

This is a preprint version of the book chapter published in Sunna, C., & Gualerzi, D. (Eds.). (2015).

Development Economics in the Twenty-First Century. Routledge.  
<https://doi.org/10.4324/9781315621449>

## **Chapter 2 - Albert Hirschman: Unbalanced growth theory**

Davide Gualerzi, Università di Padova.

1. Introduction
  2. Hirschman and development economics
  3. Hirschman on development
  4. Balanced growth
  5. Development as a chain of disequilibria
  6. Additional features of unbalanced growth
  7. Views on unbalanced growth
  8. Unbalanced growth and structural change
  9. Development, linkages and market formation
- Concluding remarks and research questions

### **1. Introduction**

The chapter focuses on the nature of the development process and in particular on its main feature, that of being an unbalanced growth phenomenon. The notion of unbalanced growth is associated especially with the work of Albert Hirschman and *The Strategy of Economic Development* (1958). Based on the six years Hirschman spent in Colombia the book lays out a really seminal view of development as a chain of disequilibria opening a research agenda that has been largely set aside today. The problem of development in the world economy of the 21st century is certainly different from that observed by Hirschman in the 1950s. Nevertheless induced investment, complementarities and linkages effects are key aspects of today's development patterns. That is why the question of unbalanced growth reaches into the fundamental problems lying ahead for emerging economies.

In the preface to the latest edition of the 1967 book on development projects Hirschman explains that the views on development in the *Strategy* were later complemented by the examination of the political processes (*Journeys Toward Progress*, 1963) and the critical evaluation of the methods and operational tools for development (*Development Projects Observed*, 1967, 1995). He therefore refers to these works as composing a "trilogy" having the "overriding common intent to celebrate, to 'sing' the epic adventure of development – its challenge, drama, and grandeur." (1995, p.viii) In the same preface he explains that the examination of development projects brought to completion the work on development, but at the same time it "became the bridge the broader social sciences themes of my subsequent writings." (p. xii).

Hirschman has indeed gone in many different directions in his successive work, going beyond development economics, discussing for instance “Responses to the Decline in Firms, Organizations, and States” (Exit, Voice, and Loyalty, Harvard, 1970), or the private/public “cycle”. (Shifting Involvements, 1982).

In line with the general purpose of bringing back into today’s debate the main insights of early development economics we first point out in section two Hirschman’s peculiar position within development economics. In section three we outline Hirschman’s general view of the development process that stands as the fundamental premise for unbalanced growth. In sections four, five and six we examine his argument on unbalanced growth and the contrast with “the balanced growth doctrine”. Section seven examines other views on unbalanced growth, most notably those of Paul Streeten. Sections eight and nine elaborate on the relationship of unbalanced growth with modern theories of growth and structural transformation. The close similarities suggest a possible direction along which to develop Hirschman’s views on the development process. In particular, Hirschman’s focus on investment decisions indicates that a fruitful line of investigation could be the problem of market formation within developing economies. In that light the analysis of complementarities affords a development of the demand side, considering more explicitly consumption complementarities.

## 2. Hirschman and development economics

A prominent figure among the early theorists who were émigrés from Continental Europe,<sup>1</sup> Albert Hirschman’s work is noticeable for the peculiarity of his intellectual development. Lying in between economic and political theory, a constant in all his work, arguably explains the originality of his views. The “life history” written by Jeremy Adelman (2013) helps to better understand the very special nature of the intellectual journey of Albert Hirschman and the process shaping ideas. Adelman mentions how in his visit to Francois Perroux “He wanted to draw attention to the ways in which perceptions of obstacles were sometimes thornier than the obstacles themselves” (p.435); he recalls Hirschman words about the “experience of what it is to think dangerous thoughts” referring to his understanding of Machiavelli. (p.491). He also describes the number of steps and different influences leading to the study of “disappointment “ as a key force for public action and therefore a focal point for social sciences (Chapter 18).

The “Strategy of Economic Development” (1958) is one of the earlier works by Hirschman in the stage in which development economics was rising and one of the most important seminal contributions in the field. The distinctive point is the notion of unbalanced growth.

As for the other seminal contributions (some of which are examined in this volume) it is the result of the intellectual environment and the particular circumstances of the period from the end of WWII to the 1960s. That is what Paul Krugman calls it “high development theory”. (2005)<sup>2</sup> arguing that its virtual disappearance from the economic discourse largely depends on the shift in method that occurred in economic theory. Model building became the standard of the profession, and in the process the development theory of Hirschman and Myrdal became to economists “not so much wrong as incomprehensible.” (2005, p.1) We can note however that Krugman reconstruction of development economics is very much out of line with what Hirschman argues. Krugman regards as “the essential high

---

<sup>1</sup> This is one of the areas of economics where the contributions by German-speaking émigrés are most significant. (Hagemann, 2005, 2007)

<sup>2</sup> I am here making reference to the article in Krugman web site *The Fall and Rise of Development Economics*, dated 2005. The original article was published in 1993. (Krugman, 1993)

development model” (p.2) the Rosenstein-Rodan’s Big Push argument. But that is precisely the essence of the balanced growth doctrine Hirschman criticizes.

