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Professor Ioannis Lianos, Abel Mateus, Azza Raslan

# Centre for Law, Economics and Society CLES

Faculty of Laws, UCL

**Director: Dr Ioannis Lianos** 



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# Development economics and competition: a parallel intellectual history

Ioannis Lianos, Abel Mateus and Azza Raslan<sup>1</sup>

#### I. Introduction

Competition law was born and framed in the developed nations of the West. The economic thinking it has relied upon - referred to hereinafter for convenience purposes as "competition economics" - is based in industrial organization, a sub-discipline of neoclassical price theory. Despite the existence of various "schools" and intellectual traditions, neoclassical price theory emphasizes the importance of markets and is classified in the microeconomic, as opposed to the macro-economic, "field" of economic thought.<sup>2</sup> As such, competition economics focuses on markets, not economies, the latter depending on a broader series of variables, such as the rate of wages paid, the demand and supply for all goods, the supply of money in society, rather than the interplay of supply and demand in a specific product market. Competition economics also assumes that there is in fact a market economy with some competition. Development economics, on the contrary, has historically been associated with macro-economics, although as we will examine further, the strict dichotomy between macro-economics and microeconomics is a false dichotomy. Established as a distinct field of economics in the post-World War II period, development economics sought to provide policy prescriptions for developed world and multilateral aid providers in the provision of assistance to impoverished countries that were not part of the communist block, then called the "third world," and referred to now as developing countries.

Studying the interaction between competition law and development economics might seem counterintuitive, as both fields grew and evolved in relative ignorance of each other. For a long time, each field addressed different questions. As of the 1990s, however, this is no longer true because of the spread of competition law to a number of developing countries. Developing countries now form the majority of jurisdictions that have enacted

<sup>&</sup>lt;sup>1</sup> Ioannis Lianos is Director of the Centre for Law, Economics and Society (CLES), UCL; Reader in European law and Competition Law and Economics at UCL, Faculty of Laws; Gutenberg Research Chair, Ecole Nationale d'Administration. Abel Mateus is Director at the European Bank for Reconstruction and Development (EBRD) and a senior research fellow at the CLES, UCL; Azza Raslan is a PhD candidate at UCL Laws and a research associate at the CLES, UCL.

<sup>&</sup>lt;sup>2</sup> We employ the concept of "field" according to the meaning given to it by Pierre Bourdieu, that is, a setting in which agents, their social positions and their position takings are located.

competition law statutes.<sup>3</sup> Recent competition law and economics scholarship has also made important inroads towards examining how the broader characteristics of an economy might affect the type of competition law regime it should enforce.<sup>4</sup> Industrial Organization economists have recently modeled the channels of interaction between innovation and economy, showing the importance of competition for productivity growth. Empirical research has also largely confirmed the importance of competition law and its interaction with development and growth is also on the rise.<sup>5</sup>

This chapter aims to contribute to the cross-fertilization of the fields of competition economics and development economics. For that to happen, however, it is important to focus on the complex intellectual history that placed these different groups of scholars, and the conceptual traditions they represent, in different intellectual itineraries in order to provide an explanation to the relative isolation of each field from the inputs of the other. Our narrative will be the opposition between the dominant intellectual tradition in development economics until recently, which highlighted the role of state intervention through the establishment of protectionist barriers and monopolies to the expense of markets and free competition, and the competition economics' belief on the superior efficiency of free competition. Our aim is not to be exhaustive, but to sketch the intellectual history of this opposition and to explain why the recent evolution of both fields to the

<sup>&</sup>lt;sup>3</sup> Until the 1980's, only twenty-six jurisdictions, most of which are developed countries, had adopted competition laws. By 1990, there were an additional nine countries (five of which were developed countries and four were developing countries). The next decade witnessed a rapid increase with approximately sixty countries adopting competition laws, most of which were developing countries. See Franz Kronthaler & Johannes Florian Stephan, Factors Accounting for the Enactment of a Competition Law- An Empirical Analysis, 52 ANTITRUST BULL., Summer 2007, at 137. In their study, a country is considered to have a competition law if it has a national law addressing all or one type of anticompetitive behavior. This number has recently increased to 113 jurisdictions (including various regional organizations) that have either adopted or are in the process of adopting competition legislation. See UNCTAD GUIDEBOOK ON COMPETITION SYSTEMS at (I) (2007).

<sup>&</sup>lt;sup>4</sup> See, e.g., MICHAL GAL, COMPETITION POLICY FOR SMALL MARKET ECONOMIES (2003); William E. Kovacic, Institutional Foundation for Economic Legal Reform in Transitional Economics: The Case of Competition Policy and Antitrust Enforcement, 77 CHI.-KENT L. REV. 265 (2011); Michal S. Gal, The Ecology of Antitrust: Preconditions for Competition Law Enforcement in Developing Countries, in COMPETITION, COMPETITIVENESS AND DEVELOPMENT: LESSONS FROM DEVELOPING COUNTRIES 20 (P. Brusick et al. eds., 2004); ECONOMIC DEVELOPMENT: THE CRITICAL ROLE OF COMPETITION LAW AND POLICY (Eleanor M. Fox & Abel M. Mateus eds., 2011); see Eleanor M. Fox, In Search of a Competition Law Fit for Developing Countries 5-10 (NYU Law & Econ. Research Paper Series, Working Paper No. 11-04, 2011).

