

## PART IV

# Territorial Policies: Emerging from the Crisis



# 13. Conceptualisations, relationships and trends between innovation, competitiveness and development: industrial policy beyond the crisis

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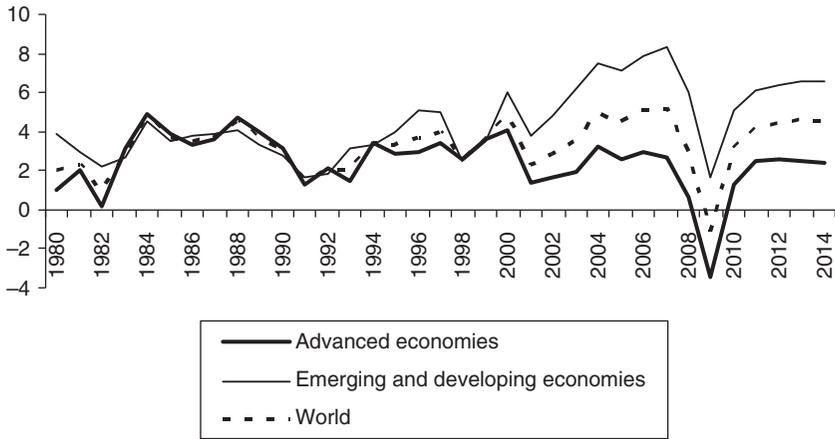
## 1. INTRODUCTION

This chapter provides some thoughts on industrial policy beyond the crisis, which are based on a long-range research by the authors (Bianchi and Labory, 2011).<sup>1</sup> This research suggests that the crisis reveals long-term structural changes in the economy, which firms in all sectors have to face and which require government intervention. Important structural changes are occurring in organisations, hence the division of labour, with deep implications not only from an economic point of view but also from a social and political point of view. We suggest that adequate industrial policies, in the broad sense of intervention to sustain firms' competitiveness and re-structuring, have as a consequence to be defined in a holistic manner.

## 2. A LONG-PREPARED CRISIS

We have analysed the crisis in depth elsewhere (Bianchi and Labory, 2010) and shown that what the crisis mainly reveals is the inadequacy of the world regulation system defined in Bretton Woods, although adjusted through time. The world has changed, the main characteristic of which is the emergence of new economic and political powers, especially that of China. The supremacy of the USA remains, but is brought into question by its financial dependence on China. The dominant regulation model has been liberal, the main rules of which can be found in the Washington Consensus.

The crisis is due to a burst bubble of the American economy, the financial sector booming to exponential levels while private and public debt



Note: 2010–2014 are forecasts.

Source: IMF statistics ([www.imf.org](http://www.imf.org)).

Figure 13.1 Real GDP growth since 1980 (annual percentage change)

were rising at unprecedented levels. Financial markets worldwide have boomed without any correspondence in the real economy. As Keynes taught us, excessive speculation leads to crises. Parallel to that, firms in all sectors were making organisational changes, setting up global value chains or global production networks. World economic growth has experienced ups and downs since the 1980s, the analysis of which helps us to understand the roots of the crisis. Figure 13.1 shows real gross domestic product (GDP) growth for the world, for advanced economies and emerging and developing countries, since 1980.

From the mid-1980s there is a first economic cycle characterised by growth up to 1988, followed by a reduction of real GDP up to the period 1992–94. A new cycle follows, of growth up to 2000 (apart from the 1997 crisis), followed by a sudden fall in 2001, and then the actual development phase until the current crisis. The most striking point illustrated by Figure 13.1 is the growing distance between emerging countries that settle at growth levels that are well beyond that of advanced countries. The latter countries are most hit by the actual crisis since they almost go back to the growth levels of the early 1980s. Thus, world growth is now entirely driven by the growth of emerging countries.

The growing tendency of emerging countries to drive world growth can be dated back to about the early 1990s. This corresponds to the fall of the Berlin Wall and the end, from a political point of view, of bi-polarism

(the dominance of two world powers, namely, the USA and USSR). The world progressively becomes multi-polar in the 1990s, with the emergence of new world powers, namely, the BRIC (Brazil, Russia, India and China) countries. Meanwhile, many changes occurred. The European Union (EU) deepened integration with the monetary union and the adoption of a common currency between a core of member countries, and at the same time enlarged its borders to the east. Such enlargement has consolidated the growth of these transitional countries, not only attracting capital from abroad, but also acquiring productive activities from Western Europe, thereby generating export economies that could re-structure, allowing the extension of supply networks throughout Europe.

