidence: Lessons from the "Asian Miracle" Experiences

South Korea, Taiwan, and Singapore are the countries whose development trajectories most seriously challenge conventional economic wisdom regarding the power of the "invisible hand" and the superiority of non-interventionist over interventionist policies. The three (formerly developing) countries managed to catch-up with the OECD[5] world in terms of economic dynamics and social welfare within only a few decades. Catching up was a consequence of interventionist policies to help create comparative advantages. When looked at in more detail, the policies adopted by the three countries were quite different. While Korea used subsidized credit and rationed it in a highly selective manner to favor sectors and companies investing in strategic industries, the most important instruments in Taiwan were selective fiscal incentives (Etzkowitz and Brisolla 1999). Later, other Asian countries – Malaysia, Indonesia, China – tested different interventionist strategies, with some remarkable successes (for example, building up competitive advantages in different sub-sectors of the electronics industry in Korea, Taiwan, Malaysia, China, and Singapore) and some costly failures (for example, the national car in Malaysia, aircrafts in Indonesia). In sum, however, the region, on the basis of relatively interventionist policies, fared much better in terms of industrialization and the creation of knowledge-based competitive advantages than any other region in the world.

Since the early 1990s, many studies have tried to explain the factors behind the success of the Asian miracle countries, often comparing it to the failure of interventionist policies in Latin America (for example, World Bank 1993; Nelson and Pack 1999; Lall 2006). While the debate around some issues is still going on, there are several elements of Asian industrial policies that are mentioned rather undisputedly as critical success factors (see, for example, Westphal 2000 and Wade 1990):

- Macroeconomic stability, reflected in relatively low inflation rates, positive real interest rates, fiscal balance, and properly valued real exchange rates, allowed for rapid and effective responses to disruptive shocks.
- Factor inputs rose quickly, physical and human capital were rapidly expanded.

[5]Organization for Economic Cooperation and Development

- Even if the strategic goal was industrialization, the expansion of the manufacturing sector was paralleled by successful agricultural development.
- Competent bureaucracies were able to orchestrate the development process, without succumbing to lobbying or pressures by strategic interest groups.
- Incentives for new industries were tied to performance, for example, special concessions were handed out on the condition that export targets be met.
- Compared, for example, with Latin America, these Asian economies were quite open, both with regard to trade and to ideas. The emerging manufacturing sectors were export oriented from the very beginning, and exports grew much more rapidly than gross domestic product (GDP) over long periods of time.
- In all Asian miracle countries, governments fostered the transition towards knowledge- and technology-driven economies by emphasizing primary and secondary education as well as technical training on vocational and tertiary levels.
- Government spending on R&D was also a strategic asset of Asian industrial policy, enabled by the high export revenues. South Korea, in particular, is today among the world's leaders in R&D spending as a percentage of GDP.
- Openness, however, was by far not complete: on the import side, Korea and Taiwan imposed differential tariffs and sometimes even quantitative restrictions on trade.

Apart from these commonalities, each successful catching-up process was based on a unique development trajectory, and industrial structures as well as policy mixes varied quite strongly. For example, Korea, Taiwan, Singapore, and Hong Kong adopted very different strategies for dealing with foreign direct investments. More recently, the success stories of industrial development in China and India again build on specific strategies (Altenburg, Schmitz, and Stamm 2008). Also, each successful country and sector benefited from certain windows of opportunity. Hence there is no "one-size-fits-all" concept for successful industrial policy.

Nevertheless, three general lessons may be drawn from this brief sketch of the Asian miracles, specifically compared to less successful or failed policies in other developing regions:

First, selective industrial policy can be successful if carried out by competent governments. Bureaucracies need to be sufficiently independent from interest groups that may distort the process in their favor. While state intervention can be assessed as greatly successful, government failure always was a problem. Quite often, consumers had to purchase overpriced goods to sustain less efficient industries for prolonged periods of time; also, banks sometimes accumulated non-performing loans due to errors in directing credit to supposedly "strategic," but actually inefficient, industries.