Stiglitz (1993) has argued that the lack of formal models cannot tell the story of the decline of development economics. It was the changing intellectual and political context the key element explaining. “I would submit that a far more plausible explanation for the seeming demise of high development theory is that the same currents that led to the dominance of free market ideology in the United Kingdom and the United States were reflected - at least in the United States - in the dominance of those ideas in certain intellectual circles. In short, it was as much the market demand for ideas as the supply of models that was crucial.” (p. 42)

Interestingly Hirschman also (1981) has an explanation for the rise and fall of development economics. He argues that the sub-discipline, as he calls it, came into being as a result “of an a priori unlikely conjunction of distinct ideological currents.” Although extraordinarily productive at one point, that created problems subsequently. “Because of its heterogeneous ideological makeup, the new science was shot through with tensions that would prove disruptive at the first opportunity. Secondly, because of the circumstances under which it arose, development economics became overloaded with unreasonable hopes and ambitions that soon had to be clipped back.” (p. 2)

### **3. Hirschman on development**

Stiglitz argues that at the core of development theory are still the questions of externalities, technological progress, and returns to scale. Since the point is not the lack of models, what are then the fundamental issues that they miss?

We would argue that it is precisely a theoretical conception of what development is about. That is what we find in Hirschman and it got lost in the recent intellectual history. The non-formalized, discursive approach at theorizing favored by Hirschman was not the stubborn adherence to an “archaic” method, as suggested by Krugman, but the effort to define the concepts and the framework that are indeed fundamental to the analysis of development. Intellectual progress following the original lines set out by Hirschman should start from what is peculiar and unique to his approach.

In the Strategy of Economic Development it is apparent that every aspect of development, as well as the role of government, the public sector and institutions at large, depends on the very understanding of the development process. In a nutshell: development depends on inducements mechanisms rather than on identifying obstacles, prerequisites, and missing factors. The point is not how complete and sophisticated that list is, the point is how you break out of the underdevelopment equilibrium. Hirschman observes that the focus shifted from natural resources to capital, to entrepreneurial and managerial abilities and the early notion of human capital. When these failed to provide an explanation the attention turned to the attitudes and value systems. These are important but they are not the fundamental point either. These factors, as much as savings and productive investment, are “as much a result as a cause of development.” (1958, p.3)

The methodological premise of the analysis is in the very first sentence of the preface. Hirschman quotes Whitehead (Process and Reality, Macmillan, New York, 1930): “The elucidation of immediate experience is the sole justification of any thought; and the starting point for thought is the analytic observation of components of this experience.” The book, Hirschman explains is based on his own immediate experience “in one of the so-called underdeveloped countries.”

The “preliminary explorations” as the title of the first chapter reads focuses on the “primum mobile”, the key to the beginning of the development process: “development depends not so much on finding optimal combinations for given resources and factors of production as on calling forth and enlisting for development purposes resources and abilities that are hidden, scattered or badly utilized.” (p.5) Thus a “binding agent” (p.6) is needed to get the development process started. The preliminary exploration concludes stressing that the investigation concerns the search of effective inducement mechanisms capable of improving and speeding up decision-making. Not the deficiency of any particular factor, but “in the combining process itself” (p.25) is the obstacle to be overcome.

It must be understood that underdeveloped countries are latecomers; their development is bound to be “a less spontaneous and more deliberate process than was the case in the countries where the process first occurred.” (p.8) Gerschenkron focused on the development process “as a deliberate attempt at catching up on the part of various groups of economic operators” (ibid.). The development process is conditioned by the “relative degree of backwardness” with respect to the early comers, i.e. countries in Continental Europe where industrialization had first taken off.

Hirschman however does not share Gerschenkron’s point of view on what can set in motion economic operators to bring forward the reforms and the changes in the institutions and values system necessary for development. He questions in particular the idea that operators “really know all the time what needs to be done to shed backwardness ... and are therefore able to weigh the costs against the expected benefits of development.” (p. 9) He notes: “What is a hindrance to progress in one setting and at one stage may be helpful under different circumstances.” He gives the example of the institution of the extended family. The point is that underdeveloped countries have little knowledge of the path ahead and what is needed to achieve the benefits of economic progress. It is only along the way “rather than a priori that they will determine which of their institutions and character traits are backward and must be reformed or given up.” (p.10)

It follows that also the binding agent emerges within a “growth perspective” that “can only gradually be acquired in the course of growth.” (p.11). That includes the desire for economic growth but also “a perception of...the road leading toward it.” (ibid.) The breaking of the “interlocking vicious circles”, to use the expression by Singer (1949), takes place at the level where all the difficulties of human action “begin and belong, in the mind.” (ibid.)