The rapid growth of Eastern European countries gave impetus to the growth of Western European countries, so that benefits were shared among old and new members of the EU. Regarding other emerging countries, growth was very high during the whole period, especially in China. The Chinese economy opened up to international trade, although the political regime is still limiting freedom. Other Asian countries experienced high growth rates in the period, although they are confronted by a crisis around the mid-1990s. Latin America experienced problems too, again mainly due to the disparity between the financial and productive spheres of the economy. Indeed, the search for short-term profits leads the financial markets, if not regulated, to rapidly expand, attracting all savings, at the expense of the productive sectors, which have difficulty in investing, and of the government sector, whose deficit tends to increase. Such disparity grows to the point where financial assets are too overvalued and the bubble explodes.

Various crises with a similar scenario took place in the world, namely, the development of weak economies accelerated by the development of financial and housing activities which crowded out the sectors of the real economy. Meanwhile, international institutions imposed rigid and inappropriate measures to deal with these economic difficulties. They enacted a drastic reduction in the role of the state, with a reduction in interest rates, so that the capacity of the government to intervene with monetary policy was reduced, together with privatisation and liberalisation of financial markets as a factor for opening up trade and rapid integration of capital markets. The problem became acute when the crisis hit the American economy. The US financial sector rapidly and exponentially boomed without any corresponding increase in the productive sector. Wages were stagnating but internal demands were artificially sustained by rapidly rising private debt. Much of this consumption was due to imported products (investment in the manufacturing sector reduced from the end of the 1990s), so that the balance of payments kept worsening. Public debt

also experienced dramatic growth, due to military spending in the fight against terrorism and the wars in which the USA engaged, in Iraq and in Afghanistan.

The main problems revealed by the crisis are problems shared by politicians making economic policy decisions and economists advising them:

1. Short term views prevailed, highlighting the short-term benefits of sustained consumption and profits in the financial sector, without regard to the worrying rise in private and public debt and to the lack of long-term investment in productive sectors.
2. Partial views also prevailed, in the sense of isolating economic phenomena from political and social aspects; for instance, the political consequences of the emergence of new economic and hence political powers did not seem to be explicitly considered, and the high risks incurred by highly indebted households with relatively low wages but high consumption did not seem to be worrying;
3. The crisis is also generated by myopic and individualistic views whereby self-interest and own profits and returns prevail, without regard to the community.

The crisis has therefore called for a return to the consideration of the long term, the future, not only from the point of view of individuals, but also from that of collective actions and effects. We therefore suggest in this book a return to the concept of *development* and not just growth, whereby development means a long-term process of growth and improvements not only from an economic point of view, but also from social, political and cultural points of view. As stressed by Sylos Labini (2006), economic development is a means to reach the wider aims of cultural and social development; Dahrendorff (1988; 2008), also highlights that economic development cannot arise without civil development.

### 3. NEW APPROACH TO INDUSTRIAL POLICY AFTER THE GLOBAL CRISIS

Given the above considerations, we propose a holistic approach to industrial policy, with the idea that the properties of the industrial system cannot be explained by its component parts alone. The whole industrial system has to be considered, together with the underlying society and polity. The unit of analysis of the industrial system should be the division of labour. Production organisation is determined by the firm's characteristics, its internal and external environments, social and political

institutions, the extent of the market and products requirements. In turn, production organisation has implications for the social, economic and political characteristics of the economic system in which the firm is embedded. In other words, the division of labour determines the productive power of labour (productivity) that has to be defined according to the extent of the market, but it also determines working conditions and the living standards of workers, hence their access to education and to cultural development. Inventions and technical progress in turn depend on the culture and knowledge that originate from experience. It is in this respect that industrial policy has to be determined in a holistic approach: industrial development is determined by, and in turn influences, the characteristics and evolution of the society and its cultural development. Therefore, industrial development policies must take account not only of available resources and technologies, but also of the social characteristics of the territory, the training of human resources that simultaneously determine social and economic evolution. We represent this in a framework for the definition of industrial policies, a 'sundial' of industrial development.

Two important elements of industrial development are resources and rules. Resources include knowledge and human capital, as well as raw materials and infrastructures. Rules are both social (in some societies some categories of people are excluded from economic activities, such as some castes in India, or women in Islamic societies) and institutional (law and regulation that determine, for instance, access to education or the procedures to create firms). Countries have different sets of rules and resources that determine different production organisation capacities and hence different paths in industrial development. Rules and resources are not fixed through time. On the contrary, they constantly evolve as demographic, cultural and political trends occur.