Second, export orientation had important stimulating effects on economic growth and productivity. International trade allowed the Asian countries to specialize in their respective comparative advantages and to increase their welfare. At the same time, export revenues allowed for the import of intermediate goods needed to utilize existing capacity and of machinery and equipment needed to modernize the industrial infrastructure and expand capacities. Whereas import substitution strategies in most developing countries led to severe balance of payment problems, the newly industrializing Asian economies managed to match their increasing technology requirements with higher levels of exports. Furthermore, importing and applying increasingly sophisticated capital and intermediate goods triggered technological learning on the company and the national levels. At the same time, exposure to demanding and rapidly changing competitive markets obliged companies to continuously upgrade their technological capabilities.

Third, export-driven industrial development can rapidly expand the employment opportunities of the poor and even help to achieve equity goals. Labor-intensive export industries helped many Asian economies to manage the transition from low productivity agrarian to more productive urban and industrial economies. Today, income distribution in these countries is atypically equitable, especially if compared to most Latin American countries. Furthermore, the strong emphasis on education at all levels further helped to make the development trajectories of Asian catch-up economies not only more competitive but, at least compared to other developing regions, more inclusive.

4. Smart Industrial Policies: Lessons Learnt

The previous chapters have shown that market failures call for and justify state intervention. Asian governments in many cases managed to build up successful and internationally competitive industries that would hardly have emerged without targeted government action. At the same time, state intervention carries substantial risks of government failure. As in any other policy field, it is therefore necessary to abandon the futile ideological discussions about markets *versus* states. Rather, one should ask *how* industrial policies should be designed and implemented so as to preclude government failure and to achieve the most appropriate balance of competitiveness, social inclusion, and environmental protection in an effective and efficient way.

In this final section, we will therefore attempt to give some answers to this question, drawing on practical lessons learned from industrial policy successes in Asia and elsewhere as well as on insights from different bodies of literature, including general

literature on political economy and more specific studies on new public management as well as donor guidelines on best practices in service provision.

First, when *choosing sectors and activities for governmental support*, a number of issues should be kept in mind:

Although the primary goal of industrial policy is to alter the sectoral composition of the respective economy in a way that enhances its competitiveness and allows for higher per capita income, it should always balance economic with social and environmental goals. Ensuring equal opportunities for all citizens to participate in the economy is of particular relevance in countries where a large portion of the population is poor and economically and socially marginalized. Also, it is necessary to make sure that environmental costs are internalized in the market economy as much as possible – something that the Asian tigers have greatly neglected. Social and environmental impact assessment should therefore be part and parcel of any new industrial policy initiative.

Asian countries have shown the importance of focusing on sectors and activities that are innovative and expand existing markets. As Rodrik notes, the "first order of business in development is to learn how to do new things, not to focus on what one already does well" (Rodrik 2006, 5). Taking up new activities creates new product or process technologies and facilitates organizational learning at the firm level as well as human capital at the level of the individual worker. Innovation in this broad sense is critical for productivity growth, product differentiation, and sectoral diversification. These productivity enhancing and learning effects cannot be fully internalized by firms and workers and generate positive externalities for the whole economy and society; it is therefore justifiable to target public support at innovative activities.

Innovation and learning may be particularly strong in the area of emerging frontier technologies, but especially in developing countries they can also be triggered by imitating technologies that are already being applied elsewhere (Lall and Teubal 1998, 1375, 1378). Producers in developing countries are often trapped in a vicious circle, where they are unable to achieve economies of scale because the quality of their product is low, their knowledge about markets is limited, and marketing channels are weak. This results in low productivity, low returns, and little reinvestment. Barriers to entry for such activities are low, and new producers regularly move into the same type of activities. As long as the market does not expand, this will only result in cut-throat competition and decreasing returns. Hence, it is crucial for industrial policy to promote the development of products that are new to the local environment and would allow producers to access new, less oversupplied markets with higher returns (Altenburg and Eckhardt 2006, 21, 28 ff.). This should be done by encouraging search processes (for example,

rewarding new business ideas or non-traditional exports) rather than letting policymakers define what they regard as promising activities.

Although new trade and growth theories have shown that comparative advantage is not predetermined by the given factor endowments, but can be "created" through deliberate efforts by firms and supporting institutions (Porter 1990), a note of caution is necessary in light of scarce public resources: Before entering into innovative markets, search processes should consider the economic viability of the sector or activity by assessing the current base of capabilities, feasible rates of improvement, and the expected evolution of demand. Moreover, they should try to assess the cost-benefit ratio of support, even though the benefits include environmental and social externalities that often cannot be measured in economic terms (Lall and Teubal 1998, 1379).

