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Modeling, Statistics and Political Circumstances

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PHILIPP LEPENIES

*Modeling, Statistics and Political Circumstances
How the Concept of Economic Development Triumphed
and what this Means for Development Alternatives*

Abstract

The notion of “economic development” dominates aid policy. A nation’s per capita Gross Domestic Product (GDP) determines whether that country is considered developed or less developed, and the standard measure of any developmental progress is GDP growth. This article investigates the evolution of the concept of economic development, as it emerged from a specific combination of modeling, statistics and political circumstances. In this story, Arthur Lewis played a decisive role, but only by building upon Colin Clark’s first global national income statistics, an indispensable foundation for Lewis’s seminal model of economic development. This model was embraced by policy makers longing for a theoretical framework to clarify and operationalize the hitherto vague concept of development. More importantly, however, the statistical indicator on which Lewis based his theory had already been universally accepted. In other words: statistics came before theory. This holds important lessons for alternative development ideas. It explains why the idea of economic development remains so firmly entrenched and suggests the conditions that might be necessary for an alternative theory to take hold.

Keywords: Economic Development; Statistics; Gross Domestic Product; Development Alternatives; Economic Models.

ALTHOUGH THE TERM “DEVELOPMENT” potentially encompasses a broad array of possibilities, development policy and development aid are dominated by the narrow concept of economic development. Economic development manifests itself through high levels of per-capita income and a high Gross National or Gross Domestic Product (GNP or GDP¹). Its converse, economic

¹ In international statistics in the 1990s, Gross Domestic Product, GDP, (the monetary value of all goods produced within a country) replaced Gross National Product, GNP, (the value of goods and services produced by the citizens of a specific country—e.g. including in American GNP also goods produced by

American companies in Germany) as the standard measure of economic strength. The methodological differences of the two concepts are of minor importance here—both give an aggregate monetary value to all goods and services produced within a given timeframe.

underdevelopment, is linked to low incomes, a low national product and negligible GNP (or GDP) growth. The underlying conviction is that less developed countries can (and should) “catch up” to the economic status and living standards of the industrialized world—chiefly by industrializing themselves. In any case, economic development entails an important sequence: it is the economy that is to grow first, thereby enabling improvements in other aspects of social development and general welfare to follow.

Although this notion of development is historically linked to the early decades of development aid and modernization theory, it still remains the ideal trajectory, aspired to throughout the globe today. If countries such as India, China, and previously the “miracle” Asian Tigers (South Korea, Taiwan, Singapore, etc.) have been hailed for their successful development, it has been because of their technological and industrial progress and high growth rates.² Many a modern development economist would hold that such structural change is still the optimal way forward. The recommendations made by Paul Collier to the countries of Africa in his “The Bottom Billion” [2006] provide a good example of this view, as well as the simple fact that the term “industrialized country” is generally used as a synonym for “developed country”, implying that a sound industrial structure is still the key prerequisite for lasting development.³ Moreover, a country’s level of development remains predominantly defined and codified in terms of GDP per capita: for example, in the statistical annex of each year’s “World Development Report” issued by the World Bank, it is GDP per capita that is emphasized over all other possible development indicators.

Above all, economic development is a universally accepted concept, a global synonym for progress. Not only less developed countries, but the industrialized countries, as well, focus on GDP and GDP—growth and define their levels of development and progress according to these figures.

The notion of economic development is thus a dominant concept, and has been so for many decades. This article will detail how the idea of economic development came to attain its current significance. It will show that economic development triumphed the moment that Arthur Lewis expressed the concept and theory of economic development by means of a simple model.

² World Bank 1993.

³ See also for instance the recommendation of the “Commission on Growth and Development”

from 2008, or simply any textbook on economic development, especially Todaro and Smith [2011].

As John Maynard Keynes famously stated, “economic ideas” rule the world and highly influence politicians [1936: 383]. Economic ideas and theories, however, must be written in a specific language in order to be acceptable to both economists and politicians. They must be formulated as models in order to achieve even a modicum of success. Arthur Lewis’s model of “economic development with unlimited supplies of labor” can be regarded as a prime example. Yet Lewis could not have come up with his idea of economic development had it not been for the seminal empirical work of Colin Clark, the eccentric founder of modern national income statistics, who is mostly forgotten today.

From the 1930s onwards, Clark single-handedly and innovatively compiled statistical data to describe the workings of the economy, first on a national, but later also on an international level—at a time when empirical economics or concise economic data did not exist and neither governments nor economists saw any practical benefit in gathering any. Clark not only proposed defining progress as the growth of per capita income, he also gave the first numerical expression of the degree of poverty in the colonies and identified the structural changes—according to statistical data—that a country underwent during the development process. Lewis took the empirical insights provided by Clark and turned them into what was expected from an economist: an abstract but easy-to-understand theoretical model. It was through this methodological coup that Lewis and his idea of economic development ultimately succeeded, making Lewis, in the eyes of many, not only “the founder of economic development as a serious sub-discipline of economics” [Tignor 2006: 266] but also a change agent and norm entrepreneur [Finnemore and Sikkink 1998] who—through his work as a consultant and expert—helped to popularize his ideas within the newly created international aid organizations and governments.

This triumph was helped by two facilitating circumstances. One was that, although the term “economic development” had been around for some time, and politicians around the globe were eager to develop, there was still no clear and comprehensive understanding of what development meant—both in terms of definition as well as in terms of policy recommendations. The other was that the national income statistics on which Lewis based his model of economic development had already become part and parcel of the international political culture, even if there was not yet a unifying theory behind them.

This combination of modeling, statistics and political circumstance is historically unique and holds important lessons for those attempting to loosen the dominance of economic development and to replace it with an alternative notion of development. It shows that providing new paradigms of development might not suffice unless they are backed by generally accepted numbers as well as by a receptive political culture. Up until now, however, development alternatives have been introduced “the other way around”—as I will make clear in the final section of this paper. Nonetheless, recent international attempts to define alternative welfare indicators may yet succeed in paving the way for a lasting development counter-narrative.

In the pages to follow, I will first examine the usage of the expression “economic development” before it acquired its modern meaning. I will then describe the life and work of Colin Clark and his inadvertent discovery of the notion of economic development through his invention of modern national income analysis. Following this, I will explain how Arthur Lewis made use of Clark’s statistics to develop his theory of how a country should develop, and I will also comment on the lasting legacy of his ideas. In the concluding section, I will examine the implications of this historical episode for the development of strategies to promote alternative concepts of development.

Even though this article highlights a “key concept,” i.e. economic development, I believe that to fully understand the emergence of such a concept (and its alternatives, as will become clear in the later part of the paper) it is important to examine the people behind those ideas, as well as their motivations, thereby illustrating how specific ideas and approaches were invented, reformulated or re-structured and what, and who, eventually enabled them to triumph—and how.