Entitlements open up choices in our purchase of commodities, in our use of the education system, in our voice in the political system, and so on. The set of choices (in the sense of objects from which to choose, not of the act of choosing) opened up by entitlements are 'provisions'. Both entitlements and provisions are key determinants of the development of nations. Some countries have levels of provisions and entitlements that are quite balanced and lead to a balanced path of industrial development, which is the path chosen by the European Union in the economic integration process. Some have high levels of provisions but low levels of entitlements, which is the case in China. Others have low levels of provisions but high levels of entitlements, which is, for instance, the case in South Africa. Provisions and entitlements determine the capacity to organise production, and simultaneously the efficiency and equity of a system.

We can also relate this framework to the discussion of industrial

policy in the current post-crisis context we have carried out so far. What globalisation has essentially meant is a rise in the diversity of players in world exchange, and therefore in the complexity of industrial development. New players have emerged, with different culture and social characteristics, basing their development on particular provisions and entitlements. Whereas before the 1990s world trade was dominated by trade between developed countries, which had similar provisions and entitlements (culture, labour regulation, and so on), nowadays world trade is characterised by an intense competition where old players (developed countries of the western world, such as the USA, Europe and Japan) have progressively lost significant market shares relative to new players, namely, the ‘emerging’ countries such as China and India. These countries are characterised by specific provisions and entitlements.

Entitlements and provisions are essential elements of industrial policy. In addition, we identify two other dimensions or levels of development, namely, innovation and territory. Entitlements determine the rights of individuals to take part in development as well as in productive and competitive processes; provisions determine their knowledge, competencies and resources, and thus their capability to take part in these processes, together with other resources necessary to perform economic activities. Innovation is the capacity to create knowledge and to apply this new knowledge to production processes; it is a dynamic element that sustains development. The territorial dimension highlights the importance of the embeddedness of productive processes in territories, where they can gain from local resources such as social capital and infrastructure. Sustainable industrial policy should aim at extending all four levers, coherently defining and implementing measures at the different levels of government, that is, regional, national and supranational.

### **3.1 Industrial Policy as a Vision of Industrial Development**

The consideration of industrial policy as a vision of industrial development implies the explicit analysis of the complementarities between instruments and between implementation levels. Defining such an industrial policy allows all policy fields and all levels to share the same objective of industrial development (and development in a broad, classic sense). Once this view is adopted, two issues arise. First, the design of industrial policy requires the identification of industries’ current and future expected trends, of crisis industries, and of the technologies of the future and the possible applications of such technologies. This analysis should allow for the identification of possible scenarios of future industrial development which policy-makers have to choose. The choice of the industrial

development path to favour is both very risky (choosing a technology that is revealed to be useless because it is rapidly surpassed by a new technology) and very costly (resources required to identify scenarios and above all to invest in the new technologies). However, the potential gain for the country as a whole, in terms of industrial and civil development or in terms of wealth of nations, is very high.

The industrial policy choice is also very political. Stakeholders have to be involved in order for the vision to be shared and approved. In dictatorial regimes, such as Italy in the 1930s, industrial policy choices are imposed. In democracies, consultation with all interested parties is necessary in order to increase the probability of success, both because consulting interested parties allows policy-makers to better access relevant information and so make better-informed and more appropriate choices, and because consensus indicates that implementation will be more closely followed. The need for consensus on economic policy confirms the fact that economic policy implies value judgements on which all stakeholders have to agree.

Industrial policy choices must also be made holistically, considering the interdependencies between instruments and policy levels, between strategy and organisations, organisations and their environment, and so on. The economic system is complex and industrial development is determined by complex interdependencies and processes. Industrial policy as a long-term vision of industrial development implies the abandonment of methodological individualism by considering the specific industrial development problem within the overall system of which it is a part. Just as individual actions within societies are largely explained by the characteristics of the whole society, especially its social norms and culture, firms' strategies and organisations are determined by the characteristics of the economic system of which it is a part: the institutions, the extent of its market and the characteristics of other related markets. Industrial policy as a long-term vision of industrial development, leading to and backed by a civil society, can therefore be represented as shown in Figure 13.2.