Second, there are a number of lessons learnt with regard to the *process of designing public support policies*:

Many problems cut across the boundaries of sectors and cannot be overcome by actors from a single institution. Therefore, it is necessary to transcend bureaucratic boundaries and design joint working arrangements and coordination mechanisms (Bullock, Mountford, and Stanley 2001, 14). Importantly, cooperation and coordination among government agencies requires that mandates, competences, and responsibilities are clearly defined and agreed. Vague, conflicting, or contested competences lead either to inaction or to fragmentary or opposed actions – all of which waste public resources and prevent public actors from being held accountable (Rodrik 2007, 43-44). In particular, unbundling the roles of the government as an entity that defines targets, rules, and regulations, on the one hand, and provides services, on the other hand, is recommended. Separation of regulatory and operational functions creates clearer lines of accountability. Furthermore it gives service providers the autonomy to use flexible means to reach their goals without undue political interference in decisions (World Bank 2006, 51).

As governments are not market actors, they lack information about constantly changing market dynamics – the most promising sectors and activities, the most significant bottlenecks for market actors, and the most effective interventions to tackle them. These structural information gaps cannot be overcome if they are left to the lobbying and rent-seeking activities of the strongest individual actors. Therefore, policy making must involve a wide range of both public and private actors in a transparent manner. Possible mechanisms for collaboration with the private sector are deliberation councils, supplier development forums, investment advisory councils, sector roundtables, and private-public venture funds. Furthermore, care must be taken to obtain and integrate the views of other

stakeholders and other directly or indirectly affected persons in a systematic manner (Bullock, Mountford, and Stanley 2001, 14). Trade-offs may emerge between the need to draw on scientific expertise, on the one hand, and social inclusiveness and participation, on the other hand. Not listening to those at the receiving end, however, does not pay, as it leads to bad results, implementation problems, and loss of public legitimacy. Collaboratively, these actors should seek to assess and address problems in a comprehensive way, and to avoid unintended negative side effects, for example, regulations that crowd out poor producers or scare away investors. Value chain and sub-sector analyses are useful approaches that help to detect such interdependencies.

When designing targeted support policies, policy-makers should take specific care that the complexity of policies does not overwhelm the implementation capacities of governments and bureaucracies. Even with regard to the Asian tigers, the existence of a "highly capable, coherent economic bureaucracy closely connected to, but still independent of the business community" has been called a "myth" (Evans 1998, 66, 79). Simple, uniform, and non-bureaucratic support schemes may, in certain conditions, be preferable to highly complex and differentiated measures, because they are easier to implement and provide less scope for arbitrary interventions and corruption.

Moreover, if the addressed market failure is not of a permanent nature, conditionality and sunset clauses should be made part and parcel of each intervention, so that barriers to removing benefits will not emerge and policies remain flexible to changing needs.

All policies should be subject to continuous monitoring and independent third-party evaluation. Monitoring and evaluation systems should measure outputs and outcomes rather than inputs. Hence, expected outcomes need to be defined in measurable and monitorable terms.

Monitoring and evaluation (M&E) should include the views of all stakeholders. In addition to traditional M&E procedures, it is therefore in some situations advisable to set up mechanisms for social monitoring. The general public, especially those affected by a certain policy, are likely to hold public service providers accountable if they receive information about how well these agencies are performing and if they have feedback systems at their disposal. Holding service providers accountable is easier if these operate at a decentralized level. This calls for a greater implementing role for local governments.

Last but not least, policies should be designed in a flexible way. The steps from policy design to implementation are usually not unidirectional. Instead, policy processes are search processes that necessarily build on trial and error and on feedback loops between implementation and (re)design.

Third, there are some best practices for *service provision*, which will briefly be recounted here.

As a rule, state intervention should aim at strengthening or developing competitive markets. However, if a market does not develop because of coordination failures, the public sector may have a role in facilitating collective efficiency (Schmitz 1999) among state and non-state actors. Collective efficiency results from external economies of proximity – which accrue to firms quasi automatically, for example, through the existence of local labor pools and supplier networks – and from the potential gains of consciously pursued joint action, such as initiatives to introduce a certifiable quality standard. Governments may facilitate dialogue, help to build trust, and promote information sharing and mutual learning among market actors in order to exploit the advantages of collective efficiency (Neuchâtel Group 2002, 13).