## **4. Balanced Growth**

### **4.1 Supply and demand requirements**

Economic development is primarily overcoming “stagnation” via savings and productive investment. To break out of the underdevelopment equilibrium theorists such as Rosenstein-Rodan, Nurkse, Lewis, Scitovsky focused on balanced growth. But balanced growth is not a useful abstraction; it is misleading and actually impossible.<sup>3</sup>

Paul Streeten offers the following definition of balanced growth: “(Balanced growth) is simultaneous investment in several industries in conformity with the pattern of consumers’ demand and of different industries’ demand for each others’ products.” (1959, p.176) This is the basic idea Hirschman criticizes. The theory argues that different parts of a developing economy have to grow in step to avoid supply difficulties or meet demand requirements. Rosenstein-Rodan and Nurkse stress balance in demand; Scitovsky and

---

<sup>3</sup> “...it is only fair to warn the reader that I heartily disagree with the ‘balanced growth’ doctrine.” (p. 50)

Lewis balance in the supply side. To avoid these problems a large number of new industries must start at the same time, so that they each others' clients. That is the "big push". (p.51) In so doing the theory "superimposes a new self-contained modern industrial system to "an equally self-contained traditional sector." (p.52) Rather than facing the problem it assumes something totally unrealistic. How could an underdeveloped economy master the managerial and entrepreneurial skills needed for such a process? Even if planning and the state are brought into the picture the tasks "simply exceed the capabilities of a society, no matter to whom they are entrusted." (p. 54) That is why Hirschman argues "...the theory fails as a theory of *development*."

The other argument for balanced growth concerns external economies. Only a coordinated plan of investment could ensure the appropriation of the external economies generated by the single entrepreneur. The state should step in with centralized investment planning. However, only external economies should be internalized while external diseconomies and social costs should remain external to the central authority. Hirschman asks: can it be done? Although realistic in some case the general idea behind is not. "Here again, the image...must have been that of a backward economic sector which would be pretty much left alone, and a brave new sector to be built from the ground up and in isolation". (p.56) At the root of the problem is the fact that *in general, economic development means transformation rather than creation ex-novo*. There is a second point concerning transformation. Traditional ways of living and producing are inevitably disrupted. The rise external diseconomies and social costs then should not be underestimated. That might affect the net results of development.

#### 4.2 Scitovsky and balanced growth

The peculiarity of Hirschman views is further highlighted by his criticism of Scitovsky. Although more known for other contributions Scitovsky did write extensively on economic development. Hirschman makes reference to his work several times in his Strategy of Economic Development.

In line with most of the theory Scitovsky (1951) maintains that induced investment creates additional requirements for the production of other commodities and lowers the marginal costs of yet other commodities because of technical complementarities. However, Hirschman argues, whereas in developed economies these effects "are expected to take place automatically and almost instantaneously" in underdeveloped countries they are instead "absolutely basic in determining the expansive path of the economy". (p.42) They deserve therefore much more attention and analysis.

Scitovsky (1954) stressed "the need for the different parts of a developing economy to remain in step to avoid supply difficulties." (p. 51) Underneath is a fundamental premise: "balanced growth theory results from comparing the initial point of underdevelopment equilibrium with another point at which development will practically have been accomplished." (p.65) Furthermore: Scitovsky (1954, pp. 148-9) argues that only at the stage in which a new equilibrium implies the "elimination of investment" profitable investment is also the socially desirable amount. But he, Hirschman observes, "shows a certain impatience" with the process that lies between two equilibrium points. However that is precisely the process of development, and that does not admit shortcuts. Suggesting, as Scitovsky does, "to reach in a single jump a new point of equilibrium where 'elimination of investment ' has been accomplished." (p. 66), is precisely the kind of shortcut one should avoid. That highlights Hirschman concludes the fundamental problem of equilibrium analysis; it does not reach into the question of development. "That nightmare of equilibrium economics, the endlessly spinning cobweb, is the *kind* of mechanism we must assiduously look for as an invaluable help to the development process." (p.66) Finally, with respect to the appropriation of external economies Hirschman recalls that according to

Scitovsky entrepreneurs are mistaken in their calculations concerning investment since they are eventually going to be recipients of pecuniary external economies. But then of course that presupposes the existence of a central authority, and that goes into the chapter of planning and state intervention, which needs to be examined and not simply assumed.

To be fair Scitovsky himself (1987, p.57) says, “the shortcoming of balanced growth were not forgotten” referring to his critical assessment. (Scitovsky, 1959) The question is not “the desirability of matching the structure of output to the structure of domestic demand” (ibid.) but rather the best way to achieve it. Hirschman he says thought that developing economies could aim at balanced growth only in the long run, through a sequential process that he called unbalanced growth.

## 5. Development as a chain of disequilibria

Hirschman admits (see below) that the notion of balanced growth might be a useful in certain circumstances. But the balanced growth doctrine is certainly not the way to approach the development problem. In the Strategy it is precisely the criticism that leads to the alternative. The problem is how development comes about. Focusing on investment decisions Hirschman elaborates the notion of development as a chain of disequilibria.

The pure model of balanced growth rests on the simultaneous start of many activities. A less rigorous but more realistic notion implies that “the various sectors of an economy will have to grow jointly in some (not necessarily identical) proportion... In this form, the balanced growth theory is essentially an exercise in retrospective comparative statics. (p.62) Of course argues Hirschman growth has proceeded in this way, with growth “communicated from the leading sectors of the economy to the followers, from one industry to another, from one firm to another...” But rather than the end result we should look at the “seesaw advance”. The main advantage is over balanced growth is that “it leaves considerable scope to *induced* investment decisions and therefore economize our principal scarce resource, namely, genuine decision-making.” (p. 63)

For Hirschman the fundamental question is that of *induced investment*. He regards the investment response to disequilibrium as a more attainable goal than the ex-novo investment required by balanced growth. That is true regardless of the combination of market and nonmarket forces (public authorities) that might be at work.<sup>4</sup> This is simply a more realistic and operational way to look at development, which appears then as a chain of disequilibria. Whether or not they induce growth depends on circumstances that are of various nature. But this is the mechanism we should focus on. It requires a notion of induced investment appropriate to the study of development; thus the focus on production complementarities. The complementarity effect, argues Hirschman “provides us with a new concept of *induced* investment“. The conventional notion rests on the response of investment to past increases of output. That is valid only in developed economies, with a fully built up industrial and agricultural structure.