On the term “economic development”

The expression “economic development” had been around for quite some time before a widely accepted meaning was attached to it. In the introduction to “Das Kapital,” Karl Marx famously wrote that the “industrially more developed countries” showed the “less developed” the mirror image of their future [Marx 1977: 12]. He spoke of “industrially,” not of “economically” developed countries—but according to Marxian theory, it was the economy that

shaped how societies functioned. His use of the term “developed” was rather coincidental. Marx used the adjective to emphasize that an automatic and linear universal historical evolution awaited all countries of the globe, in which industrialized bourgeois capitalism played a decisive role.⁴

Half a century later, Joseph Schumpeter published a “Theory of Economic Development” (*Die Theorie der wirtschaftlichen Entwicklung*, 1911). In Schumpeter’s understanding, economic development was a synonym for technological progress. The innovative entrepreneur brought about technological change through the “creative destruction” of old economic patterns. However, this understanding of economic development had little to do with how the term is understood today.

In Britain, economic development entered political rhetoric in the late 19th century in connection with the administration of the British colonies and overseas territories, especially Australia. In the usage of British colonial administrators, economic development described the exploitation of the natural “resources of the colony” [Arndt 1981: 461]. It meant the construction of infrastructure in order to facilitate resource exploitation for the benefit of Britain, not necessarily for the benefit of the territory in question.

British colonial administration differentiated between the economic development of a country and the “social well-being”, that is the living standards, of the inhabitants of the colony [Arndt 1981: 463]. Initially, these two concepts were unconnected.

This can be seen in the 1924 Charter of the League of Nations, which is the first codification of the idea of development assistance in international law. Article 22 stipulated that to the former colonies “which are inhabited by peoples not yet able to stand by themselves under the strenuous conditions of the modern world, there should be applied the principle that the *well-being and development* of such peoples should be entrusted to advanced nations who by reason of their resources, their experience or their geographical position can best undertake this responsibility” [League of Nations 1924, Anghie 2002, Lepenies 2014b, my emphasis]. Another example of this co-existence of concepts was the British principle of the Dual Mandate, enshrined in the Colonial Development Act of 1929. It made clear that Britain’s responsibility was to develop the economic potential of the

⁴ The original reads: “Das industriell entwickelten nur das Bild der eigenen entwickeltere Land zeigt dem minder Zukunft.”

colonies while at the same time caring for the welfare of its inhabitants in terms of improved health, education and nutrition.

In the aftermath of the Great Depression, but especially during World War II, it became obvious that the world, and with it the British Empire, was in the midst of a historical transformation whose direction or outcome nobody could foresee. Yet, with unrest and the quest for independence arising in the colonies, more efforts had to be made to improve the often appalling situation of the peoples living overseas. Specific funds were earmarked to improve the “development” of the colonies (for instance under the Colonial Development and Welfare Act—another expression of the parallel existence of the two ideas⁵), and specific “development plans” and strategies had to be drafted by the colonies themselves without a clear idea as to how development and welfare could be linked.

In an article entitled “An Economic Plan for Jamaica” [Lewis 1944], Arthur Lewis criticized the fact that colonial administrators typically called for the improvement of infrastructure or agricultural research in their “development plans” while at the same time asking for additional funds for the creation of schools and health facilities. What was missing, from his point of view, was a strategy to indicate how the economic development of the colony could be planned in such a fashion as to lastingly finance and maintain institutions providing welfare, i.e. how economic and social development could be combined into a coherent framework.

Within the economics profession, the Austrian Paul Rosenstein-Rodan (who had emigrated to Britain) had innovatively expressed the notion of industrializing “economically backward areas” in two seminal papers in 1943 and 1944. He held that “[m]any nations, many peoples” had “become impatient” because of appalling living conditions (Rosenstein-Rodan 1944: 158). This was not only a “moral, but even more a political and economic problem.” Stable and prosperous peace required “international action to improve the living conditions of those peoples who missed the industrialization ‘bus’ in the nineteenth century.” Rosenstein-Rodan called for a massive capital transfer from the rich to the poor countries, giving rise to the idea of aid. But his reasoning was less economic than political. For him, “the development of the economically backward areas of the world” was “the most important task facing us in the making of the peace” [1944: 159].

⁵ The terms “welfare” and “well-being” were used synonymously.

Thus, although ample use was made of the term “economic development” towards the end of World War II, there was no underlying theory of economic development behind it (Teitz and Chappel 2013: 212). But what was obvious to many was that the “gap” between rich and poor countries had to be closed for reasons of international stability and peace.

In 1947, one of the first United Nations documents on development was published: a report entitled “Economic Development in Selected Countries: Plans, Programmes and Agencies.” It stated that “the government’s ultimate aim in economic development is to raise the national welfare of the entire population” (UN p. xv quoted in Arndt 465). Here, suddenly, a direct link was claimed between economic development and welfare enhancement—but again, this was not based on any clear theory of economic development. The report was a mere summary of investments made in the economic infrastructure of sample countries.

In his 1949 inaugural address, the American president Harry S. Truman emphasized, as had Rosenstein-Rodan, the importance of economic and industrial advancement for peace and prosperity. Truman’s speech is usually seen as the starting point of the era of development aid, as he proclaimed: “We must embark on a bold new program [...] for the improvement and growth of underdeveloped areas.” An effort should be made “for the achievement of peace, plenty, and freedom.” Through the “increase in industrial activity” countries were to raise their standard of living. According to Truman, the key to prosperity and peace lay in “greater production” (Truman 1949). This “politics of productivity,” as it was later called, was the political conviction of the time, based on the positive experience of the Marshall Plan. It was an important part of the Truman doctrine at the beginning of the Cold War. Once a country had industrialized, prosperity and living standards would improve and capitalism would prevail over communism.⁶

Yet this was essentially a political credo, and the word “development” had not yet become automatically attached to it. It would take several more years for a theory of development to be codified by the recently emerged discipline of development economics and taken up by international organizations such as the World Bank or other UN agencies. But the idea that the poor countries were somehow to “develop” economically was in the air, and a search among academics

⁶ See Kuznets [1968].

for a concise theory of development began. Arthur Lewis was one of the pioneers. He started lecturing on “economic development” at the University of Manchester in 1950 [Meier 2001: 40].

It was Lewis’s paper “Economic Development with Unlimited Supplies of Labour” from 1954, as well as his subsequent book on “The Theory of Economic Growth” from 1955, that constituted the founding documents of the modern concept of economic development. In them, Lewis argued that the main strategy for economic development was industrialization—and that economic growth allowed for the solution of diverse political and social problems [Lewis 1954, 1955]. With Lewis’s model, development and development policy received a theoretical foundation. But why was Arthur Lewis able to formulate his ideas in a way that others before him had failed to achieve? The reason is that he made innovative use of the work of Colin Clark and his novel idea of producing and interpreting national income statistics. And by doing so, he gained the credibility and recognition that Colin Clark was unable to achieve for himself.