Financial and non-financial enterprise support services are crucial "for effective market-oriented innovation to take place" (Neuchâtel Group 2008, 14), as they are geared to overcoming coordination failures and information deficits. At the same time, these services are themselves subject to market failures: if left to the market, these services will not always be provided or they may not reach out to specific groups of entrepreneurs and producers. Enterprise support services are placed on a continuum of private and public goods. Whereas some enterprise support services relating to day-to-day activities of businesses and farmers bear a strong private goods character, the outcomes of other services relating to "strategic," long-term activities are less easily predictable and appropriable by individual actors and therefore will not be demanded by the poorer segments of entrepreneurs and farmers (Altenburg and Stamm 2004, 11ff.). Services with a strong public goods character therefore require public investment. This holds even more if they serve the public interest by enhancing environmental sustainability or public health (Neuchâtel Group 2006, 26-27). The extent and duration of public funding therefore depends on the degree to which benefits are privately appropriable or public, as well as on the capacity of those at the receiving end to pay for them. In the case of non-permanent market failures, it is advisable to install conditionality and sunset clauses before funding starts. Funding of services with a strong private goods character should also be based on a realistic cost-benefit analysis, so that costs of services do not exceed the amount that the users are able to pay in the future when their capacities are fully developed (Neuchâtel Group 2006, 26). In general, the decision to fund a specific intervention should be taken on the basis of long-term financial planning rather than in an ad-hoc, reactive manner.

Even in the case of services with a strong public goods character, donors and governments should avoid directly providing services whenever possible, but rather support market-based service providers, be they public, semi-public, or

private. Having the same organizations managing the funds and providing services is bound to lead to inefficient use of funds, crowding out of private suppliers, as well as to lack of accountability to users. There are several ways to separate the institutions: (a) "Service mandates" allow the use of public funds without maintaining a public delivery system, but are susceptible to the same problems as public provision of services: inefficiency and crowding out. (b) In order to prevent political capture and to elicit private-sector needs and priorities, contests that allow private sector firms to bid for public resources can be particularly useful (Rodrik 2007, 39). (c) Another possibility is demand-side financing via grants or a voucher system – however, the administration of such systems is fairly complex (Neuchâtel Group 2002, 24). The last two options can be used to stimulate the development of a diversity of different service providers. If users are able to choose between different providers, competition will press providers into good quality services and promote more specialized services. Users will be able to demand the services that suit their needs best.

In addition, public service providers should be obliged to measure the cost and income generated by each service, and mechanisms for gathering and feeding back users' opinions of the services delivered should be developed. Performance results must be the basis of future funding. However, when setting criteria and measuring performance, it must be clear that there may be trade-offs between different objectives, for example, between financial sustainability, on the one hand, and impact, on the other, or between outreach and impact (Altenburg and Stamm 2004, 24).

Another important instrument for making service provision more market based is co-financing by users, even if (in the case of poor target groups) it is only a small part of the total cost. This serves a double purpose: Paying for services increases the pressure to improve service quality and the accountability of service providers to the users. At the same time, it prevents crowding out of commercial providers by subsidized programs and increases efficiency of resource allocation, as users will only avail those services for which they actually see a demand (Altenburg and Stamm 2004, 25). Co-financing can take many forms: payment in installments and deferral until harvest time, payment in kind, or financing through member organizations (Neuchâtel Group 2002, 60, 20).

Lastly, in order to ensure sustainability, governments and donors should facilitate the development of permanent local institutions and mechanisms that raise awareness among entrepreneurs and farmers about the benefits of services and help to exchange information on the quality and outcome of specific services. It is equally important to facilitate long-term links between service providers and professional and up-to-date backstopping institutions, so that suppliers are able to react to changing demands.

5. Conclusions

This article has shown that industrial policy has an important part in developing social and ecological market economies. There is now a broad consensus that unregulated markets are unable to achieve optimal results in terms of economic efficiency, social equity, and environmental sustainability. Government interventions are needed to correct market failures, but the public sector often intervenes in ways that generate new problems of mismanagement and corruption. Governments should therefore adopt "smart industrial policies" that are light-handed, build on market forces wherever possible, and ensure accountability where the public sector directly engages in service provision. In this way, it is possible to combine the creativity inherent in markets with the checks and balances provided and executed by the state in a way that ensures more balanced socioeconomic and environmental development trajectories.

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