1. Why this book?

Productivity growth is a precondition for increasing living standards and maintaining competitiveness in the globalised economy. Low total factor productivity is the key reason for persistent poverty in developing countries. Therefore, poor countries need to increase productivity to eradicate poverty. The challenge is not only to develop more productive ways of doing business in activities already established but also to accelerate the structural transformation from low productivity activities in agriculture, petty trade and skill-extensive services to new activities that are knowledge-intensive and exploit the advantages of inter-firm specialisation.

The role of industry and specifically manufacturing as the key driver of structural change, technological innovation and productivity increases has been at the centre of development economics from its inception: 'Generally, industrialization was viewed as equivalent to development' (Ranis 2004, p. 4). This is mirrored by the fact that *industrial* policy has become a synonym for policies seeking to influence the direction, structure and pace of economic growth and development.

Undoubtedly, the main driver of structural change is the private sector. Still, governments have an important role to play in setting policy frameworks that stimulate competition and encourage innovation and technological change, as well as in correcting market failure. For instance, it may be important to support activities that do not pay off immediately for an individual investor but are likely to trigger manifold linkages and spillovers in the future; or to encourage new activities that do not emerge spontaneously because several interrelated investments need to be made simultaneously that exceed the resources available to any individual entrepreneur. Such government interventions accelerate structural change towards more competitive and higher value activities. This is what industrial policy is about.

The above notwithstanding, the concept of industrial policy has remained a hotly debated and controversial subject in developed and developing countries alike. It is the territory on which many an ideological battle has been fought: the role of the state is juxtaposed with that of the market, intervention is contrasted with *laissez-faire*, technocrats are confronted with entrepreneurs. The dissent regarding the role of industrial policy is also to some extent due to a lack of clarity about its definition. According to most definitions,[1] industrial policy comprises 'any government measure, or set of measures, to promote or prevent structural change' (Curzon Price 1981, p. 17). While industrial policies are sometimes employed to preserve and protect existing industries or to mitigate the effects of structural crises, their principal aim is to accelerate structural change towards more productive and dynamic activities. These activities need *not* be part of the industrial or manufacturing sector. Industrial policies quite often target activities in other sectors in which governments assume untapped growth potentials, such as non-traditional agricultural exports or high-value service activities like software development and tourism. Importantly, industrial policies are always about seeking to move towards a desired future state of the economy; they are directional and normative in nature.

While the theoretical case for industrial policy is not in doubt, there is no consensus about the most effective instruments and right degree of intervention. The controversy is mainly about *selective* interventions that favour some sectors over others and thus interfere with the price mechanism, the main signalling device of market economies. Critics argue that governments are usually not very good at identifying coordination failures or anticipating future knowledge spillovers, and their decisions may well end up reducing allocative efficiency and creating perverse incentives for investors and bureaucrats. However, proponents rightly emphasise that industrial policy is a desirable response to pervasive market failures, particularly in development contexts calling for fundamental normative decisions on future societal pathways.

It is now widely accepted that industrial policy *may* work well in countries with strong meritocratic public services and political checks and balances. These mainly include Organisation for Economic Co-operation and Development (OECD) member states and some other countries with high income levels. South Korea, Taiwan, Singapore, Brazil and Chile are often mentioned as examples of countries that successfully used industrial policies to catch up with the rich countries of the OECD. More recently, the spectacular economic development success of China in sustaining high growth rates, capturing global markets, moving into high-technology sectors and, along the way, reducing poverty levels has been attributed to its special industrial policy hybrid of central control coupled with competitive markets.

Many observers, however, are quite sceptical when it comes to the role of industrial policies in *low-income and most middle-income countries*. According to all available governance indicators, these countries almost without exception lag far behind with regard to government effectiveness, transparency and accountability. Hence, even though these countries obviously face particularly severe market failure, there is a big question mark as to the ability of their governments to intervene in markets in ways that increase public welfare.[2] In fact, economic history is full of failures of industrial policies. In any case, the appropriate policy mix is unlikely to be the same as in rich countries because both the *requirements* and the *capacity* for public intervention differ substantially. Yet, in stark contrast with the above-mentioned success cases of catch-up development, little is known about the quality and the outcomes of industrial policies in low- and middle-income countries.

This book focuses exactly on the latter group of relatively poor developing countries. There is a rich literature available on the development paths and policies of emerging economies both in terms of the first-generation newly industrialising countries in East Asia and, more recently, the BRICS countries (Brazil, Russia, India, China and South Africa). However, not much has been written so far on the industrial policy approaches and challenges of the vast majority of developing countries – which in Alice Amsden's typology are not even considered as the 'rising rest' but simply as the 'remainder'.[3] These countries are typically characterised by weak entrepreneurial dynamism, an incipient and small private sector, highly fragmented economic structures and a high degree of informality (with dominance of micro and small enterprises) – a scenario that, more often than not, is ignored in the mainstream industrial policy literature.