The statistical discovery of economic progress: Colin Clark

Before the 1930s, concise economic statistical data were rarely available. Little use was made by policy makers of coherent statistical information on the economy, nor were economic data regularly compiled by government request. The extent to which economic data were unavailable in the wake of the Great Depression seems incredible from today’s point of view. In one of his first publications, Clark lamented “the disgraceful condition of British official statistics” [Clark, 1932: vi]. Historically, there had been various attempts in different countries at calculating national income and other aspects of national wealth or income distribution. But until then, politicians had not been convinced that the often very vague data could be put to practical political use. Moreover, economic science at that time was predominantly based on theorizing, less so on empirical analysis. This changed with the Great Depression.

During the crisis of 1929, Colin Clark, a young chemist at Oxford, developed an interest in understanding what was happening to the national and international economy. However, listening to economists at his college and elsewhere discussing the dramatic situation, the

natural scientist Clark was appalled to find that economists could excel in finding theoretical arguments for the crisis and for their solutions, but that their ideas were never based on empirical data. He wrote: "Not one in a hundred [economists] [...] seems to understand what constitutes the scientific approach, namely the careful systematization of all observed facts, the framing of hypotheses from these facts, prediction of fresh conclusions on the basis of these hypotheses, and the testing of these conclusions against further observed facts. It would be laughable, were it not tragic, to watch the stream of books and articles attempting to solve exceptionally complex problems of present-day economics by theoretical arguments, often without even a single reference to the observed facts of the situation" [Clark 1940: vii-viii]. For Clark, "economics should be of practical benefit to the human race" and this could only be done "with a respect for observed facts in preference to long chains of theoretical reasoning" (1940: ix). He was decidedly un-theoretical. His idea was not to produce yet another contribution to economic theory, but to limit himself to empirical measurement and estimation.⁷ Statistical data should speak for itself. He held that there was "room for two or three economic theorists in each generation not more [...] The rest of us should be economic scientists, content steadily to lay stone on stone in building the structure of ordered knowledge" [1940: x].

Clark admired William Petty, whose "Political Arithmetick" in the 17th century was a first (albeit unsuccessful) attempt to apply the then-novel Baconian ideas of measurement and data collection to the realm of politics and who believed that sound policies should be based on statistical information.⁸ Clark went on to collect data on the economy by himself, without external funding or research assistance.

This herculean task is almost unimaginable. Clark started by analyzing former attempts at calculating national income, found fault with the prevalent methodologies and went on to invent many of the modern concepts and tools of national income accounting after painstakingly collecting raw data from a myriad of different institutional sources (industry associations, workers' unions and syndicates,

⁷ The following quote by Francis Bacon served as a motto for Clark's "Conditions of Economic Progress": "It cannot be that axioms established by argumentation can suffice for the discovery of new works, for the subtilty of Nature exceedeth many times over the subtilty of argument."

⁸ Petty was also explicitly anti-theoretical. He had written: "The Method I take, is not

yet very usual; for instead of using only comparative and superlative Words, and intellectual Arguments, I have taken the course (as a Specimen of the Political Arithmetick I have longed aimed at) to express my self in terms of Number, Weight, or Measure; to use only Arguments of Sense, and to consider only such Causes, as have visible Foundations in Nature" [Hull 1899: lxxv].

etc.) in the absence of a functioning national statistics office. In 1932, he was able to condense his empirical findings in a book entitled “National Income 1924-1931” [Clark 1932]. It was the most empirically-based and methodologically sound presentation of British economic statistics thus far. A more data-grounded publication had never been published in economics. The book consisted almost exclusively of numbers, tables and methodological definitions. In it, Clark defined National Income as the sum total of all goods and services produced in one year valued at market prices. As this figure did not account for depreciation, it was a “gross” measure, making Clark the inventor of what was later to be called “Gross National Product” [1932: 118]—a term that Clark himself never used.

Although his book astonished economists and subsequently gained him a post as lecturer in statistics in Cambridge, politicians were little impressed or influenced by his work, nor did economists readily make use of his numbers. In Keynes’s “General Theory” of 1936, for instance, Colin Clark and his work are mentioned only once.⁹

Yet Colin Clark, a maverick, had found a calling and continued his quest for data. In his second publication, “National Income and Outlay” from 1937, Clark reconstructed the evolution of national income and its components from the 19th century onwards. Innovatively, he proposed to use “the rate of growth of real income per head” [Clark 1937: 264] and called this the measure of economic progress. This measure proved incredibly useful. Not only could Clark show how much income had risen over time, but it was also possible for him to identify phases of economic decline in which incomes had stagnated or fallen. In this way, he was able to quantify exactly how severe economic depressions had been in the past. For him, national income (and with it income per capita) was the only reliable measure for quantifying progress.

Even with Clark’s second publication and the methodological toolkit he provided, both the academic and political world remained unimpressed. With no future prospects in academia, Clark left Cambridge and emigrated to Australia, where he became director of the Queensland Bureau of Industry as well as a government statistician. In Australia, Clark finished his most important publication, the

⁹ During World War II, however, Keynes suddenly recognized the potential of national income accounting to visualize the workings of the economy according to his macroeconomic theory. Making amendments to Clark’s original methodology

(and later also to the methodology proposed by Simon Kuznets in the US), it was Keynes who was able to catapult National Income and Gross Domestic Product statistics to prominence, especially in the US (see Lepenies 2013).

“Conditions of Economic Progress” [1940]. Therein, Clark took his statistical analysis to a new level: the international comparison of national income and income per capita data.

But Clark’s analysis was not merely a compilation of international figures. In his own words, he set out to “give us as much information as possible on the matter which after all concerns us most—namely, to find the conditions under which we can hope for the greatest degree of economic progress in the future” [1940: vii]. In other words, what Clark sought to discover was whether his numbers gave hints as to how the process of development (or economic progress as he named it) functioned.

In a single table, Clark summarized his estimates of the income of various parts of the world. This was the first time that this global overview of the different levels in income had been calculated and visualized. The numbers revealed that the world was “a wretchedly poor place” [1940: 2], with 81% of the world’s population subsisting on an income of less than 10 US dollars per week. Two-thirds of the world’s output was produced in the so-called industrial countries, with less than one-third of the world’s population. Half of the world’s output was produced by only four countries (US, GB, France, Germany). With these “hard facts,” Clark could lament that “the age of plenty” would “still be a long while in coming” [1940: 4].