<sup>&</sup>lt;sup>5</sup> See, e.g., Ajit Singh and Rahul Dhumale, Competition Policy, Development and Developing Countries (South Center T.R.A.D.E. Working Paper No. 7, 1999); Ajit Singh, Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions (Intergovernmental Grp. of Twenty-Four on Int'l Monetary Affairs Working Paper, 2002) available at http://www.unctad.org/en/docs/gdsmdpbg2418\_en.pdf; Tay-Cheng Ma, The Effect of Competition Law Enforcement on Economic Growth, 7 J. COMPETITION L. & ECON. 301 (2011).

analysis of the micro-foundations of growth, their focus on institutions and their emphasis on empirical methods, might lead to a new synthesis, favoring a useful cross-fertilization between competition economics and development economics.<sup>6</sup>

## **II.** Tales of Economic Development and Competition in Early Economic Thought: Intellectual Premises and Implications

One can classify these various intellectual traditions evolving into maturity in the 19<sup>th</sup> century and first half of the 20<sup>th</sup> century in two broad categories: those emphasizing the efficiency of markets and competition (the efficient markets paradigm) and those doubting, in various degrees, their efficiency (the inefficient markets paradigm)

#### A. Economic Development and the Efficient Markets Paradigm

Classical economics did not address economic development per se.<sup>7</sup> However, the purpose for classical economists was to achieve "material progress" or "economic progress".<sup>8</sup> Adam Smith was the first widely recognized economist to refer to the role of markets for economic development. Smith's ingredients for a theory of growth were that growth depends on productivity, labor and capital. Smith characterized the increase in productivity as the interaction of the division of labor and market expansion.

The new microeconomics of development, building on network models, has shown the central role of the mechanism discovered by Adam Smith regarding the link between labor division and market dimension and the importance of multiplication of markets for growth.<sup>9</sup> The process of development is characterized by specialization and productivity increases associated with the division of labor, which is only possible with market expansion and multiplication. In this model, comparative advantages are thus generated endogenously through the process of specialization, the preference of individuals for diversity and a decrease in transaction costs. The main

<sup>&</sup>lt;sup>6</sup> This study does not examine the intellectual tradition of the neighbouring field of law and development. See David Kennedy, Law and Development Economics: Towards a New Alliance 6-7 (forthcoming 2012), available at http://www.law.harvard.edu/faculty/dkennedy/publications/Law%20and%20Development%20 EconomicsAug15Draft%20Stiglitz%20volume.pdf; DAVID M. TRUBEK & ALIVARO SANTOS, THE NEW LAW AND ECONOMIC DEVELOPMENT: A CRITICAL APPRAISAL (2006).

<sup>&</sup>lt;sup>7</sup> The term "classical economics" was coined by Karl Marx in his description of Ricardo's formal economics in contrast to "romantic economics" (i.e. economics close to the people). It usually covers the period between 1776 to 1870. David Colander, The Death of Neoclassical Economics, 22 J. HIST. ECON. THOUGHT 127, 130 (2002).

<sup>&</sup>lt;sup>8</sup> Heinz Wolfgang Arndt, Economic Development: A Semantic History, 29 ECON. DEV. & CULTURAL CHANGE 457, 458 (1981).

lesson to take away from this literature is that economic growth occurs because markets multiply. It is not due to a population increase, exogenous changes in the transaction, production and preferences. Rather, growth is generated by the interaction of the division of labor and market building.

Other classical economists supported free trade (internal and international trade) and specialization as a means for development.<sup>10</sup> Free trade increases competition and thus reduces the monopolistic rents enjoyed by the incumbent firms. Ricardo demonstrated that under conditions of free trade, a country would specialize in the production and export of commodities that it can produce at a lower production cost compared to other countries. Ricardo's comparative advantage theory is still the main argument for free trade.<sup>11</sup> However, it is built on assumptions that are not always present, especially in the case of developing countries.<sup>12</sup> Rodrik argues that the assumption that specialization raises overall productivity in an economy that is open to trade is misguided. Instead, he argues that comparative advantage is not the sole "driving force" for economic development. <sup>13</sup> He explains that the "trick" is not to focus solely on the one product you do best but to specialize and master the production of a broader range of activities. Accordingly, achieving economic efficiency is not just a question of specialization, but also a question of what to specialize in. Thus, it is dynamic comparative advantage and not static comparative advantage that a country should pursue.

This emphasis on the dynamic element was lost in the effort of neoclassical economists, on which competition economics is largely based, to address, primarily, issues of static allocation of given resources at a given period of time. Starting with Jevons and the marginal revolution, neoclassical price theorists took as a given the level of population, the various needs and capacities of production, land and other resources, to concentrate on the mode of employing labor that would maximize utility. As Meiers explains it, "(f)ocusing on the search for the conditions of efficiency in utilizing existing resources in the economy, economists totally ignored economic growth as a

<sup>&</sup>lt;sup>10</sup> Smith identified the benefits of international trade in stimulating development based on the dynamics of economies of scale. John Stuart Mill also noted the benefits of free trade to less developed countries. Most importantly, David Ricardo put forward his theory of relative comparative advantage using the two countries, two commodities one factor (labor) model. See generally David Ricardo, On The Principles of Political Economy and Taxation, in P. SRAFFA (eds.) THE WORKS AND CORRESPONDENCE OF DAVID RICARDO (Vol. 1, Cambridge University Press, 1951).

<sup>&</sup>lt;sup>11</sup> Others have built upon Ricardo's theory to construct a fully fledged international trade theory. See the Heckscher-Ohlin trade theory producing a model extending the comparative advantage hypothesis to multiple goods.

<sup>&</sup>lt;sup>12</sup> See JOAN V. ROBINSON, REFLECTIONS ON THE THEORY OF INTERNATIONAL TRADE: LECTURES GIVEN IN THE UNIVERSITY OF MANCHESTER (1974); PAUL BARAN, THE POLITICAL ECONOMY OF GROWTH (1957).