### 3.2 A Framework for Industrial Policy as a Long-Term Vision

Entitlements and provisions are essential elements of industrial policy. Using our reflection on industrial policy in the twenty-first century (Bianchi and Labory, 2006a; 2006b; 2009), we identify two other dimensions or levels of development, namely innovation and territory. Entitlements determine the rights of individuals to take part in development as well as in productive and competitive processes; provisions determine their

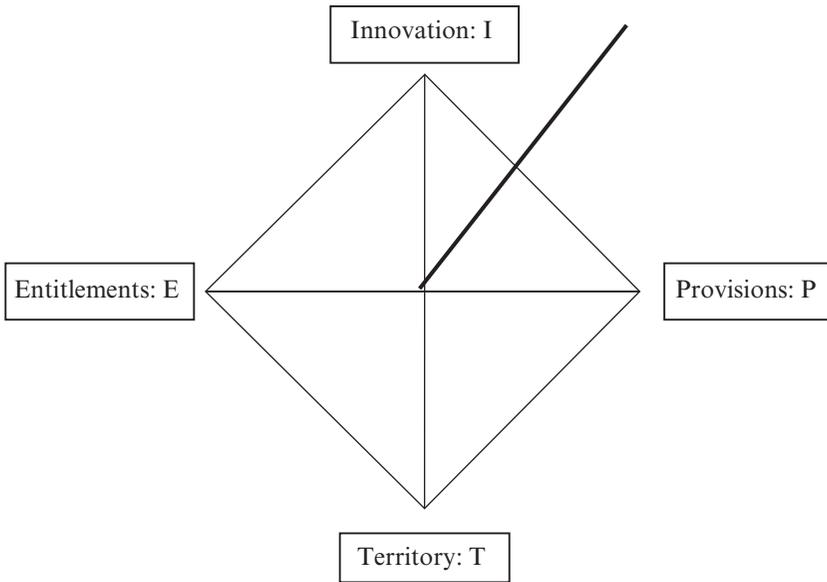


Figure 13.2 *Four levers of industrial development*

knowledge, competencies and resources, hence their capability to take part in these processes, together with other resources necessary to perform economic activities. Innovation is the capacity to create knowledge and to apply this new knowledge to production processes; it is a dynamic element that sustains development. The territory dimension highlights the importance of the embeddedness of productive processes in territories, where they can gain from local resources such as social capital and infrastructure (Figure 13.2).

All levers are important and do not substitute for each other. Sustainable industrial policy should aim at extending all four levers, coherently defining and implementing measures at the different levels of government, that is, regional, national and supranational. The levels of government are represented by the fifth dimension of the picture, namely, the bold line, thereby obtaining a sundial.

All four elements determine both the cumulateness and the sustainability of industrial development: cumulateness in the sense of providing a dynamic process; sustainability essentially in the sense of compatibility of the economics, social and political spheres. The dimensions are not substitutable but complementary, and have to be simultaneously developed in order for industrial development to be sustainable from both social and environmental points of view. In fact, the four levers can determine

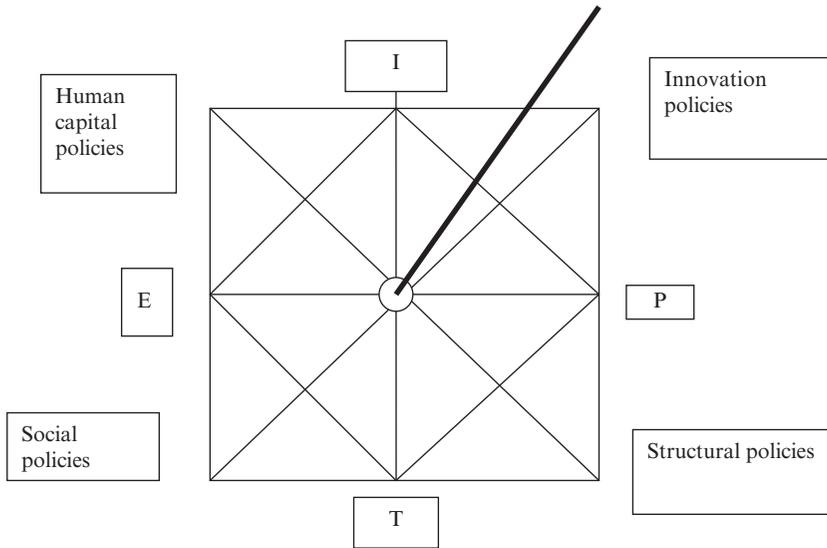


Figure 13.3 The sundial of industrial policy: the EPIT framework

development in a circular process, or virtuous spiral: innovation determines regional development and social improvements, which in turn enlarge entitlements, allowing more people to take part in the development process that enables further innovation. The scheme is therefore essentially dynamic, not representing the development process itself but both the elements to take into account in the policy decision-making process as well as their links. These elements and their links indeed determine possible learning mechanisms. The scheme – entitlements, provisions, innovation and territory – comprises all possible public policies, as shown in Figure 13.3.