Yet he also analyzed what made the rich or more developed countries so different from the rest. Clark proposed to differentiate among three distinct sectors. The primary (agriculture, fishing, forestry), the secondary (manufacturing, mining and building) and the tertiary sector (commerce, transport, services, etc.). His statistical comparison revealed that a high level of income per head was “always” associated with a “high proportion of the working population engaged in tertiary industries.” For him, this was “a very firmly established generalization” [1940: 6-7]. Whereas low real income per head was “associated with [...] a high percentage in primary production” [1940: 7]. Over time, he found “the proportion of the working population engaged in primary industry declining and in tertiary industry increasing”. The proportion of the working population engaged in “secondary industry” appeared “in every country to rise to a maximum and then to begin falling, apparently indicating that each country reaches a stage of maximum industrialization beyond which industry begins to decline relative to tertiary production” [1940: 7]. Put more

simply, it was industrialization that put countries on the path to economic progress.

In chapter 10, entitled “The Morphology of Economic Growth”, Clark dwelt on the issue further. Not only was the process of structural transformation from the primary to the tertiary sector described as a historical and general process, Clark also used the relatively unknown term “economic growth” as a synonym for “economic progress” or development:

From Sir William Petty’s day to present time the transfer of working population from primary production to secondary and tertiary has been continuing, and perhaps will continue for as many centuries more. This is clear evidence that world economic equilibrium has not yet been obtained, and indeed that the world is still within a very long distance of obtaining it. In other words, certain agricultural countries and regions must be regarded as ‘overpopulated.’ This word is not used in the sense that they are in any way unable to support their present populations, but simply in the economic sense of the term, namely that their inhabitants could earn considerably higher average real incomes per head in other industries or territories, and, if actuated by economic motives, will in the course of time do so [1940: 341].

But despite his important insights, Clark’s work again failed to receive the attention it deserved. As Angus Maddison writes:

“Colin Clark was a loner, bubbling with ideas and handling a vast amount of material ... He presented the reader with a mass of primary material whose analytic relevance was frequently difficult to perceive. He had hundreds of tables, but in the first two editions, none of them were numbered, many had no title and countries were not listed in alphabetical order [...] His bibliographical references were frequently inadequate often omitting dates or titles [...] The disorderly presentation of his magnum opus and the difficulty in digesting it is a major reason why his distinguished role in the history of macromeasurement is sometimes underestimated [...] If he had concentrated his efforts and been less impatient to cover so many problems his impact would probably be greater” [Maddison 2004: 27].

Nonetheless, the international figures gathered by Clark were the standard data set until the late 1950s, when international income data became more readily available. Not only did the numbers serve to justify the apparent need for aid payments but, most importantly, Clark’s structural interpretations of the process of development soon found their way into development economics. Colin Clark was the first development economist, without being conscious of it. Nonetheless, it was not Colin Clark who established himself as the development economist of the first hour, but Arthur Lewis.

In parallel with Clark’s work in Britain, the Soviet émigré Simon Kuznets had been working on national income tables in the United

States at the request of Congress from the early 1930s onwards, although his first statistical publication appeared two years after Clark's initial calculations of national income. And although he is generally regarded as one of the major pioneers of national income accounting (and sometimes even more remembered for that than Clark), Kuznets argued that national income data was only of limited use. For instance, he vehemently opposed the idea that different countries could be compared using the same national income accounting methodology (as Clark had done and as has since been done). Given that economic and social structures differed from one country to another (for instance by the degree of work done by the household), Kuznets felt that national income methodology should be calibrated differently for each country. This would come at the price of international incomparability, but the numbers generated would better encapsulate the real economic potential of the individual country (Kuznets 1933, 1934; see also Fioramonti 2013). As a consequence, Kuznets did not produce any international comparisons or infer supposedly universal workings of international development from international data sets. For this reason, his influence on the emergence of the theory of economic development (understood as economic growth) was very limited at best. However, his later writings on inequality and on the determinants of growth were to have a large impact on development theory—but only once the idea of economic development had already been established, thanks in large measure to Clark—and to Arthur Lewis [Kuznets 1955; 1968; Lepenies 2013].¹⁰

What did happen in the aftermath of Clark's publications, however, was that during the late phases of World War II, and unintendedly, national income statistics became a useful and powerful planning tool for wartime production purposes in the United States, though now referred to under the new name Gross National Product (GNP). GNP resulted from an adaptation of Clark's methodology but placed a stronger focus on industrial production than on income (whereas Kuznets's methodological ideas on national income were now mostly ignored). The statistical figure GNP was strongly propagated by the government bodies responsible for military planning. In the United States, positive GNP growth became a shorthand indicator for

¹⁰ The subject matter of this paper is the initial emergence of the idea of economic growth through the fortuitous combination of the efforts of Clark and Lewis. The large variety of theories on growth that characterized economics from the mid-1950s onwards

(not only through Solow and Growth Theory in general, but also through the Neo-Marxist and Socialist Growth Theorists like Baran, Lange and Kalecki) is not dealt with here, as these authors did not play a decisive role as initiators of the concept.

industrial and military might and GNP data figured prominently in the media and within political rhetoric (e.g. in Roosevelt's speeches). And although World War II has been dubbed a "GNP war" [Weigley 1973], GNP's political usefulness outlasted the fighting, retaining its prominence in the years to follow [Lepenies 2013].

The growth of GNP indicated that the economy was expanding, thus enabling more people to be employed. At a time when millions of servicemen were returning home, growth became a national necessity to avoid unemployment in peacetime. At the same time, as the Soviet Union achieved atomic power status, with its true economic potential unknown, a rising GNP was viewed as necessary in order to survive and ultimately triumph in the Cold War. As part of the Truman doctrine, as mentioned earlier, GNP growth was also seen as the most important political goal in preventing other countries from falling into the hands of communists. With the Marshall Plan, the United States compelled recipient countries to begin calculating national GNP figures in order to ensure the international comparability of their economic strength—rendering GNP statistics the universal methodology of international comparison. When the first post-war years produced an increase in material living standards of unprecedented historical proportions, seemingly making everybody better off, GNP finally became a general indicator of welfare. All this happened within a short span of time (less than 15 years).¹¹ By the early 1950s, GNP and GNP growth, and thus industrial expansion, had become a political fetish, a measure of identity. High GNP and growth figures were seen as traits of industrialized nations—and thus of high development—in the absence of a clear theory of development.