<sup>&</sup>lt;sup>13</sup> See Dani Rodrik, One Economics, Many Recipes: Globalization, Institutions, and Economic Growth 103 (2007).

policy objective for several decades, from about 1870s to 1930s."<sup>14</sup> Indeed, "(e)conomic analysis concentrated on the conditions that would make possible various optima rather than on the conditions that would allow an economy to achieve ever-changing optima of ever-increasing range"<sup>15</sup>. Their concern was how consumer choice could be maximized (allocative efficiency) or producers's costs minimized (productive efficiency). In their standard model, interactions between producers and consumers are mediated through the price system, thus leading to a unique Pareto efficient equilibrium. If neoclassical price theorists examined interrelationships between different sectors of the economy, their analysis focused on a particularly short time horizon and the impersonal setting of a market for all goods and all periods. History and institutions did not matter and could not influence the choice of the equilibrium and were thus excluded from the analysis. The possibility that there can be multiple equilibria, inferior or superior, at a given point in time, which could be chosen because of historical, cultural, or institutional reasons or the distribution of wealth, was not seriously contemplated.<sup>16</sup>

This period coincided with the dominance of neoclassical price theory and welfare economics in the economics profession, which became the mainstream in the 1890s. This occurred after Alfred Marshall resolved the conflict between the utility and cost theories of value by elaborating a theory (partial equilibrium) which included both the cost of production (the supply curve) and the utility theories (the demand curve).. Under this theroy equilibrium involves not only the most satisfactory position for each individual in the economic system, but also the elimination of any above normal profits. The static approach thus advanced allowed for clear predictions on the forces pulling toward equilibrium, an important weapon in the professionalization of the economics discipline during the late 19<sup>th</sup> century and the subsequent increased role of economists.

The Walrasian general equilibrium theory, formalized by Arrow and Debreu in the 1950s,<sup>17</sup> assumes complete/universal markets for all current and future contingent commodities and perfect information (first fundamental theorem of welfare economics). According to this theorem, every perfectly competitive economy in a state of general equilibrium is Pareto-optimal. Wealth distribution is not a concern, as it is assumed that any Pareto-optimal allocation of resources can be achieved by means of perfectly competitive

<sup>&</sup>lt;sup>14</sup> GERALD MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS 38 (2005). <sup>15</sup> Id.

<sup>&</sup>lt;sup>16</sup> See, e.g., Robert Solow, A Contribution to the Theory of Economic Growth, 70 Q. J. ECON. 64 (1956) (presenting a neoclassical growth model).

<sup>&</sup>lt;sup>17</sup> Kenneth J. Arrow, An Extension of the Basic Theorems of Classical Welfare Economics, in PROCEEDINGS OF THE SECOND BERKELEY SYMPOSIUM ON MATHEMATICAL STATISTICS AND PROBABILITY 507 (J. Neyman ed., 1951); Kenneth J. Arrow & Gérard Debreu, Existence of an Equilibrium for a Competitive Economy, 22 ECONOMETRICA 265 (1954).

equilibrium, once one makes an appropriate redistribution of initial endowments (the second fundamental theorem of welfare economics). Reinforced by the Coase theorem, which advanced that private bargaining might provide a solution to an inefficient redistribution of initial endowments in the absence of transaction costs,<sup>18</sup> the general equilibrium theory (as well as partial equilibrium theory) glorifies the concept of perfect competition and confined the role of government to lump-sum redistributive measures.<sup>19</sup> The fact that partial equilibrium theory serves as the foundations of modern competition economics' analysis may explain why growth has never been an explicit aim of competition law and policy.

Schumpeter's theory of economic development attempted to break away from the concept of static equilibrium. Schumpeter criticizes the "circular flow of economic life as conditioned by given circumstances" approach, focusing instead on the process of economic change<sup>20</sup>. According to Schumpeter, economic development comes from within the economic system and is not merely an adaptation to external factors. It occurs discontinuously, thus disrupting any equilibrium that might be attained. Discontinuous bursts of innovative investment by the entrepreneurs constitute the central autonomous cause of economic development. In this dynamic context, above normal profits provide reward to innovation, thus leading to surplus values that cannot be present in perfect equilibrium conditions. As Schumpeter observes, "(d)evelopment [...] is a distinct phenomenon, entirely foreign to what may be observed in the circular flow or in the tendency towards equilibrium."<sup>21</sup> The role of consumers in the process of economic change is secondary, in contrast to the important role producers play in "educating" the consumers to want new things.<sup>22</sup> In the words of Schumpeter, "while it is permissible and even necessary to consider consumers' wants as an independent and indeed the fundamental force in a theory of the circular flow, we must take a different attitude as soon as we analyze change."<sup>23</sup>This emphasis on the dynamic aspects of change, the recognition of the primordial role of the entrepreneur, and the neglect of consumer surplus, might appear in direct conflict to the neoclassical price theory's focus on static consumer surplus and competition law's traditional preoccupation with consumer choice.

#### B. Economic Development and the Inefficient Markets Paradigm

<sup>&</sup>lt;sup>18</sup> Ronald H. Coase, The Nature of the Firm, 4 ECONOMICA 386 (1937).

<sup>&</sup>lt;sup>19</sup> DEEPAL LAL, THE POVERTY OF DEVELOPMENT ECONOMICS (2000).

<sup>&</sup>lt;sup>20</sup> JOSEPH SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT (Transaction Publishers 2005) (1934). <sup>21</sup> Id. at 64.

<sup>&</sup>lt;sup>22</sup> Id.

<sup>&</sup>lt;sup>23</sup> Id. at 65.