The overall area defined by the four elements in Figure 13.3 can be divided along the different axes drawn, thereby determining areas that show different focuses of policies. The IOP area is that of traditional industrial policies, consisting in measures to develop resources, such as infrastructure, financing for firms, and so on, and measures to promote innovation. The IOT area is that of social policies, since people are primarily part of territorial communities and their social well-being is intimately linked to it. New social policies also include the provision of learning capacity to workers and therefore extend to the whole IET area. Entitlements are another key element of not only social policies, but also human capital policies in the sense of training and education. Providing the population with the relevant skills is indeed essential to industrial

and economic development. The ETP area is that of urban and environmental policies. If the axis leans towards the provision pole, away from entitlements, the risk is to reach what can be called a 'Chinese syndrome', namely, growth of provisions without entitlements, hence growth that is unsustainable from a social point of view because economic growth is not supported by redistributive and participative justice. In contrast, if the axis is shifted towards entitlements, without simultaneously developing provisions, we have a high social demand that cannot possibly be fulfilled, given the lack of resources. If the axis is pushed greatly towards innovation, the risk is that of a non-embedded change, while pushing excessively towards the territory risks leading to conservation without the ability to manage change.

The sundial therefore expresses the necessity of coherence between the different levers. It is not necessary that all countries be perfectly in equilibrium, but if the sundial leans towards one pole or another it can indicate necessary policy adjustments and possible actions for policy-makers so that their long-term vision and, consequently, implemented instruments become more coherent and effective. These are industrial policies after the crisis: the capacity to view in the long term the complexity of society and to define policies that could guarantee their economic, social and human development. The axes can also change over time or according to new emerging priorities. For instance, the terms implicit in the EU Lisbon Strategy may be better termed as knowledge instead of innovation (because of its emphasis on the knowledge-based economy where not only innovation, that is, knowledge creation, is essential but also the transfer and accumulation of existing knowledge), and environment (stress on environmental concerns) instead of territory. Instead of entitlements, related to the right of access to collective goods, the concept of capabilities, defined by Amartya Sen (1982), is in the sense not only of access rights but also the capacity and the competency necessary to execute the rights. Provisions become human capital, which is key to activate the other three elements.

Development depends both on the extension of the basis, that is, of the four elements (knowledge, environment, capabilities and human capital), and on the coherence between the instruments that the state, at different levels (regional, national and supranational), implements in order to develop and coordinate the four key elements. The sundial therefore represents a holistic approach to industrial policy, trying to understand the mechanics of the whole in which industry is a component part in order to favour sustainable development, that is, industrial development that is compatible with social development and equity and environmental preservation for future generations.

#### 4. INDUSTRIAL POLICIES AS LONG-TERM STRATEGIES: SOME EXAMPLES

We wish to illustrate our industrial policy framework using a few examples. These examples show the necessary coherence between the main pillars of the sundial we have drawn above, but are not used to identify a single optimal path. In fact, it is important to stress that there is no single path to long-term, sustainable industrial development but different possible routes, one of which may be chosen. We suggest that this choice can be helped by the sundial that expresses the required coherence for development to be sustainable and contributing to civil as well as economic development. We illustrate this view taking three country cases. We start with China and Brazil. The growth of the emerging countries is indeed, as already emphasised in this book, the most important aspect of the twenty-first century. Since the 1990s, these countries are guiding the growth of the world economy. For China, we focus on a particular region, Guangdong and the area of Shenzhen within it. The third country we mention is South Africa, because it is an interesting example of lack of entitlements for a long time, followed by a sudden extension of rights that continue creating tensions owing to the lack of equal distribution of provisions.

##### China

In China, Shenzhen is the city which grew most rapidly in the past 30 years. In 1978, Shenzhen was a fishing' village, closed behind the frontier that separated the Chinese People's Republic and the booming British colony of Hong Kong. The Shenzhen district had then 20 000 inhabitants and was the southern part of the Guangdong province, namely, the wide area on the delta of the Pearl River, whose capital Guangzhou, Canton, had been, in the eighteenth century, the port of entry of the western world into the Chinese empire, characterised by corruption and political dependence about which Adam Smith, in the *Wealth of Nations*, mentions the depravation. However, during the Mao era Guangdong became the area with most rapid industrialisation of the People's Republic, based on heavy industry.

At the end of the 1970s the policy of economic zones was started in China, and the first of these zones was created in Shenzhen in 1980. Economic zones are special areas where specific rules are implemented in order to support high growth rates. The main objectives are to attract foreign capital and to favour the creation of manufacturing activities not only thanks to low-cost labour but also to normative and fiscal conditions

specific to the zones that make their product internationally competitive. The economic zones can thus manufacture products that are exported to the rest of the world, on the basis of a sort of social dumping that can only be temporary.