Hirschman draws a fundamental distinction between the role of investment in developed and developing economies. Whereas “*The big dynamic changes in developed economies are expected to originate in ‘autonomous’ investment*”, it is not realistic to expect that in underdeveloped economies. Instead “investment that is induced by complementarity

---

<sup>4</sup> “There is no implication that any disequilibrium whatsoever will be resolved by some combination. But if a community cannot generate the ‘induced’ decisions and actions needed to deal with the supply disequilibria that arise in the course of uneven growth, then I can see little reason for believing that it will be able to take the set of ‘autonomous’ decisions required by balanced growth.” (p.64)

effects may help to bring about a real transformation.” (p.70)<sup>5</sup> Complementarities are closely linked to the idea that in underdeveloped economies “investment is undertaken because for one reason or another the ensuing output is expected to find a market.” (ibid.) But then every investment is in a sense induced and that blurs the distinction between induced and autonomous.<sup>6</sup> To solve this problem Hirschman suggests to rank investment projects with respect to external economies. Investment creates external economies but also appropriates external economies. Induced investment can be more clearly identified with projects that are “net beneficiaries of external economies”. (p.71) That is however a hard-to-measure criterion. Therefore: “we shall continue to speak of investment inducing other investments and shall simply be aware that there are widely varying degrees of ‘inducements’ “ (ibid.)

## 6. Additional features of unbalanced growth

The unbalanced growth approach above concerns the sectoral-industrial analysis. But it is of more general relevance. It concerns for instance the unbalanced development between agricultural and industry. But economic development is for its very nature unbalanced also spatially; it proceeds by creating growth poles. That results in the problem of the lagging-behind regions. The polarization effects are examined in the last chapter of the strategy of economic development (“Interregional and International Transmission of Economic Growth”) where Hirschman returns to the question of the role of public policy and in particular of public investment. “The most obvious manner in which economic policy affects the rates of growth of different parts of the country is through the regional allocation of public investment. Three principal patterns of allocation can be distinguished: dispersal, concentration in growing areas, and attempts to promote the development of backwards areas. “ (p. 190) The deliberate policy attempting to promote the development of lagging-behind regions leads to consider the “optimal institutional arrangements” (p.199).

Institutions and institutional change are central in the recent literature on development theory. Modern political economy is trying to go beyond an almost exclusive focus on markets to discuss also the role of institutions. (Acemoglu, Johnson, and Robinson, 2005). Ha-Joon Chang (2006, 2007) has also insisted on this aspect. On the other hand, the debate on the role of the state in development has been re-ignite by the analysis of late industrialization (Amsten, 1989, 1991).

Early development economics focused on the cumulative causation arising from an initial stimulus. That is why it insists on the role played government and public investment. But this again would mean singling out one aspect and put it at the basis of the development process. This contrasts with Hirschman view of the development process. As pointed out earlier only the development process itself can define the necessary changes in institutions. They cannot be identified a priori for the institutions most conducive of economic growth are not known in advance and there is no already set road to development.

As for the role of government Hirschman suggests to distinguish governmental activities into two broad categories, that of “inducing” and “induced” activities and that of “unbalancing” and “balancing” functions, therefore assigning to the government a role that again should reflect the priorities dictated by the development process itself: “...these two

---

<sup>5</sup> In his example, more demand for beer may not only lead to an increase of brewing capacity but to the establishment of a brewery.

<sup>6</sup> For an interesting discussion of the two concepts see Melville, 1952.

tasks may perhaps serve to give ministers and governments a clearer conception of their role within the development process.” (p.204-205) What follows is a criticism of the attempt to draw comprehensive development plans. “The attempt at comprehensive programming usually exacts a high price in terms of articulateness and persuasiveness, qualities that are essential for the plan’s ability to come to grips with reality.” (p.205)

Hirschman further reflection on the argument is contained in *Development Projects Observed* (1967, 1995). Here is skepticism about comprehensive planning and planning techniques is grounded on the observation of development projects. The principle of the “hiding hand” was he says “close to a provocation” compared with the operational character of the technical methods for allocating funds to various projects. (p. viii) Indeed nothing could be less ‘operationally useful’ (p. ix) he says. But then again one must define the main purpose of the analysis.

While the first chapter is a prologue “to endow and surround the development story with a sense of wonder and mystery that would reveal it to have much in common with the highest quests undertaken by humankind.” (p.ix), the other chapters do offer “hints, suggestions, and propositions.” (ibid.) of more practical relevance. The more practical suggestions concerning the elaboration on uncertainties, “latitudes”, projects design and evaluation, follow from his previous work and therefore much from the *Strategy*.