Contrary to classical and neo-classical economics, which assumed the superiority of the market system for the efficient allocation of resources in society, a set of economic theories emerged and evolved during the 19<sup>th</sup> century and early 20<sup>th</sup> century, emphasizing, to various degrees, the inefficiency of the market mechanism, either to achieve the static efficiency aims favored by neoclassical price theory or the objective of economic growth. The common thread of these movements consists in advancing reasons for a more active state intervention in markets. From this perspective, and depending on the degree and methods of State intervention advocated, they challenge competition economics' belief that, absent market imperfections, the market provides the most efficient mechanism for the organization of economic transactions.

#### 1. The Infant Industry Argument

Industrialization has always been at the heart of any discussion on development. According to the "infant industry" argument, a country should have productive power by first strengthening its infant industries to level the playing field before opening its doors to free trade and competition<sup>24</sup>. In his famous statement supporting the case for infant industry protection, John Stuart Mill<sup>25</sup> alluded to one of the main prerequisites for such industries: the presence of dynamic learning effects that are external to firms. However, protection should be temporary as long as the infant industry matures and becomes viable without protection. Subsequently, Charles Francis Bastable added another condition requiring that the cumulative net benefits provided by the protected industry exceed the cumulative costs of protection.<sup>26</sup> Together, these conditions are known as the Mill–Bastable Test.<sup>27</sup>

Almost all arguments for infant industries boil down to production costs for newly established industries within a country being likely to be initially higher than for well-established foreign producers of the same product, who have greater experience, higher knowledge and higher skill levels. Over time, new domestic producers would raise their productivity and be able to compete with foreign firms on equal footing. One should note that this argument is for

<sup>&</sup>lt;sup>24</sup> See FRIEDRICH LIST, NATIONAL SYSTEM OF POLITICAL ECONOMY 72-73 (1856). List thought that free trade was suitable for industrialized countries and that industrialization through free trade was possible only in case countries were on the same level of development. Alexander Hamilton encouraged "government activism" to promote industrialization. See MICHAEL P. COWEN and ROBERT SHENTON, DOCTRINES OF DEVELOPMENT 155 (1996). <sup>25</sup> See JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY WITH SOME OF THEIR

<sup>&</sup>lt;sup>25</sup> See JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY WITH SOME OF THEIR APPLICATIONS TO SOCIAL PHILOSOPHY 918–919 (1848), reprinted in Murray C. Kemp, The Mill-Bastable Infant Industry Dogma, 68 J. POL. ECON. 65, 65 (1960).

<sup>&</sup>lt;sup>26</sup> CHARLES FRANCIS BASTABLE, THE COMMERCE OF NATIONS 140–43 (10th ed. 1921) (1891).

<sup>&</sup>lt;sup>27</sup> For further discussion of the Mill–Bastable Test, see Murray C. Kemp, The Mill-Bastable Infant Industry Dogma, 68 J. PoL. ECON. 65–67 (1960); see also Marc J. Melitz, When and How Should Infant Industries be Protected?, 66 J. INT'L ECON. 177 (2005).

temporary support of the domestic industry through the suppression of competition, Although one common mechanism for competition suppression is trade protection, the modern theory of "second best"<sup>28</sup> proffers that a producer subsidy is superior to a more distorting tariff, unless the government is constrained to raise revenue or taxes are also distorting. Regardless of the means of suppression, there are various arguments advanced by the supporters of the "infant industry" argument for a more active state intervention.

First it is considered important to induce investment in the acquisition of technological knowledge such as learning-by-doing and on-the-job-training, which create externalities that are internalized by the firm. Learning effects are crucial in most industries.<sup>29</sup>

Second, state intervention may also produce externalities externalities exterior to the firm but interior to the industry. In this case, the effects of the activity of one firm benefit the others and cannot be appropriated completely by that firm. Externalities generated by the accumulation of knowledge due to R&D are of this type. When spillovers occur to other firms, it leads to a situation of under-provision of the external good. Spillovers may not be purely national and may also have an international impact. The case for government intervention through a subsidy in these cases is well established. A learningby-doing effect with external impact to the firm is also a case for output subsidies provided by the state. A tariff is again a second best option because it introduces an unnecessary consumer distortion. If investment in human capital is required for an increase in productivity, then the firm or the workers should be able to borrow. Only if there are imperfections in the capital markets will this solution not work. However, output subsidies also do not solve the appropriability problem of externalities.

Third, there is ample empirical evidence in support of the assertion that R&D generates high rates of return and that the social rate is much larger than the private rate.<sup>30</sup> Problems of coordination and imperfect markets or lack of perfect information lead to the well-known case of underinvestment. Let us suppose that there are significant fixed costs and export demand is

<sup>&</sup>lt;sup>28</sup> R.G. Lipsey & Kelvin Lancaster, The General Theory of Second Best, 24 REV. ECON. STUD.

<sup>&</sup>lt;sup>29</sup> Martin B. Zimmerman, Learning Effects and the Commercialization of New Energy Technologies: The Case of Nuclear Power, 13 BELL J. ECON. 297 (1982); Marvin B. Lieberman, The Learning Curve and Pricing in the Chemical Processing Industries, 15 RAND J. ECON. 213 (1983); M. Bell., B. Ross-Larson & L. Westphal, Assessing the Performance of Infant Industries, 16 J. DEV. ECON. 101 (1984).

<sup>&</sup>lt;sup>30</sup> Timothy F. Bresnahan, Measuring the Spillovers from Technical Advance: Mainframe Computers in Financial Services, 76 AM. ECON. REV. 742 (1986); Manuel Trajtenberg, The Welfare Analysis of Product Innovations, With an Application to Computed Tomography Scanners, 97 J. POL. ECON. 444 (1989); Jeffrey I. Bernstein & M. Ishaq Nadiri, Interindustry R&D, Rates of Return, and Production in High-Tech Industries (C.V. Starr Ctr. for Applied Econ., Econ. Research Reports. 1988), available at http://www.econ.nyu.edu/cvstarr/working/1988/RR88-04.pdf.

limited due to high transportation costs or barriers to trade abroad. Profitable entry by a producer may be precluded by the non-existence of a buyer downstream in the market. The same reasoning may apply to a firm that needs inputs upstream in the market to enter into production. and may also apply to network externalities that arise due to either technological or pecuniary linkages. These coordination failures may be a reason to establish a tariff in order to temporarily raise profitability in the market. However, it is doubtful that a tariff will solve the coordination problem. A superior policy would be some form of centralized system of information, a role usually performed by financial institutions, or sector or regional planning.