Shenzhen was chosen by Deng Xiao Ping as the first economic zone with the idea that it could constitute, thanks to its geographical location, the productive basis for the island of Hong Kong. From then on, the Shenzhen economic zone has grown at very rapid rates, reaching 13.5 million inhabitants and attracting investments amounting to about \$30 billion. The Shenzhen Stock Exchange has operated since 1990 and illustrates the strong development of the financial sector in the city and region. From an urban point of view the city expanded in two directions, one towards Canton, with the development of satellite cities increasingly integrated thanks to a railway and metro network that link the whole delta, and the other towards Hong Kong. The integration process is so strong that a unique metropolitan context has been considered since 2007 and would constitute the third largest metropolitan area in the world, after New York and Tokyo. From an economic point of view the development of Shenzhen is supported by a strong concentration of high-technology investment, in particular by multinationals in the electronic sector, together with commercial activities in the port which is integrated with those of Canton and Hong Kong.

The extremely high growth has generated numerous problems, despite the regulation provided by the necessity to hold internal work and residence permits – so-called *hukou* – that limit the residence period within the economic zone. However, it is estimated that about 70 per cent of the Chinese workers employed in the zone do not hold *hukou*, so that they have to go back to the countryside after finishing their working contract. Parallel cities for temporary workers are also developing. Such a complex urban development experienced two crucial periods. The first period is the period of the definition of the special economic zone and of the first housing development centred on the growth of industrial areas with rather precarious residential areas. In the second period it has been necessary to structure the city through urban interventions that articulated service and residential areas when the economic zone was becoming more and more high technology. In particular, new universities were created, such as the Shenzhen University, the Shenzhen Polytechnic, the Shenzhen Graduate School of the Beijing University, the Shenzhen Institute of Information Technology and the Southern University of Science and Technology.

The very rapid growth of the urban area inevitably created social problems, in particular regarding criminality. Another important type of

problem has been created as regards the environment. Such a rapid and extensive growth has created many pollution problems, not only air pollution but also water and soil pollution. The Shenzhen government therefore decided to face the social and environmental problems by designing a long-term strategy of industrial development. International experts<sup>2</sup> and business representatives, including representatives of foreign multinationals, were invited to identify the long-term development issue of the area and suggest solutions. The reflection carried out led to the identification of three critical issues:

1. The need to increase the quality of production and the required adjustments in education and research, hence the relationship between industrial, technological and educational dynamics.
2. The definition of environmental priorities and the redefinition of urban areas in order to address pollution and modernisation problems.
3. The need to address social problems and to extend entitlements, in particular freedom of expression, pushed by the media in Hong Kong which are still relatively free.

The case of Shenzhen therefore shows how the issues of industrial policy, urban policy and technological policy are interrelated (lesson 1). It also shows the infinite set of actions that can be implemented at the different levels of policy, from town to province, region and nations, the coherence of which can only be guaranteed by the definition of a strategy for long-term industrial development (lesson 2). A third lesson to draw from this case is that a long-term vision of industrial development can only be sustainable if entitlements are developed together with provisions. The whole country of China is trying to sustain development on the basis of the growth in provisions, without regard for entitlements, namely, civil and political rights of citizens. Political elites of the Communist Party indeed take all decisions at all decision-making levels. This development, exclusively based on provisions without regard to entitlements, has a high cost, that is, the obligation to maintain high growth rates in order to avoid social unrest. China after the crisis will be a more technological, more dynamic and more educated country, but also a country with higher internal inequalities and therefore more unstable, although the country will have to show more responsibility and participation in global economic and political stability since it is one of the foremost world powers. This extremely high contradiction will have to be resolved. In terms of our sundial, Chinese development can be represented by the arrows, which will have to be moved to the left and towards the bottom in order to become more sustainable (Figure 13.4).