The theory of economic development: Arthur Lewis

In 1979, Sir Arthur Lewis was awarded the recently established Nobel Prize in Economics for his contribution to the field of development theory. In development economics, there is probably no other figure as prominent as Lewis. Born on the island of St. Lucia in the West Indies in 1915, Lewis experienced firsthand the effect of widespread poverty, illiteracy and violence that made itself felt there. His interest in all questions of social and economic improvement of

¹¹ For a detailed political history of national accounts, GNP and Gross Domestic Product (GDP) see Lepenies 2013.

the colonies stemmed in great measure from his own experiences of the dire situation in the British Caribbean. A gifted student, Lewis won a scholarship to study at the London School of Economics. One of his most influential teachers was Paul Rosenstein-Rodan, who at the time began to develop his research interest in the question of reconstruction and economic inequality among nations. Even before completing his PhD thesis, Lewis was employed as a faculty lecturer. Given the international background of many students at LSE, he became interested in integrating the analysis of the economic situation of specific countries of Asia, Africa and Latin America into his courses. From this interest, Lewis developed a special course in “colonial economics”, which was offered in 1943-1944 and was the first course of this type at the university [Tignor 2006: 20-22].¹²

One of the topics that arose concerning the progress of the colonies was the issue of planning. Lewis’s publication “The Principles of Economic Planning” from 1949 established him as a leading authority on questions regarding colonial administration and provided him regular employment as an advisor to the Colonial Office (Eckert 2009), especially since the book contained a short appendix entitled “On Planning in Backward Countries”.¹³

In 1947, Lewis was appointed to the chair in economics at the University of Manchester. A few years later, in 1951, he was asked by the Secretary General of the newly created United Nations to be part of a team of experts investigating “Measures for the Economic Development of Under-Developed Countries” [UN 1951]. As the first major document of the UN to highlight the question of development including policy recommendations, the findings of the report mostly represented Arthur Lewis’s personal theoretical deliberations, which he was to formulate more succinctly in his article on the “unlimited supply of labor.” In the report, the notion of underdevelopment was defined as the situation where “per capita real income is low when compared to the per capita real income of the United States of America, Canada, Australia and Western Europe” [UN 1951: 3]. Furthermore, development was all about combating unemployment and under-employment in the underdeveloped world. The road to development, in the understanding of the report, was via economic growth, in order to make use of what was

¹² Findlay (1989) provides a comprehensive biographical sketch. The major point of reference, however, is the seminal biography by Tignor [2006].

¹³ On the importance of planning in the discourse on economic development, see Lepenies 2014a.

considered to be the unproductive excess labor force of the agrarian sector:

In many underdeveloped areas, the population on the land is so great that large numbers could be withdrawn from agriculture without any fall in agricultural output ... If this labor were employed on public works, capital would be created without any fall in the other output, or in total consumption [UN 1951, 41].¹⁴

The focus on the labor supply of the agrarian sector was highly innovative and allowed “underdeveloped” countries to be perceived as structurally different from the industrialized world. This issue lies at the heart of Lewis’s article “Economic Development with Unlimited Supplies of Labour”, that was published in 1954. According to Paul Krugman the paper is “the most famous paper in all development economics” [Krugman 1997: 18]. In fact, it provided the first clear-cut theory of economic development. It was not merely that it contained ideas and strategies for policymakers as to what should be done concretely in order to promote development—since this is what other authors of his generation (such as Albert Hirschman, Gunnar Myrdal, Ragnar Nurkse and others) had also provided. Instead, Lewis created and explained the economic model of a “dualistic economy,” i.e. an economy that consisted of a traditional sector, mostly subsistence agriculture, with low productivity and a large number of underemployed laborers (“surplus labor” in the words of Lewis, who assumed a marginal productivity of zero for this group) and, at the same time, a modern capitalist and industrial sector. Departing from this observation, Lewis constructed the paradigm of the “expanding capitalist nucleus” [Hunt 1989: 86]. This described the idea that the capitalist sector should be developed in such a fashion as to make optimal use of the “unlimited supplies of labor”, so that the underemployed and idle work force of agriculture could be transferred to the industrial sector. Development, so the model suggested, was then all about concentrating on the growth of the industrial sector—triggered by the belief in the ready availability of potential workers. Once the workforce of the “traditional” sector was fully absorbed, the capitalist sector would have grown large enough to be self-sustaining [Preston 1996: 165]. Thus, the process of development would lead to a gradual restructuring of the economy. The relative weight of the industrial (and later the service) sector would rise throughout the process of development, as the importance of the agricultural sector declined.

¹⁴ Also quoted *in* Meier and Seers, 13.

This message not only provided the economic model for the nascent theory of modernization, it also claimed that the problems of underdevelopment were mostly a question of the internal restructuring of a country. In order to “push” the growth of the industrial sector, foreign capital might be needed, but the obstacles to development were mostly endogenous.¹⁵ The 1951 UN report stated that “all countries” were “in a position where their national incomes could be greatly increased by better utilization of what they have” [UN 1951: 4].

Lewis’s model was optimistic, and this certainly added to its attraction for politicians and development policy makers. It “suggested that a seeming disadvantage of less developed societies—the presence of large numbers of unskilled workers in the agricultural sector—could become an advantage if this very same unskilled, largely redundant agrarian workforce were put to work in an expanding industrial sector” [Tignor 2006: 273].

Development—economic development—was all about growth: growth in terms of Gross National Product and per capita income, which would mirror the rise in industrial production, the growth of the modern capitalist and industrial sector. With this focus on growth, the erstwhile dilemma of how to combine the idea of economic development with the general welfare of the population seemed to be resolved: “The horse of development should go in front carrying the cart of welfare behind it” as Lewis put it (quoted in Tignor, 2006: 73).

In 1955, Lewis published “The Theory of Economic Growth,” the first major economic publication on growth to further develop the issues of the earlier paper. Right at the beginning, Lewis asserted that growth was “the appropriate framework for studying economics” [Lewis 1955: 5]. Moreover, growth was used as a synonym for “progress” as well as “development” (Lewis 1955: 10; see also Arndt 1978). Lewis’s ideas on growth were a “full blueprint of the diverse prerequisites for increasing per-capita output” which included “societal-wide transformations in cultural values, family organization and commitment to a work ethos as well as the standard economic prerequisites of [...] investment and precise government planning” [Tignor 2006: 273].

While at the LSE, Lewis, like other British economists working on international issues, became acquainted with Colin Clark’s work. Many early papers on developmental issues made reference to

¹⁵ This was in sharp contrast to the positions elaborated by Raúl Prebisch and his collaborators at CEPAL, the UN agency for Latin America.

Clark's 1940 figures. Lewis, in his 1954 article, speaks in passing of the "path-breaking and praiseworthy" work done by Clark [Lewis 1954: 159] but otherwise makes little mention of him in his writings. Yet not only did Lewis readily use the statistical indicators suggested by Clark in order to define progress and development, but his 1954 paper is nothing less than a simple translation of Clark's statistics into an economic model, especially the idea of the quasi unlimited supply of labor and the possibility of integrating this labor force in the expanding industrial nucleus. This is not to belittle the work of Lewis or to accuse him of plagiarism. Instead, it shows that, in order to succeed, the idea of economic development had to be transformed into the language spoken by economists: a theory substantiated by a model. And in the case of Lewis, this model built on the one statistical indicator (GNP growth) which had already revolutionized Western politics.