Fourth, an additional problem justifying intervention arises from imperfect capital markets that either do not finance the investments required or, due to problems of adverse selection and moral hazard, require collateral that would penalize small firms and market entry. There is no ready solution and besides, government intervention requires both ex ante and ex post knowledge of rates of return which are difficult to estimate.

Fifth, a further case for government intervention is linked to the need to build a reputation in export markets. Consumers have imperfect information and it is costly for them to discover the quality of a new firm. As a result, it is costlyto build a reputation, leading some economists to advance the need for an export subsidy to help in the penetration of new markets. However, there is a serious signaling problem with this approach: oftentimes quality is associated with the intrinsic characteristics of products, and some firms have higher quality products because they are better at producing those goods. As explained by Grossman and Horn<sup>31</sup>, in order to get the subsidy, every firm will have to degrade the quality of its product. The best policies are the ones that give an incentive for firms to produce differential improvements in the quality of their products, like minimum standards and enforcing warranties.

We know that in perfect equilibrium markets, intervention is almost never an optimal policy. As we saw above, within a monopoly market structure there is an argument for government intervention, which is not surprising, since monopoly is already a source of market distortion. Is there a case for government intervention in intermediate structures of imperfect competition like an oligopoly? This is a more complex world.

Theoretical and empirical evidence shows that the strongest case for government intervention may arise in the first stages of introduction of a new innovative product, both in developed and developing countries. For developed countries it is in terms of R&D and for developing countries in terms of learning-by-doing. In both cases, spillover effects are very important and it may be difficult for private firms to appropriate all the benefits of their

<sup>&</sup>lt;sup>31</sup> Gene M. Grossman and Henrik Horn, Infant-Industry Protection Reconsidered: The Case of Informational Barriers to Entry, 103 Q. J. ECON. 767 (1988).

actions. But it should be recognized that protection comes only as a second or even a third best policy option. Subsidies or tax benefits to R&D and the process of learning are more adequate.

Models of endogenous growth based on the introduction of new varieties or new products are important to understand how diffusion of technological innovation takes place around the world.<sup>32</sup> Technological transfer from the North to the South is crucial for the development of the South, and the technological development of the South is based on imitation of the inventions/innovations that take place in the North. While a stricter policy of intellectual property rights (IPRs) in the North may benefit R&D and monopoly rents in this region, it will prevent faster imitation by the South, unless imitation is only done by multinationals of the North located in the South. If the first effect predominates, stricter IPRs can lead to a decrease of wages in the South. This is another element to consider in the definition, for example, of the optimal duration of a patent. But a lax policy of IPRs in the South can also prevent development of technologies adapted to the economies of the South. This can have implications on the adequate competition law-intellectual property interaction, which might not be the same for developing and developed jurisdictions.

There is still a scarcity of rigorous studies on the relevance and effects of protection for infant industries, despite its wide use by developing countries. As we saw it is only generally a third best policy and should always be temporary, but the difficulty in practice is to identify what industries to target as in industrial policy. What can never go wrong are policies for human capital accumulation and building necessary infrastructure.

#### 2. Marxist Approaches

In his book "Capital", co-authored with Friedrich Engels,<sup>33</sup> Karl Marx introduced a linear growth model: the stages of growth.<sup>34</sup> Based on a historical analysis, Marx advanced the view that capitalism constitutes one of the stages on the road to economic development before the society evolves to socialism.<sup>35</sup> He put forward the labor theory of value: that the labor factor of

<sup>&</sup>lt;sup>32</sup> For a survey see Gino Gancia & Fabricio Zilibotti, Horizontal Innovation in the Theory of Growth and Development, in HANDBOOK OF ECONOMIC GROWTH (Philippe Aghion and Steven Durlauf eds., 1995). <sup>33</sup> KARL MARX, CAPITAL: A CRITIQUE OF POLITICAL ECONOMY (Penguin Classics 1992) (1867).

<sup>&</sup>lt;sup>34</sup> Although Karl Marx is usually grouped with classical economics, we have included him in this part since he was one of the few early economists who presented a unique linear growth path, which also influenced the thinking of later developmental economists under the Neo Marxists school.

<sup>&</sup>lt;sup>35</sup> See KARL MARX, CAPITAL: A CRITIQUE OF POLITICAL ECONOMY, supra note 32, at Part I, Chapter I; JOAN ROBINSON, AN ESSAY ON MARXIAN ECONOMICS (2d ed. 1966).

production rather than market forces (the exchange value of the commodity as represented by its price on the market) are the source of the value of a commodity.<sup>36</sup> But his theory of value should be understood as a normative (ideological) theory, when confronted with market prices. Pranah Bardhan notes that "development economics is the only major branch of economics where elements of Marxist and Marx-inspired ideas have had a significant impact on the mainstream."<sup>37</sup> The influence of Marxist economic thought on development economics resumes in the following two issues: (i) the introduction of the idea of unequal exchange and (ii) the emphasis on structural constraints (i.e. historical and social norms, wealth) that provide little scope to some actors for freedom of action or rational choice. A common feature of Marxist and neo-Marxist economic thought on development is indeed the realization that relationships of voluntary economic exchange between developed and developing countries (the center and the periphery) do not lead to a situation of mutual advantage, as was argued by the classical liberal economists in conformity to the precepts of the theory of comparative advantage. Rather, as was shown by historical experience, these relationships led merely to the alleged continuous transfer of value from the capital-poor periphery producing commodities to the capital-rich center<sup>38</sup>, although this proposition was not theoretically proved. This effect was intensified by the international division of labor between societies focusing on agricultural and mineral (primary) products and industrialized countries, a byproduct of the colonial system.<sup>39</sup> These propositions would be taken by the structuralist/institutionalist school in Latin America of the 1950s.