Balanced growth is mentioned a few times. Although useful for some planning decisions (in particular when the risk of an inadequate demand for a project output is high) it is an obstacle when considering the basic principles of R&D strategy (p.78). In particular “aiming at a reduction of demand uncertainty through the balanced-growth technique ... may well increase the supply uncertainties because of the resulting impossibility of applying the R&D strategy.” (p.84)

## **7. Views on unbalanced growth**

Paul Streeten is possibly the second most important advocate of unbalanced growth. His argument on unbalanced bears many similarities to Hirschman views, but it is also different in at least two counts. It is less imbedded in a view of development, and more in the broader context of its meaning within economic theory; second, it is more prudent on the contrast between balanced and unbalanced growth, offering a careful review of the advantages and disadvantages of the two concepts.

In his 1959 article he observes that Allyn Young advanced a notion of balanced growth later modified by Rosenstein-Rodan. He argues that Allyn Young replaced Smith’s division of labour with inducement to invest and that “the conception of the market ... carries with it the notion that there must be some sort of balance, that different productive activities must be proportional to one another”. (p.167) The doctrine he says is widely accepted but “it is obvious that development means disturbing an equilibrium, upsetting a balance.” (p.170) His point is that “in certain conditions unbalance may stimulate rather than impair progress.” (p.171)

The case for unbalanced growth is then based on the way complementarities affect consumption and production. Streeten distinguishes between static and dynamic complementarities “The most important consumption complementarities arise ... in the process of rising consumption. Similarly, technical complementarities may arise or may become apparent only with the growth of knowledge and inventions.” (p.173) For consumption most important is that the “cost of imbalance”, due to indivisibilities or “anabolism of wants”, is associated with higher real income and therefore the opportunities for higher growth. The services of indivisible commodities can be bought, but



“consumption pro-rata, though not impossible, is more expensive. An individual who equates marginal rates of substitution to price ratios will be worse off than one who tolerates some imbalance.” (p.174) Furthermore, consumption complementarities “create pressure and a sense of deprivation, which stimulates and guide investment, and guarantee its profitability. Investment opportunities are created by new consumption opportunities which in turn result from unbalance.” (p.175) Indivisibilities play a central role also in production complementarities. Building capacity ahead of existing demand is justifiable because of economies of scale. But there is an even stronger argument: demand is stimulated by the unbalanced investment “by encouraging a cluster of activities” as in the case of railways. (p.180) The ultimate dynamic complementarities in production concerns invention and innovation. “...just as in consumption new voids open up as we move along the path of satisfying existing wants, so investment that is intended to fill existing gaps may lead to innovations that open new gaps.” (ibid.) In other words, the pattern of investment and innovation is stimulated by bottlenecks, but it is at the same time creating new ones calling for more innovation. “Necessity is the mother of invention, but invention was also mother of necessity.” (p.181)

Summing up: unbalanced development might be desirable when indivisibilities and costs of expansion are important, “higher incomes are created than would be in balanced growth”, (p. 182), incentives to invention are strengthened. Explicit reference to Hirschman Strategy is made when observing that unbalances highlight where action is needed, therefore economizing in a resource “often in short supply”, the power to take decisions.

In a rather prudent manner Streeten argues that in the presence of certain conditions unbalanced growth is a more successful strategy for development. Although in a sense desirable, balance may have to be given up as an overall strategy.

In a reply to Streeten Nurske (1959)<sup>7</sup> notes that that his interpretation “of the phrase ‘balanced growth’ is more limited and less rigid that he makes out to be.” (p.295) It applies to direct investment, not to overhead investment. Even in that case “balanced growth is necessary only if export demand is not ‘sufficiently’ expanding.” (ibid.) Adding the international dimension highlights also that “the complementarities in the make-up of additional consumption can then be implemented through international trade.” (p.296) In general, and this might be Nurske’s most far reaching observation, it is a good idea to distinguish between balanced growth as a method and an objective.

Streeten (and Hirschman) views have been called into question more forcefully by Nath (1962). He argues that balanced growth is a dynamic concept concerned with change over time. Hirschman “ridicules” balanced growth treating it as a static equilibrium but in fact it “is no more concerned with static equilibrium than the equilibrium rate of growth ... of a dynamic model.” (p.148). Hirschman criticizes balanced growth for requiring extended state action, but then argues that in some case government may have to take the first step. Coming to Streeten Nath argues that the argument about technical progress stimulated by unbalances is inconclusive; “balanced growth does not abolish shortages or scarcities, it only minimizes the social and economic upheaval that they may cause.” (p. 151) As far as the considerations that should guide investment priorities both Streeten and Hirschman come up with recommendations that are compatible with balanced growth.

In fact Nath defense of balanced growth adds to the understanding of two distinct perspectives on development and development planning. For in the end he argues that balanced growth is practically useful and ultimately “demands a programming approach to

---

<sup>7</sup> Ragnar Nurske died on May 6, 1959. James Tobin put together the few fragments of what was probably a longer reply.

economic development.” (p.152) That might not be the entire story, but is an important part of it.