Lewis's legacy

The 1954 paper caused an "overnight sensation." It was not only "short, well written, easy to understand, original and self-evident, at least to nonspecialists" [Tignor 2006: 82]. It also, "galvanized the new field of development economics, providing it with a legitimacy that it had not previously enjoyed." As a result, Lewis, "if not towering above the others" (meaning the other pioneers in development economics), was certainly "primus inter pares" [Tignor 2006: 79].

But it was not only development practitioners and administrators who were attracted to Lewis's arguments, but economists themselves.¹⁶ In a famous article on the legacy of development economics, Paul Krugman dwelt on the issue of why certain economic ideas come to be accepted while others do not. He wrote: "To be taken seriously an idea has to be something you can model" [Krugman 1997: 18]. And this is exactly what Lewis's concept of dualism and unlimited supplies of labor provided.

Reflecting on development economists and their work, Krugman asked "why was Lewis influential?" And he provided the answer himself: "The key reason [...] was that the surplus labor story, unlike many other

¹⁶ Needless to say, in most development agencies, especially in the early decades, the great majority of employees were economists.

In the World Bank, the ratio of economists to non-economists was 50:1 until well into the 1990s [Chambers 1996: 50].

development stories emerging at the time, could be formalized relatively easily so it gave economists a way to follow the mainstream's increasing emphasis on rigor and formalization while continuing to do development" [1997: 18]. Albert Hirschman, himself a pioneer of development (albeit one famously satisfied for not having provided a concise theory) similarly wrote that Lewis's ideas helped "enhance the scientific aura and status of the new field" [Hirschman, 1981: 10].¹⁷

According to Gerald Meier and Dudley Seers, "development economics did not arise as a formal theoretical discipline, but was fashioned as a practical subject in response to the needs of policy-makers to advise governments on what could and should be done to allow their countries to emerge from chronic poverty" [Meier and Seers 1984: 4]. Many of the contributors to economic development had been consultants themselves. Their ideas of "big pushes", "great spurts", "balanced" or "unbalanced growth" might have been practical or comprehensive but, in any case, they lacked the rigor and simplicity of Lewis's model.

The prize committee of the Swedish Riksbanken (which sponsors the Nobel prize in economics) shared this view. In its internet factsheet, it not only highlights the fact that Lewis received the prize for his pioneering research into development, but that his specific contribution was the development of a model.¹⁸

Modeling is not only a specific way of "thinking like an economist" [Mankiw and Taylor 2011], it is also a particular form of communication. Models are a means of persuasion, a means of rhetoric, as Deirdre McCloskey has described [1983; 1990]. And it is not only fellow economists who want to be persuaded, but politicians as well. Models, as Mary Morgan has succinctly put it, are often explicitly designed to provide "recipes to remake the world" [2012: 404] and this is exactly what Lewis provided.

After World War II and in the endeavor to prevent another Great Depression, politicians around the world began to seek the advice of economists. The figure of the economic expert became an institutionalized feature of politics, whether in the form of the council of economic advisors in the US or as the proponent of development aid. More than other social scientists, economists were able to make themselves heard in politics—and the way they intended to make themselves heard was by using models.

¹⁷ Also quoted in Tignor [2006: 97].

¹⁸ http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1979/lewis-facts.html.

Moreover, Lewis's model fell on fertile ground. Clark's ideas on how to measure and define economic progress and growth had been adapted and accepted by most governments (thus providing the theoretical backing of a felt reality). Politicians no longer needed to be convinced that development was an important issue. What had been lacking, however, was a simple narrative that could, with all academic rigor, not only explain the structural features of both developed (high-income and industrialized) and underdeveloped (low growth and low per capita income) countries, but also show what had to be done in order to get a less developed country on track. And best of all, the model which provided this also implied that something could be done, that underdevelopment was not an eternal fate, or the inevitable consequence of external circumstances. Development was an emulation of the path already taken by the industrialized world, a process of convergence.

Although Lewis's ideas and theory were harshly criticized by some (especially his idea of a "labor surplus," see Schultz 1964 and Ranis 2004 for an overview of criticisms) his model was highly influential, especially as Lewis himself was a ceaseless consultant to governments and development institutions of the United Nations alike during the 1950s and 1960s. Walt Rostow's "The Stages of Economic Growth" from 1960 (whose main hypothesis had already been formulated in 1956) is an elaboration of Lewis's ideas (as were most ideas of modernization from political science) and reveals how his theory of economic development left the confines of economics proper and found its way into the wider political realm.

In its global outreach, Lewis's idea of economic development appeared as a modern interpretation of the traditional theories of civilization and progress of Western modernity. The concept of economic development upheld the ideas of the universality and unilinearity of time as well as the notion that the observable socio-economic, cultural and political differences among countries meant that some countries or societies had already progressed further while others were "backward" or "traditional" and had to "catch up" and "become modern." Additionally, the "further advanced" had the expertise and knowledge to "assist" the others in accelerating their process of convergence—just as in the philosophy of progress expressed for the first time by the Marquis de Condorcet in 1793 [Lepenies 2014b].

But now it was no longer the use of reason that separated countries and that should be fostered, but economic productivity and industrialization. Advanced countries could instruct and teach the

“underdeveloped” or “less developed” exactly what had to be done in order to enhance GNP and growth. From this, however, many other non-economic side-effects would follow: a full-grown process of modernization, westernization and international convergence—all as by-products of economic growth. GNP and the notion of growth reanimated the old ideas of “civilizing” the “less civilized,” not only by replacing the term civilization with “development”, but also by basing the notion of “development” no longer on some lofty concept of “progress” or “culture” but on the supposedly unequivocal hard numbers of economic reality [Lepenies 2008].

*After Lewis: establishing alternatives
to economic development “the other way around”*

Lewis’s ideas were not original in themselves. In their essence, they did not provide a novel view of the development process. But Lewis took existing threads and combined them in an original and lasting manner. As well as attempting to “sell” a new view on development, he could build on a general notion of what development was (or could be)—incorporating an accepted statistical indicator. These facts might seem banal. But they are not, especially not in light of the history of development alternatives.

Attempts to “dethrone” the idea of economic development have often tried to establish development alternatives “the other way around.” What I mean by this expression is that these counter-concepts depart from an a priori normative and often theory-inspired notion of what development should mean—and subsequently attempt to translate these theories into statistical indicators. Ideally, these indicators would not only be as powerful as GDP, but also surpass it. In the case of alternative concepts of development, theory came before statistics. This is true for the two most prominent attempts that explicitly wished to replace the concept of economic development, Basic Needs and Human Development.