Moreover, today's poor countries are not only faced with a highly constrained development setting as characterised above but also with the formidable challenge of having to deliver results against a variety of economic, social and environmental objectives at the same time. This latter aspect of multiple and simultaneous policy goals is often overlooked, yet it is arguably the single most important feature determining today's development processes: while the industrialised countries enjoyed the luxury of being able to pursue growth and productivity objectives first, then dealing with the social implications by building up welfare institutions and, even later, starting to mitigate the environmental impact thus created, such a sequential approach is simply not available to poor countries today. Against the double pressure stemming from both their own populations (with rapidly rising expectations fuelled by modern global communication channels) and an impatient donor community, governments struggle to find pathways that build on synergies and avoid tough trade-offs between competing objectives. This predicament of having to address multiple goals is a recurring theme throughout this book. It is what makes rational and effective industrial policies so critically important in poor countries seeking to achieve long-term sustainable development.

Our book therefore addresses difficult questions that are particularly relevant for poor countries yet have often been overlooked in industrial policy analyses. Such questions prominently include:

- How can the industrial transformation be made socially inclusive, and what should industrial policies look like when the vast majority of the workforce are engaged in informal micro-enterprises?
- How can trends towards rising inequality and enclave economies be overcome?
- Is it preferable to promote local bottom-up economic development or to encourage growth poles and economies of scale?
- Is it realistic to expect welfare-oriented industrial policies to be adopted by regimes whose legitimacy rests largely on distributing favours among their political supporters?
- How can transformative structural change be promoted when governments are not subjected to the checks and balances of mature democracies?
- How relevant is the 'greening' of industries, and particularly decarbonisation for poor countries whose per capita CO_2 emissions are still negligible while poverty levels are high?

Our approach throughout this book is evidence-based and seeks to deliver a reality check. While dealing with a politically highly charged subject, we aim at providing a sober and balanced assessment of both the potentials and perils of industrial policy in a context where it matters most, that is, in shaping the development trajectory of economies seeking to overcome poverty and create wealth. Ultimately, we want to replace dogma with nuance, debunk some of the myths still prevailing and demonstrate that industrial policy needs to defy the twin challenge of failing markets *and* weak state capacities. Obviously, this does not render its proper design and implementation any easier. However, it also does not call into question the necessity to act.

The book is organised in the following manner. At the outset (Chapter 2), we develop our conceptual foundation and point of departure – the proposition that economic markets are subordinate to social norms and values and that industrial policy is faced with the reality of multiple societal goals that go beyond the realm of economic efficiency. More specifically, and placed in the context of emerging global sustainable development goals, chapters 3 and 4 address the challenges to promote inclusive growth patterns and to respond to the growing relevance of environmental concerns in industrial policymaking (green industrial policy).

This is followed in Chapter 5 by a review of the evolution of the industrial policy discourse, with emphasis on the need to develop systems and principles of governance that can balance market and state failure. This chapter also sums up key principles of smart industrial policy.

In Chapter 6, we focus on the context-specificity of industrial policy and try to distil the main elements that characterise the design and implementation of industrial policy in developing countries. We argue that these countries face the common challenge of latecomer development, which confers both advantages and disadvantages on them. Within an overall setting of severe and mutually reinforcing development constraints on the demand and the supply side, especially the poorest countries have to find ways to kick-start market-based economic development, to reduce persistently high poverty levels and to build up environmentally sustainable economic and technological capacities. This chapter also considers the political economy of developmental policymaking. It acknowledges the widespread existence of limited access orders (North et al. 2012), that is, regimes where political elites divide up control of the economy and stabilise their position through systems of clientelism, and industrial policy may be employed as one instrument for rewarding supporters. This is often coupled with weak policy management capabilities and a strong influence of external factors ranging from donor agencies to international trade agreements that may limit the range of available policy options.

In Chapter 7, we present five country case studies. By selecting Ethiopia, Mozambique, Namibia, Tunisia and Vietnam, we review the manifestation of industrial policy in countries at different income levels, with significant variations in their development strategies and with different political and institutional systems.

Chapter 8 pulls together the key insights from the case studies in a comparative perspective aimed at identifying critical determinants of policy success or failure. In doing so, it places particular emphasis on the way the interaction between public and private actors is organised, the importance of a long-term transformative vision as a national 'project', the policy implementation process within the broader space of planning and/or searching for solutions, and the specific challenges stemming from emerging planetary boundaries as epitomised by the threat of climate change.

The concluding Chapter 9 distils the main lessons of our study and offers an outlook on the key industrial policy challenges ahead for developing countries.

NOTES

1. See Aiginger (2007, p. 319 f.) for a compilation of definitions.
2. Chang (2006) and others point out that state bureaucracies of East Asian industrial latecomers (e.g. South Korea) were fairly ineffective at the beginning of their take-off. Thus, initial ineffectiveness obviously does not rule out the possibility of step-by-step improvements. Still, these bureaucracies obviously had the capacity to organise learning processes effectively, in a way that the vast majority of low- and lower-middle-income countries have not yet been able to replicate.
3. Based on a conceptual foundation related to manufacturing experience and industrial diversification, Amsden distinguishes the 'rising rest' (China, India, Indonesia, South Korea, Malaysia, Taiwan and Thailand in Asia; Argentina, Brazil, Chile and Mexico in Latin America; plus Turkey in the Middle East) from all other developing countries, which as the 'remainder' are considered as falling further behind in economic development (Amsden 2001).