In his reply Streeten (1963) dismisses much of Nath criticism on the ground it misses the point. Interestingly he argues that the main weakness of balanced growth is that final markets can be created without recourse to it, for instance by an expansion of exports. As for intermediate markets he recalls that Nurske himself came out in favor of unbalanced growth. (p. 67) On development planning he argues that unbalanced growth “as argued by Hirschman is consistent with, but does not require initial and continued planning.” It requires however a different kind of planning than that associated with balanced growth. But he concedes defects of unbalanced growth theory, such as the underestimation of the resistance to the changes called forth by unbalances, the excessive stress on investment decisions, the underplay of supply limitations. These defects he says were not absent in his earlier presentation. Indeed at the beginning of his reply he says that the controversy is no longer fruitful, and tells us: “My work in collaboration with Professor Gunnar Myrdal on problems of development in South Asia has clarified and changed my views...” (p.66, footnote)

He is referring to Myrdal’s book *Asian Drama* (1968). In the Preface Myrdal acknowledges Streeten contribution on “...developing and elaborating the criticism ...of the type of model-thinking that characterized the ‘modern approach’”. (p. xvii) In appendix two to the second volume we can read “...the main controversy respecting balanced versus unbalanced growth has little relevance for the problem central to this appendix: How South Asia countries should plan development. Both doctrines are essentially beside the point.” (p.1932) This seems more important than the extended and detailed examination of the problems in both approaches that follows.

## **8. Unbalanced growth and structural change**

Overall the “controversy” clarifies quite well the issues involved in balanced versus unbalanced growth theory. It highlights what seems to be Hirschman’s fundamental point: the development process is a disequilibrium process, further qualified by Streeten as a process that in given circumstances may be more favorable to growth.

The issues underlying the controversy have hardly resurfaced in the recent study of development. Nor there has been an effort to develop the insights provided by unbalanced growth theory. It is gone largely unnoticed that unbalanced growth bears a close resemblance to the dynamics that is the focus of the modern theory of structural change and long-term transformation. To be true the theoretical approach is critical of mainstream growth theory that has come to dominate even the field of development, now quite distinct from more broadly defined development studies.

Growth theory is mostly aggregate and theoretical; as such it almost neglects structural change. The changes of the economic structure are instead an almost defining element the studies of development, which are however mostly empirical studies. The theory of structural change is truly concerned with the relationship between change in the economic structure and aggregate growth; at the same time it is “theoretical”. It arises from the criticism of steady growth models and argues that non-proportional growth is the necessary condition for growth.

Luigi Pasinetti clarifies quite well the relationship between the theory of structural change and the study of development. Not only does he note that the early definition of structural change by Perroux became widespread and used particularly by “structuralists” in Latin America, but also that “The literature on ‘development economics’ has all inevitably been

concerned in some way or another with problems of structural change.” (1993, p. 9) He mentions the 'big push' (Rosenstein-Rodan, 1943), 'unbalanced growth' (Streeten, 1959), 'dual economies' (Lewis, 1954, Nurkse, 1953). Since those ideas are hard to formalize development economics has at present a poor reputational standing that among theoretical economists.

As for the empirical analyses of Kuznet and Chenery they never attempted any theoretical study of structural change: “...these scholars, on any synthetic presentation of their works, have always very sharply distinguished two separate fields of analysis and research, which they call 'complementary', but which rather uneasily, they keep separate, namely: the field of research concerning changes in the economic structure - which they connect with long-term development, and which they do not integrate into any theory- and the field of research concerning prices and markets, which they do explicitly connect with a specific theory - the Walrasian general equilibrium theory - but which they openly acknowledge as being unhelpful to the investigation of structural change.” (1993, p. 10)

Pasinetti structural dynamics is grounded on the idea that a changing structure of the economy is a response to unbalances originating from the different pace of technical change among sectors, i.e. different rates of productivity growth. Non-proportional growth concerns the supply side *and* the demand side. Therefore Pasinetti's structural dynamics opens an entire new chapter concerning the changes in consumption composition.

The role of unbalances is even more explicit the theory of Transformational growth. Transformational growth theory is presented by Edward J. Nell in several contributions.<sup>8</sup> Nell (1998) argues that in Keynesian perspective the analysis of accumulation must ultimately focus on demand growth. In other words, we need a theory of the growth of demand.

Demand growth is generated endogenously from within the process of transformation. It proceeds from the “structural development” of the market, i.e. changes of demand composition and the rise of new markets. market expansion driven by population and/or income growth can be accommodated in a steady growth framework. The expansion of existing markets (more or less mature) can be explained by the diffusion path of new products, shaped by the product life cycle, and the income-driven dynamics associated with the Engel curve. The more difficult problem is that of new markets. There are two major sources of new markets argues Nell: the evolution of the social structure and the development scenarios driven by the major facts of historical transformation (this is the case of the enclosures and the creation of an urban-industrial setting in the early stage of capitalism) or, in more abstract terms, by structural imbalances.

“[f]or growth to start up, the economy must become imbalanced ... [when] a structural imbalance is regularly reproduced it becomes a trend” (Nell, 1998, p.19). This creates an incentive and an opportunity for innovation of a specific type. Initially this will happen in a few industries and in a few places and these will become centers of innovation and investment (ibid., p.20). Notice that “this is not a one-time, exogenously caused imbalance; it is an imbalance which results from an ongoing process, an imbalance which will be reproduced if corrected” (p.19).