In a famous paper from 1969, regarded as one of the founding documents of the Basic Needs paradigm, Dudley Seers discussed the “Meaning of Development.” Seers criticized the way in which an increase in National Income (i.e. GNP) had become not only the prime center of political attention in the West, but also the dominant shorthand definition for “development.” The focus on industrialization and economic growth had, in his view, sidelined the topics of hunger,

unemployment, inequality and poverty, which according to Seers were probably the most pressing issues in less developed societies (Seers 1969). He argued that development meant above all poverty alleviation – instead of economic growth. Consequently new measures had to be found to give a “true” picture and definition of development (“the challenges for the remainder of this century [...] [are] [...] how to find measures of development to replace national income”, Seers 2).

Out of this viewpoint grew the movement (led, amongst others by the Dag Hammarskjöld Foundation, the ILO and the Institute for Development Studies in Brighton) that attempted to replace GNP by focusing instead on what were called the “Basic Needs” of societies—which were to be measured by a series of social statistical indicators. The theoretical groundwork of the Basic Needs approach was Abraham Maslow’s concept of a “hierarchy of human needs” that he had expressed in the early 1940s [Maslow 1943]. Various international fora and meetings were instrumental in calling for a renewed and poverty-centered view of development—highlighting the need for meeting minimum requirements for food, shelter and clothing, for providing access to safe drinking water, sanitation, health, transport and education, and for ensuring decent work and working conditions.

The case for meeting Basic Needs, however, was “primarily a moral/ideological” one [Hunt 1989: 266] and grew out of the observation that although development had always attempted to combat poverty, poverty itself and the living conditions of the poorest had not been at the center of attention due to the focus on growth and industrialization. Yet it was precisely the issue of what was to be measured and thus what was to be counted as “Basic Needs” that divided the international development community. Proposed measures were either not available for many countries, not credible, or regarded as politically unacceptable by large international organizations (e.g. measures of inequality, distribution or political participation). Also, with many indicators it was unclear, not to say a muddle, whether they were to be counted as an output, i.e. a result of development, or a necessary input to other developmental basic needs (e.g. health and education as inputs for employment and wealth).

Some Basic Needs proponents argued that the meeting of basic needs should come before or instead of growth. However, critics held that the focus on growth and economic development had to be maintained at all costs in order to provide the necessary local means to finance the provision of basic needs. As many social indicators of Basic Needs showed a positive statistical correlation with GDP, this was

taken as proof of the need to continue to focus on economic development first [Streeten 1979].

The Basic Needs approach was not able to replace the dominant position of economic development. What it did influence, however, was the nature of aid practice. Next to industrialization schemes (the traditional old-style development policy since the 1950s), development aid was now also about building health clinics, schools, wells, etc. in order to target poverty directly [Preston 1996]. And social indicators (longevity, child mortality, literacy etc.) did find a lasting place in discussions on development, but mainly as a complement to the overall still-dominant figure of GDP—a far cry from challenging the dominant position of GDP or the idea of economic growth.

Twenty years after Seers's paper, another major attempt was made to expand the notion of economic development. This time, the theoretical foundation was the so-called "Capability Approach" that had been developed by the economist Amartya Sen [1999]. Sen had argued that growth was undoubtedly important, but merely a means to a higher end. However, economic growth had become an end in itself and little attention was paid to whether growth led to overall development. For Sen, development was defined as the freedom to live the life one had reason to value living. In other words, development meant the possibility to flourish: politically, socially but also economically. Income per capita might be an important input, but so were health, education and political participation. Every time an individual was prevented from living the life he or she wanted to live (for instance, through constraints on female participation in the labor market or in education that could prevent girls from taking up the occupation they desired), this was a sign of poverty and underdevelopment. Conversely, every time the possible alternatives for individuals expanded, because obstacles such as the one mentioned above were removed, this was a sign of development (see Kremakova 2013).

The harsh critique of the dominant role played by GDP and of the concept of economic development itself (a direct critique of World Bank policies) was one of the reasons why the economist Mahbub Ul-Haq, director of the then little-known United Nations Development Program (UNDP), decided to seize the opportunity to place his agency at the forefront of the development debate—by attempting to translate Amartya Sen's ideas into measurable indicators in order to replace GDP figures. With the collaboration of Sen, the Human Development Index (HDI) was created by UNDP staff, a composite indicator combining statistical information on economic growth, education and

longevity into a single number [Ul-Haq 1995: 61].¹⁹ Using the HDI, countries were ranked according to their numerical index value. This international ranking was published annually in the UNDP flagship publication, the “Human Development Report,” beginning in 1990 [UNDP 1990]. In these reports, the UNDP deliberately contrasted the ranking of countries according to the dogma of economic development (i.e. GDP, as was done in the World Bank publications) with an international ranking following the data on human development—to make the point that the world is perceived differently according to which measure is taken and that, needless to say, human development provides a fuller picture of development than GDP.

However, although the HDI is highly visible in the media, the index has always been strongly criticized as being more a publicity tool than a credible statistic on development. Its methodological shortcomings have been the subject of academic debate ever since the index was introduced [Srinivasan 1994; Stanton 2007].²⁰ Given that the index was directly linked to a specific UN agency that openly attacked the ruling dogma of the most powerful development institution, the World Bank, it comes as no surprise that this effort to champion human development was unable to effect a true paradigm change in development—at least not one that would have challenged economic development other than theoretically, especially as the attempt to operationalize Human Development boils down to little more than the traditional approach of meeting Basic Needs.²¹

*Conclusion: alternative welfare measures new numbers
for a new development?*

Given the perseverance of GDP and the concept of economic development, it seems that rather than attempt to produce yet another alternative “the other way around” (i.e. placing theory before statistics), important lessons can be learned from the evolution of the idea of economic development. For the success of an alternative concept of

¹⁹ The methodology of the index mirrored an earlier attempt of measurement that was presented as part of the Basic Needs debate, i.e. the Physical Quality of Life Index PQLI—which had little palpable influence on development policies or international discussions.

²⁰ Castles holds that the HDI’s “position [...] owes little to its intrinsic qualities and

much to the packaging and promotional efforts of its multinational sponsor” (Castles 1998: 832, quoted in Stanton 2007).

²¹ Martha Nussbaum’s attempt at identifying a set of “basic capabilities,” thus seems little more than what had already become the focus of practical aid work through the Basic Needs [Nussbaum 2003].

development, the first determining factor should be a manifest and broad political will to consider alternative visions of development. Secondly, one requires accepted statistical indicators of alternative development approaches that have proven their political usefulness and lastly, the development of a theory-based model that incorporates these indicators and serves policy-makers as a guideline and justification for their actions.