The structural constraints resulting from this asymmetry between rich jurisdictions, able to maximize the results of the competitive process, and poor agricultural periphery, may take different forms, such as the existence of institutional traps (inefficient institutions or social norms that it is impossible to reform) or the persistence of production relations perpetuating mass poverty in the periphery (i.e. imposed by multi-national companies). These structural constraints are mirrored in the socio-economic and political framework of these jurisdictions, differentiating them as a separate category from the developed center. The concept of a developing (or under-developed) country is thus born. Development economists inspired by Marxism advanced an active state intervention and the regulation of multi-national companies as the means through which industrialization, and thus modernization, would occur.

 <sup>&</sup>lt;sup>36</sup> Marx defined commodity as "an object outside us, a thing that by its properties satisfies human wants of some sort or another". See, MARX, supra note 32, at Part I, Chapter I, Section 1, No. II2.
<sup>37</sup> Pranah Bardham, Marxist Ideas in Development Economics - A Brief Evaluation, 20 ECON

<sup>&</sup>lt;sup>37</sup> Pranah Bardham, Marxist Ideas in Development Economics - A Brief Evaluation, 20 ECON & POL. WKLY. 550, 550 (1985).

<sup>&</sup>lt;sup>38</sup> ARGHIRI EMMANUEL, UNEQUAL EXCHANGE (1972); Joseph Love, Raul Prebisch and the Origins of the Doctrine of Unequal Exchange, 15 LATIN AM. RES. REV. 45 (1980).

<sup>&</sup>lt;sup>39</sup> See BARAN, supra note 11.

Marxists differed, however, from neo-Marxists in their conception of the type of economics needed for these nations, the first advancing a monoeconomics claim that perceives development as a linear evolution from a pre-capitalist society to a capitalist one, and finally to socialism, the second rejecting monoeconomics and advancing different strategies on the need to industrialize under-developed nations.<sup>40</sup>

#### 3. Neoclassical Price Theory and Market Failures

Neoclassical price theory is characterized by being micro-oriented, focusing on the utility-maximizing behavior of individuals and the profitmaximizing actions of perfectly competitive firms, with the main concern being the "static allocation of resources" and "not the dynamic growth of an entire economy."<sup>41</sup> Traditionally, neoclassical economics presumed that people act rationally, the bases of their choice being the maximization of utility for individuals and that of profits for firms. These choices are made independently, under conditions of perfect information. However, these assumptions are obviously unreal for many markets, which are characterized by the presence of market failures. Hence, markets left to operate alone will not always result in efficient allocation of goods and services. Market failure may be attributed to many factors, such as information asymmetries, failure to supply public goods, imperfect competition or monopolistic competition. And markets that are taken for granted in developed countries may simply not exist in developing countries.<sup>42</sup>

Starting with Marshall, neoclassical economists altered their view on the ability of government to intervene efficiently in the marketplace and the importance of consumer surplus.<sup>43</sup> The trend was intensified at the turn of the 20<sup>th</sup> century with Sidwick,<sup>44</sup> and more importantly by Pigou.<sup>45</sup> Pigou's main contribution to welfare economics was the theory of market failures that extended beyond Marshall's focus on consumer surplus.<sup>46</sup> Pigou challenged the prior belief of classical and neo-classical economists on the ability of the

<sup>&</sup>lt;sup>40</sup> See Albert O. Hirschman, Grandeur and Décadence de l'Economie du Dévelopement, 36 ECONOMIE ET POLITIQUE 725, 727 (1981).

<sup>&</sup>lt;sup>41</sup> GERALD M. MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS 38 (2005).

<sup>&</sup>lt;sup>42</sup> Extensive empirical work done by Abijhit Banerjee, Esther Dufflo and others have shown the limitations of the assumption that persons in developing countries do simple perform utility maximization. Note their research using randomnized experiments, summarized in ABIJHIT BANERJEE, ESTHER DUFFLO, POOR ECONOMICS: A RADICAL RETHINKING OF THE WAY TO FIGHT GLOBAL POVERTY, (BBS Publications, 2011).

<sup>&</sup>lt;sup>43</sup> ALFRED MARSHALL, INDUSTRY AND TRADE (4th ed. 1923).

<sup>&</sup>lt;sup>44</sup> HENRY SIDWICK, THE PRINCIPLES OF POLITICAL ECONOMY (3d ed. 1901).

<sup>&</sup>lt;sup>45</sup> ARTHUR CECIL PIGOU, THE ECONOMICS OF WELFARE (4th ed. 1932).