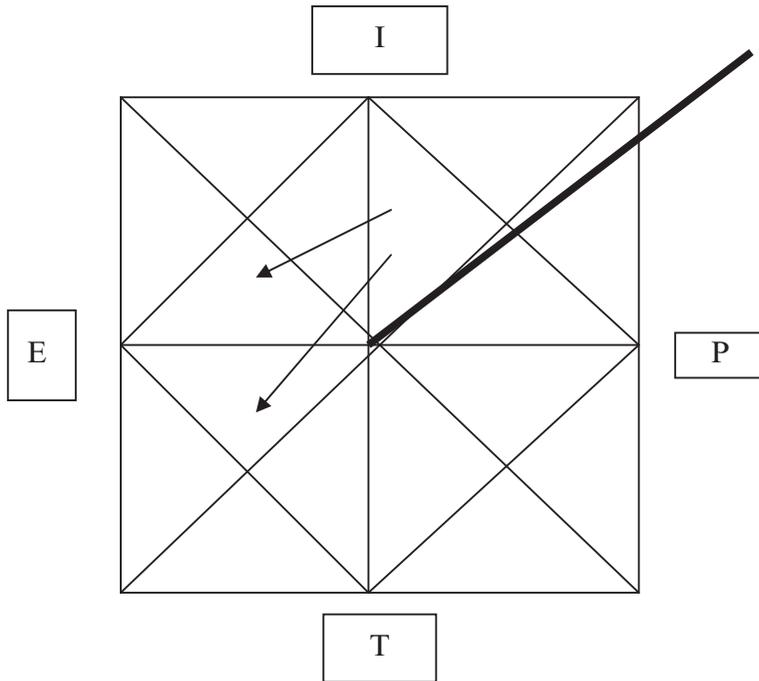


Figure 13.4 *Sundial of Chinese development and necessary changes (arrows)*

### **Brazil**

Brazil is today part of the BRIC, that is, the countries which inverted the dynamics of the world economy at the beginning of the twenty-first century. In 2009 Brazil was the world's eighth largest economy in terms of GDP, and ninth in terms of purchasing power parity (World Bank). After a long history of colonisation and political instability after independence, Brazil has been a democratic government since 1985, after a period of dictatorship. Political and economic stability have been ensured since then. President Cardoso governed the country between 1994 and 2002 and ensured a return to economic stability; Lula da Silva has been governing the country since 2002, implementing an interestingly balanced strategy of industrial development. The Lula government courageously pushed public spending and sustained the poorest families' income by raising minimum wages and pensions. This implied a significant rise in internal demand both from households and from the state. Investments also increased so that overall the economy experienced a boom.

Without going into details in this short overview, it is enough to say that Brazil provides an example of balanced industrial development in the sense that both effective rights (entitlements) and provisions rise simultaneously. In addition, entitlements and provisions contribute to development in a complementary way, so that development is robust and sustainable in the long term. This synergetic development of entitlements and provisions not only comprises social cohesion but also regional cohesion, which is a concern of the Lula government from the start. Regional cohesion means that the North-Eastern States must develop in order not only to eliminate the historical social injustice of the country, but also in order to generate a new level of economic development that could benefit to the whole country.

This strategy however requires a long-term vision where investment in large infrastructures, such as the Porto Suape, are viewed not only as development gears able to generate the growth of the areas around the port, but also become the basis for the development of trade with the rest of the world, thereby turning these regions into worldwide hubs of exchange. Hence the Brazil of Lula seems to represent an attempt to simultaneously develop rights and resources, ensuring cohesion between economic development and democracy (Figure 13.5).

## South Africa

The new South Africa started in 1994, with the end of apartheid and the change in the Constitution. The history of the country originates with the arrival of Dutch colonists in 1652, whose objective was not to create provinces of their home country abroad, but to create new independent states. Fighting against local populations, the Dutch colonists (Boers) expanded along the coastal area around Cape Town and Natal Province. When Great Britain attempted to put these areas under British dominance, lured by the discovery of diamonds and later gold, the Boers were pushed further inside the country, crossing the Vaal river, where they founded the Transvaal and the Orange Free State.

After a new war with the British, these states were conquered and the Union of South Africa was created, which got independence in 1910, taking the name of Republic of South Africa. Segregation became institutionalised and the government established three classes of racial stratification: white, coloured and black. The Republic was a state of the white, which reached standards of living comparable to western countries' standards, while coloured people were discriminated against but involved within democratic life, and blacks were left as class without rights. After World War II, foreign governments started to boycott South African