Transformational growth describes the growth pattern that characterized the development of advanced industrial economies as a result of the operations of the market.<sup>9</sup> At the

---

<sup>8</sup> The approach bears some fundamental similarities to that of John Cornwall (see, for example, Cornwall and Cornwall, 2001)

<sup>9</sup> Except the focus is not on the market's allocation function, but rather on its mode of operation as an institution of change.

center of the transformation is the development of the market, not purely its expansion. On the other hand Pasinetti structural dynamics inevitably poses the question of the rise of new markets. (Gualerzi, 2010, 2012)

## **9. Development, consumption complementarities and market formation**

Admittedly neither Pasinetti's structural dynamics nor Transformational growth are concerned with developing economies per se. There is nevertheless a striking similarity between development as a chain of disequilibria and the mechanism by which structural imbalances drive the process of transformation. The focus on demand composition, the evolution of consumption, and the formation of markets suggests a new perspective on induced investment and development linkages. New markets arising from the process of transformation address the question of the interdependence between investment decisions and the growth of interlocking markets. We find evidence for this new perspective in Hirschman's argument about complementarities and recalling that in developing economies induced investment is clearly associated with the transformation of the economic structure.

In line with the idea that a community should be capable of taking investment decisions when faced by bottleneck and supply constraints Hirschman focused on production complementarities. These are largely dictated by technical requirements. But the notion of induced investment can be more fully articulated considering also consumption complementarities.

Hirschman recalls that there is "a rigid type of complementarity in use (best treated as derived demand) " and "looser, 'developmental' type of complementarity (entrained want)" (p.68) An example of the first one is cement and steel rods in construction, an example of the second is new office building strengthening demand for various goods and services. He then goes on with an interesting description of what the complementarities might be: "from modern office furniture and equipment (still fairly rigid), to parking and restaurant facilities, stylish secretaries, and eventually perhaps to more office buildings as the demonstration effect goes to work on the tenants of the older buildings. Here again, failure to arrange for all these complementarity items from the start could be denounced as 'poor planning' ... an attempt to telescope the whole process would be futile because of the virtually infinite number of complementarity repercussions, and because of the uncertainties about a good many of them;" (p. 69, Italics added) In a footnote he provides some more details: "Development itself constantly extends the range of complementarities that are rigidly compelled and necessarily simultaneous: the optional equipment of one period becomes the standard equipment of the next, as a result of social and cultural pressures and needs rather than because of purely technological factors." (p.69, footnote 7)

It seems only fair to say that there is a certain amount of evidence on the importance of consumption complementarities and a hint in the effects they might have in the rise of new markets. The new possible research agenda on market formation can help to articulate the problem of the interlocking of markets in the consolidation of development. The uncertainties seem to be clearly associated with the open-end process by which consumption evolves and new markets arise. This line of investigation finds support in some passages cited above from Streeten 1959 article. They could be further analyzed in an effort to make more precise the role of market formation in the development process.

The plausibility of moving in this direction finds further support recalling the link between demand and supply adjustment that is so central to development economics. The fact that

they need to grow in step one another is the main reason for the big push. Hirschman argues that if we focus on the balancing of demand and supply at two equilibrium points we miss the fundamental aspect of the unbalance, which is that of providing the incentive to decision making. Consumption complementarities add to the motivations and the consequences of induced investment, while market formation proceeds from consumption complementarities and it is part of the process of transformation driven by induced investment.

Complementarities are no longer a purely technology matter but more accurately reflect the relationship between technology, investment and change of consumption patterns, i.e. the transformation associated with the development process. This clarifies Hirschman claim that transformation and development mean different things in developed and developing economies. In one case they are primarily associated to autonomous investment (creating new products, new processes, even entire new industries); in the other, they are the result of induced investment, with production complementarities setting limits according to technical feasibility and consumption complementarities guiding the rise of new markets. That completes Hirschman's view of unbalanced growth. It offers a more accurate view of development linkages and the role of investment

### **Concluding remarks and research questions**

In this chapter we focused on the highly original theorizing of the development process contained in Hirschman's Strategy of Economic Development and argued that a new research agenda can arise from it. That should be regarded as complementary to the study of institutions and the role of the state in today's drastically different circumstances than those in which development economics first arose. Hirschman's conceptualization of the development problem and his analysis of the development process as a chain of disequilibria takes us beyond balanced growth, which Krugman regards as the basic model of high development theory. Market formation, although hardly discussed as such, is implicitly contained in that basic model. (Gualerzi and Cibils, 2014). It is now more clearly grounded in the notion of development as chain of disequilibria.

More work is clearly necessary to focus on the question of today's development trends. However the relationship between investment and the expansion of the domestic market appears fundamental for the current phase of transformation facing the emerging economies. Fundamental aspects of the problem are consumption complementarities, the evolution of consumption patterns and the rise of new markets. That suggests an enlarged view of development linkages and a new research agenda.

Hirschman notes that the term "South", as opposed to the industrialized North, is taken to indicate the lagging behind regions. But then he observes that "The term 'South' as used here does not include undeveloped - i.e., largely unsettled – areas." (p.187) One can only speculate on what unsettled really means. This appears however a curious distinction in today's world. Especially through "globalization" there seem to be very few corners of the world that are not affected by "development". That calls for an approach that rather than backwardness looks at the interaction between development and underdevelopment. This of course is the question of dependency, which remains largely outside Hirschman perspective. That also might be subject to a rethinking.<sup>10</sup>

---

<sup>10</sup> It could be argued that precisely the focus on consumption patterns and market formation could provide the link between the unbalanced nature of the development process and dependency theory. Market formation proceeds indeed from the "importation" of a model of mass consumption and the ensuing transformation of the production and consumption sphere.