<sup>&</sup>lt;sup>46</sup>See Steven G. Medema, The Hesitant hand: taming Self-Interest in the History of Economics Ideas (2009); No Wealth but Life – Welfare Economics and the Welfare State in Britain, 1880-1945 (Roger E. Backhouse & Tamotsu Nishizawa eds., 2010).

free play of self interest to serve the public interest, which formed the intellectual underpinning of the laissez-faire policy prescriptions prevailing until the 1930s. The "imperfect competition" and "monopolistic competition" theories advanced by Robinson and Chamberlin in the early 1930s further reinforced the view that the perfect competition paradigm was unrealistic.<sup>47</sup>

Taking as a given that the aim of sound economic policy is to increase the "national dividend", which measures the value of the output of the community, Pigou highlighted the existence of various instances where there are divergences between the private and social net products, because of market failures such as externalities and, more generally, the existence of spillovers.<sup>48</sup> He concluded that "certain specific acts of interference with normal economic processes may be expected not to diminish but to increase the dividend,"49 thus challenging the sharp dichotomy between state intervention and the efficiency of markets that prevailed at the time. The establishment of economically sophisticated regulatory regimes in specific industries (i.e. airlines, telecoms, energy) in the post war period, at the expense of softer forms of regulation such as competition law, relied upon Pigou's theory of market failure. Ronald Coase and the Chicago school heavily criticized his prescriptions,<sup>50</sup> thus marking the beginning of a separate tradition in welfare economics, more inimical to state intervention.

#### 4. Keynesian Approaches

A basic tenet of neoclassical price theory is that, absent a market failure, markets will work efficiently in the long run. Failures like the Great Depression were not contemplated. In contrast, Keynesian economics in the 1930s addressed questions of "depression equilibrium and mass unemployment" and advanced "a strategic regulative role for the state."<sup>51</sup> Keynes was particularly concerned with the unemployment of labor and the underutilization of capital during depression in advanced industrial countries as a result of over-saving. Keynes's remedy to unemployment was to increase aggregate demand through fiscal policies.<sup>52</sup> Keynesian economics thus led to a relative neglect of the price mechanism and the micro-economic foundations which were crucial for welfare economics.<sup>53</sup> Central government intervention

<sup>&</sup>lt;sup>47</sup> JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION (Macmillan 1969) (1933); EDWARD CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION: A RE-ORIENTATION OF THE THEORY OF VALUE (1938).

<sup>&</sup>lt;sup>48</sup> PIGOU, supra note 43 at 125-130.

<sup>&</sup>lt;sup>49</sup> ARTHUR CECIL PIGOU, ECONOMICS IN PRACTICE: SIX LECTURES ON CURRENT ISSUES 107 (1935).

Ronald Coase, The Theory of Social Cost, 3 J. L. & ECON. 1 (1960).

<sup>&</sup>lt;sup>51</sup> PETER PRESTON, DEVELOPMENT THEORY, AN INTRODUCTION 59 (1996).

<sup>&</sup>lt;sup>52</sup> GERALD MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS 54 (2005). <sup>53</sup> DEEPAK LAL, THE POVERTY OF DEVELOPMENT ECONOMICS 9 (2000).

was thus necessary in order to approach full-employment equilibrium. This argument, along with market failure theories, paved the way for a more active role for the state and legitimized interventionist policies in the 1930s.

Although not concerned with developing countries as such, Keynes exercised an indirect intellectual influence on development economics, as manifested by the Harod-Domar growth models, which were used as the basis for planning models for developing countries following World War II.<sup>54</sup> Harod and Domar found that growth is proportional to the share of investment spending as a proportion of national income, thus extending the static employment analysis of Keynes. The growth rate of national income is thus inversely related to the capital-output ratio. Although the Harod-Domar model was not concerned with under-developed countries, and was initially formulated with the aim of addressing issues of chronic unemployment in industrialized countries following the Depression, one of its implications, as we will discuss in the next part, was that the principal strategies of development were thought to be the mobilization of domestic and foreign savings in order to generate sufficient investment that would accelerate economic growth. These models, the so-called two-gap models, were extensively used by international organizations in the 1960s and 1970s to determine the need of foreign exchange (aid) required to achieve a given growth rate by the developing country.

#### **III.** The Battle for the Soul of Development Economics

We can distinguish a first phase in development economics, during the 1950s and 1960s, as being dominated by interventionism, i.e. state intervention, followed by a second phase: the return to the free market paradigm in the 1970s-1980s. Finally, in the third phase starting in the 1990s, the emphasis shifted to institutional design. <sup>55</sup> The following part will address these three phases of development economics. Our claim is that while the first phase marked the departure of development economics from the neoclassical price theory framework that forms the theoretical backbone of welfare economics, in particular competition economics, the second phase was characterized by important ideological debates and tensions that led to a progressive embracement of the market/competition paradiam bv development economics. The common focus on institutions during the third phase, offers a real chance for a useful interaction between development

<sup>&</sup>lt;sup>54</sup> Roy F. Harod, An Essay in Dynamic Theory, ECON. J., Mar. 1939 at 14; Evsey D. Domar, Capital Expansion, Rate of Growth, and Employment, 14 ECONOMETRICA 137 (1946).

<sup>&</sup>lt;sup>55</sup> See David Vines, Comments, in FRONTIERS OF DEVELOPMENT ECONOMICS 135, 136 (Gerald M. Meier & Joseph E. Stiglitz eds., 2001).

economics and competition economics that corresponds to the evolving aims of competition law.

#### A. Development Economics as an Alternative to Mono-Economics

In the early post-World War II era, development economists contemplated that capital accumulation and technical progress were the main driving forces behind development. Development economists did not share the neoclassical economists' beliefs about the price system and markets in general, at least for developing economies. As Gerald M. Meier notes:

"(t)he price system in the less developed country existed in only a rudimentary form: markets were fragmented and localized; market imperfections were pervasive; and there was little range for the sophisticated exercise of the logic of choice as in a well- defined price system. Moreover, large changes in the economy were the very essence of development – not the incremental or marginal changes of neoclassical economics. Substantial transformation in the structure of the economy was needed. A widening of the economy was required – not simply the tightening up of the economy through the application of neoclassical principles of resource allocation."<sup>56</sup>

Under the influence of the Harod-Domar model, the major obstacle to be overcome was thought to be capital deficiency: "it was necessary to fill the savings gap and to foster technical progress."<sup>57</sup> The solution suggested to this problem was foreign aid for planned investment and the adoption of import-substitution industrialization policies that would rely on central planning. Development would thus be achieved through the promotion of both private and public investments.