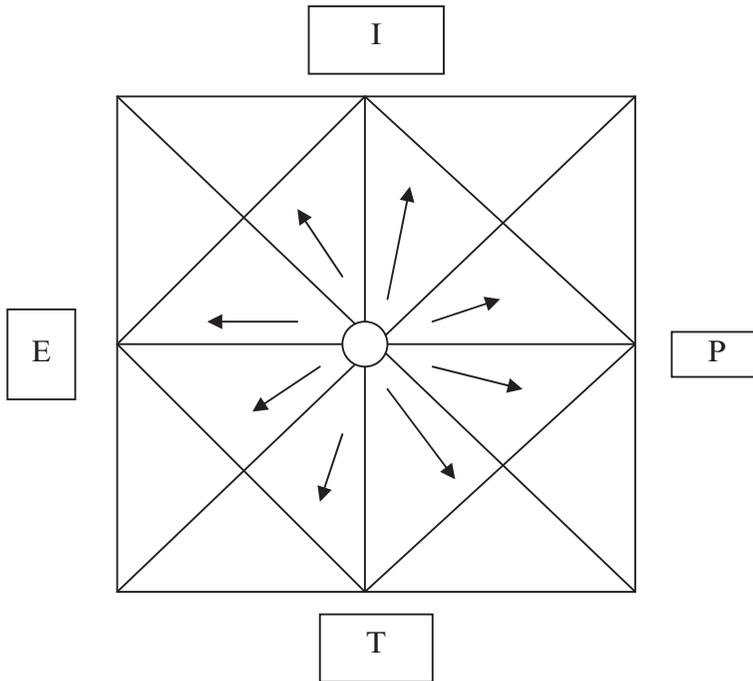


Figure 13.5 *Sundial of Brazilian development*

products in protest against apartheid. Within the country, the black population started to organise and movements against apartheid expanded, of which Nelson Mandela, incarcerated for 27 years, remained a reference and leader.

At the beginning of the 1990s, in the extraordinary period of history where the Berlin Wall and bi-polarism ended, even apartheid came to an end. The government took the first step towards this in 1990 by lifting the ban on the African National Congress and other political organisations. Nelson Mandela was freed and soon became Head of State. Civil and political rights were recognised for the whole of the population, but the economy remained in the hands of the white population.

Today South Africa remains imbalanced since entitlements have been provided to the whole population but provisions are still unequally distributed, raising discontent among the poor population. Here the problems are essentially social and show that entitlements cannot be extended if provisions are not, hence the necessary balance between the two (Figure 13.6).

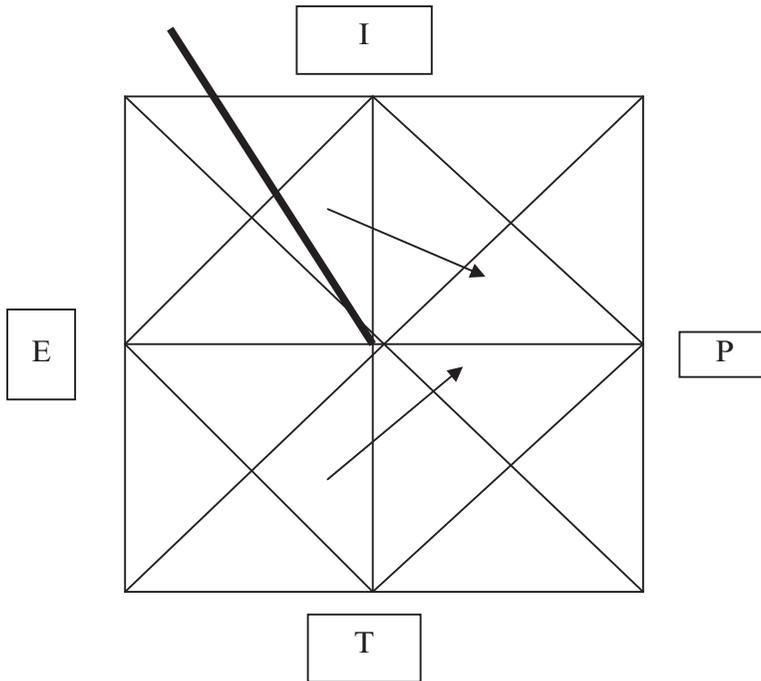


Figure 13.6 *Sundial of South African development and necessary changes (arrows)*

## 5. FINAL REMARKS

Industrial policies therefore essentially constitute a vision of the future. Different visions are possible, but each choice involves opportunities and risks. There is a coherence issue in defining the vision and in making the specific policies. Coherence between policy actions and between policy levels requires policy-makers to have broad view of the economic system in which the particular development problem arises (holistic approach). This, in turn, requires going back to the basics of production organisation (to understand complexity of the economic system and identify appropriate gears of development). Rethinking industrial policies today means to redefine the basic concepts of collective actions and to put them in a dynamic perspective.

**NOTES**

1. The above-mentioned research and volume has been condensed in this chapter version, which was presented during the San Sebastian meeting on 'Innovative and Competitive Territories', 11–13 September 2010.
2. One of these expert was Patrizio Bianchi who was Economic Advisor to the Governor of the Guangdong province in 2000.