Revisiting the unbalanced nature of the development process and the notion of dependency seem promising venues to respond to the changes occurred in the very question of development in the profoundly different circumstances of the world economy today.

## References

- Acemoglu, D., S.Johnson, and J.A. Robinson. 2005. Institutions as a Fundamental Cause of Long-Run Growth. In Aghion, P and S.N. Durlauf (eds.) *Handbook of Economic Growth*. Elsevier North Holland.
- Adelman, J. 2013. *Worldly Philosopher. The Odyssey of Albert Hirschman*. Princeton University Press.
- Amsden, A. 1989. *Asia's Next Giant: South-Korea and Late Industrialization*. Oxford University Press.
- Amsden, A. 2001. *The Rise of the "Rest": Challenges to the West from Late-Industrializing Economies*. Oxford University Press.
- Arndt, H.W. 1987. *Economic Development: The History of an Idea*. Chicago University Press.
- Chang, H-J. 2007. *Institutional Change and Economic Development*. Anthem Press, London.
- Chang, H-J. 2006. *The Relationship between Institutions and Economic Development. Some Key Theoretical Issues*. The World Institute for Development Economics Research. United Nations University, Tokyo.
- Gualerzi, D. 2010. *The Coming of Age of Information Technologies and the Path of Transformational Growth*. Routledge.
- Gualerzi, D. 2012. Towards a Theory of the Consumption-Growth Relationship, *Review of Political Economy*, Volume 24, Number 1, pp. 15-32, January.
- Gualerzi D. and Cibils, A. 2014. High Development Theory, CEPAL, and Beyond. In J.LI Cardoso, M.C. Marcuzzo, M.E. Sotelo Romero (eds.) *Economic Development and Global Crisis. The Latin American Economy in Historical Perspective*. Routledge.
- Hagemann, H. 2007. German-speaking Economists in British Exile 1933-1945. *Banca Nazionale del Lavoro Quarterly Review*, Vol. LX, no. 242, September.
- Hagemann, H. 2005. "Dismissal, Expulsion, and Emigration of German-speaking Economists after 1933", *Journal of the History of Economic Thought*, Vol. 27, No. 4.
- Hirschman, A. 1958. *The Strategy of Economic Development*. Yale University Press.
- Hirschman, A. (1967) 1995. *Development Projects Observed*. The Brookings Institution Washington, D.C
- Hirschman, A. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Harvard University Press.
- Hirschman, A. 1981. "The rise and decline of Development Economics", in *Essays in Trespassing*, Cambridge University Press.
- Hirschman, A.1982. *Shifting Involvements*. Princeton University Press.

Krugman, P. 2005. The Fall and Rise of Development Economics.

<http://web.mit.edu/krugman/www/dishpan.html>.

Krugman, P. 1993. Toward a Counter-Revolution in Development Theory. Proceedings of the World Bank Annual Conference on Development Economics, 15-38, Washington, D.C., World Bank.

Melville, J.U. 1952. Autonomous and Induced investment. *The American Economic Review*, Vol. 42, No. 4. September.

Myrdal, G. 1968. *Asian Drama. An Inquiry into the Poverty of Nations*. The Twentieth Century Fund. Penguin Books.

Nath, S.K. 1962. The Theory of Balanced Growth. *Oxford Economic Papers*. New Series, Vol. 14, No. 2, June. PP. 138-153.

Nell, E. 1998. *The General Theory of Transformational Growth*. Cambridge, Cambridge University Press.

Nurkse, R. 1959. Notes on 'Unbalanced Growth'. *Oxford Economic Papers*. New Series, Vol. 11, No. 3. October. PP. 295-297.

Pasinetti, L.L. 1993. *Structural Economic Dynamics*. Cambridge, Cambridge University Press.

Rosenstein-Rodan, P. 1943. "Problems of Industrialisation of Eastern and South-Eastern Europe", *The Economic Journal*, Vol. 53, No. 210/211. June-September.

Scitovsky, T. 1951. *Welfare and Competition*.

Scitovsky, T. 1954. Two concepts of external economies, *Journal of Political Economy*, 62, April.

Scitovsky, T. 1959. Growth - Balanced or Unbalanced?, in Abramovitz M. et al. (eds.) *The Allocation of Economic Resources*. Stanford University Press.

Scitovsky, T. 1987. Balanced Growth, in Eatwell, J, Milgate, M. and Newman, P. (eds.) *Economic Development*. The New Palgrave, Macmillan.

Singer H. W. 1949. Economic Progress in Underdeveloped Countries, *Social Research*, 16, March.

Streeten, P. 1959. Unbalanced Growth. *Oxford Economic Papers*. New Series, Vol. 11, No. 2, June. (pp.167-190)

Streeten, P. 1963. Unbalanced Growth: A Reply. *Oxford Economic Papers*. New Series, Vol. 15, No. 1, March. (pp. 66-73)

Stiglitz, J. 1993. Comment on "Toward a Counter-Revolution in Development Theory" by Krugman. Proceedings of the World Bank Annual Conference on Development Economics, 15-38, Washington, D.C., World Bank.