This is not a utopian vision. Various national and international political initiatives have sprung up in recent years under the general heading of “alternative welfare measurement.” These initiatives comprise two elements: finding out what matters to people and attempting to measure this statistically. But what stands behind these initiatives is much more than the mere search for alternative measures. These initiatives are based on the political conviction that policies of the 21st century should be based on a new idea of progress, well-being and, thus, of development—and should no longer cling exclusively to the idea of growth and thus of economic development. However, as with the notion of development, there is to date no clear theory as to what this new definition or, better, theory of modern progress should look like. Criticism of economic development and growth is not new—and has been around for at least forty years (the famous Club of Rome report “The Limits of Growth” from 1972 is a standard reference). Yet the last few years have seen, for the first time since the ascendance of GDP, an open commitment of politicians to seek alternatives.

A decisive event in this respect was the OECD World Forum “Statistics, Knowledge and Policy” that was held in Istanbul in 2007. Representatives of the UN, the World Bank, the OECD and other organizations and governments ratified the so-called “Istanbul Declaration” which spoke of an “emerging consensus on the need to undertake the measurement of societal progress in every country, going beyond conventional economic measures such as GDP per capita” [OECD, 2008: 15].²²

This consensus was based on the following factors. One is the belief that a global development model based on endless economic growth is no longer environmentally and economically sustainable and must be replaced in light of climate change and other challenges of modern times. The other is that GDP no longer measures nor indicates what

²² This consensus on and belief in the use of indicators was triggered by the apparent success of the Millennium Development Goals (MDG) as an indicator-supported policy

instrument, as well as by the recent advancements in the measurement of welfare and, above all, subjective well-being (see OECD 2008).

constitutes a good life for the citizens of a given country (i.e. welfare)—as had been believed ever since GDP became the focus of political attention. With the slogan “Measuring and Fostering the Progress of Societies,” the declaration calls upon national governments to “encourage communities to consider for themselves what ‘progress’ means in the 21st century” and to translate this into indicators that should inform and structure politics in order to go “beyond GDP.” The search for a new definition of development is thus, above all and in a first step, a search for new statistical indicators. Here, as in the case of economic development, statistics come before theory.

In various countries, initiatives with differing degrees of citizen participation in defining progress have been launched. France’s “Commission on the Measurement of Economic Performance and Social Progress” [2009] did not include participatory elements, but because of its thoroughness, its report is considered the most important methodological point of reference when discussing what type of indicators could be integrated into a set of alternative welfare measures. “Measures of Australia’s Progress,” the Italian initiative “Benessere equo e sostenibile,” Great Britain’s “National Debate on Well-Being” or Germany’s “Gut Leben in Deutschland” are but a few examples of what has been called “a new global movement” in the search for identifying new political priorities as alternatives to growth by setting up a system of welfare indicators [Kroll 2011; García Díez and Lepenies 2015].

It remains to be seen whether these initiatives will lead to a paradigm shift that supersedes the traditional notion of economic development. Given the still-prevalent focus on growth and GDP in global politics—public claims and initiatives to look into alternatives notwithstanding—the prospects for success seem doubtful. But it is still noteworthy that the combination of political circumstance and statistics (coming before theory) now parallels, for the first time in the history of development alternatives, those conditions which historically enabled the triumph of the idea of economic development.

The process of fixing alternative welfare indicators is a case study worthy of observation and analysis by scientists working on development. It will be interesting to observe whether alternative indicators (and which sort of indicators) can have a lasting influence on politics and alter the focus on GDP growth and economic development as the *sine qua non* of progress. Most interesting will be the question whether, in time, a modern Arthur Lewis appears—a norm

entrepreneur combining successful welfare indicators with a novel and lasting model and theory of well-being, progress and development for the 21st century. Only then will all the ingredients of the triumph of economic development—modeling, statistics and circumstance—be fully replicated.

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Résumé

La notion de « développement économique » domine les politiques d'aide internationale. Le Produit Intérieur Brut (PIB) d'une nation détermine si celle-ci est développée ou non, et la croissance du PIB est devenue la mesure standard de tout progrès en termes de développement. Cet article étudie l'évolution du concept de développement économique, tel qu'il a émergé à partir d'une combinaison spécifique de modélisation, de statistique et de circonstances politiques. Dans cette histoire, Arthur Lewis a joué un rôle décisif, mais en s'appuyant sur les travaux antérieurs de Colin Clark consacrés à la statistique sur le revenu national, le fondement indispensable pour le modèle de développement économique proposé par la suite par Lewis. Ce modèle a été adopté par les décideurs politiques en quête de cadre théorique pour éclairer et rendre opérationnel le concept, jusqu'alors vague, de développement. De façon plus décisive encore, l'indicateur statistique sur lequel Lewis appuie sa théorie était d'ores et déjà universellement accepté. En d'autres termes : la statistique est venue avant la théorie. Cela implique des enseignements importants pour les approches alternatives du développement : cela explique non seulement pourquoi l'idée de développement économique reste si solidement ancrée mais suggère certaines conditions nécessaires pour qu'une théorie alternative puisse s'établir.

Mots-clés : Développement économique ; Statistiques ; Produit Intérieur Brut ; Alternatives de développement ; Modèles économiques.

Zusammenfassung

Das Konzept der „wirtschaftlichen Entwicklung“, dominiert die internationale Zusammenarbeit. Das Pro-Kopf-Einkommen (gemessen am Bruttoinlandsprodukt BIP) zeigt, ob ein Land mehr oder weniger entwickelt ist. Der Standardindikator dafür, dass Entwicklung stattfindet, ist das BIP-Wachstum. Dieser Artikel untersucht die Entstehung des Konzepts der wirtschaftlichen Entwicklung als das Ergebnis eines besonderen Zusammenspiels von Modellierung, Statistik und politischen Rahmenbedingungen. In dieser Geschichte spielt Arthur Lewis eine besondere Rolle – aber nur weil er auf die ersten internationalen Einkommensstatistiken Colin Clarks zurückgreifen konnte, die eine grundlegende Basis für Lewis berühmtes Modell der wirtschaftlichen Entwicklung darstellten. Lewis Modell der wirtschaftlichen Entwicklung wurde von Politikern dankbar aufgegriffen, da es endlich das lange sehr vage verstandene Konzept der Entwicklung konkretisierte und operationalisierbar machte. Wichtiger jedoch war, dass die Statistiken, auf die Lewis seine Argumentation aufbaute, schon lange politisch etabliert und akzeptiert waren, bevor sie theoretisch untermauert wurden. Mit anderen Worten: Statistik kam in dieser Geschichte vor der Theorie. Dies ist eine wichtige Lektion für den Versuch, Alternativen zur Idee der wirtschaftlichen Entwicklung zu etablieren. Es kann gezeigt werden, warum das Konzept der wirtschaftlichen Entwicklung so fest im Sattel sitzt und welche Bedingungen und Schritte notwendig wären, damit sich Alternativen durchsetzen.

Schlüsselwörter : Wirtschaftliche Entwicklung; Statistik; Bruttoinlandsprodukt; Entwicklungs-alternativen; Ökonomische Modelle.