The theoretical underpinning of these theories was the "dual sector" model suggested by Arthur Lewis in 1954.<sup>58</sup> Lewis argued that "the central problem of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 percent of its national income or less converts itself into an economy where voluntary saving is running at about 12 to 15 percent of national income or more."<sup>59</sup> His suggestion was that under-developed nations were characterized by the presence of two economies: a high productivity one with high wages and a low productivity one with low wages but surplus labor (essentially laborers, self-subsistence farmers, domestic services workers, small retailers). Capital

<sup>&</sup>lt;sup>56</sup> GERALD M. MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS 54 (2005).

<sup>&</sup>lt;sup>57</sup> Id. at 56.

<sup>&</sup>lt;sup>58</sup> Arthur Lewis, Economic Development with Unlimited Supplies of Labor, 22 MANCHESTER Sch. 139 (1954).

<sup>&</sup>lt;sup>99</sup> Id. at 155.

accumulation will lead to the gradual transfer of these labor resources from the subsistence sector to the high productivity one, as long as capital accumulation catches up with the surplus labor. The process relies on the assumption that, joined with capital, labor produces an output larger than its wage, thus generating a capitalist surplus which is later reinvested in order to create new capital. Growth is largely dependent on the increase of the share of the capitalist sector in national income.

In "The Stages of Growth: A Non-Communist Manifesto," Rostow also highlighted the crucial role played by investment in presenting his linearstages-of-growth model as a road map for development.<sup>60</sup> Drawing on the historical example of Great Britain, Rostow identified the following five stages of economic development: traditional, transitional, take-off, maturity and high mass consumption. This evolutionary and linear path to growth was universally applicable (to both industrialized and non-industrialised countries). Development was perceived as an evolutionary quantitative process in the path of industrialization, involving mainly the extension of the existing structure of production. However, Rostow's prediction that foreign investment and aid would ensure the economic take-off of developing nations, failed to materialize and in time the enthusiasm for the theory began to decline.<sup>61</sup> A common thread of these development theories was the active role advocated for state intervention in the economy in order to generate capital accumulation and the necessary investment for industrialization. This was essential, in view of the need to adopt new technologies and to preserve high investment and saving rates.

The "big push" theory, advanced by Rosenstein-Rodin in the 1940s, further emphasized the role of the State as an ex ante coordinator for economic activities.<sup>62</sup> The aim of state intervention was to take advantage of the increasing returns that could be realized from large-scale planned industrialization projects encompassing several major sectors of the economy simultaneously. Simultaneous industrialization of many sectors of the economy would be profitable on the aggregate, even if it would not be individually profitable to industrialize them separately. This "big push" would exercise a domino effect on the economy and ensure sustained development. Rosenstein-Rodan noted, however, that the market mechanism was not able activities needed to coordinate the to ensure this simultaneous

<sup>&</sup>lt;sup>60</sup> WALT WITMAN ROSTOW, THE STAGES OF ECONOMIC GROWTH – A NON-COMMUNIST MANIFESTO (1960).

<sup>&</sup>lt;sup>61</sup> JAMES M. CYPHER & JAMES L. DIETZ, THE PROCESS OF ECONOMIC DEVELOPMENT 141 (3d ed. 2009).

<sup>&</sup>lt;sup>62</sup> Paul N. Rosenstein-Rodan, Problems of Industrialization of Eastern and Southeastern Europe, 53 ECON. J. 202, 210-11 (1943).

industrialization (because of a coordination failure), thus leading to a low equilibrium underdevelopment trap.<sup>63</sup> He observed that

"(t)he market mechanism alone will not lead to the creation of social overhead capital, which normally accounts for 30 to 35 percent of total investment. That must be sponsored, planned, or programmed (usually by public investment). To take advantage of external economies (due to indivisibilities) require an "optimum size" of enterprise to be brought about by a simultaneous planning of several complementary industries."<sup>64</sup>

The under-development problem was thus not only caused by the absence of capital or technology but also by the lack of coordination of the different economic activities.

Nurske presented another variation of the "big push" thesis: the theory of balanced growth.<sup>65</sup> He argued that the problem with developing countries is their low capital investments capabilities, which affect their productivity levels and their overall per capita income, putting them in a "vicious circle of poverty." He was of the view that mere individual capital investment efforts will not solve the problem. There is a need for creating a large-scale supply and a matching large-scale demand. The market economy is unable to achieve that: when an individual business or single industry alone attempts to raise its output level by increasing its individual capital investment, it runs the risk of not finding a market for its products because of the low level of overall average income.<sup>66</sup> However, Nurske disagreed with Rosenstein-Rodan on the methods used. While Rosenstein-Rodan advocated a centralized solution to the development problem, Nurske thought of less interventionist approaches to form capital, such as the use of "dynamic fiscal policies" and forced savings; he also emphasized the role of entrepreneurs in the development process.<sup>67</sup> This, coupled with regulations shielding infant industries from import competition, would lead to an increase in supply met by a corresponding increase in demand. The programme evolved to the Import Substitution Industrialization (ISI) programmes, very influential in Latin America during the 1950s and 1960s.

In the 1940s and 1950s a new wave of economic theories emerged to challenge neoclassical price theory from structuralists/institutionalists

<sup>&</sup>lt;sup>63</sup> See Richard R. Nelson, A Theory of the Low-Level Equilibrium Trap in Underdeveloped Economies, 46 AM. ECON. REV. 894 (1956) (discussing the low level equilibrium trap).

<sup>&</sup>lt;sup>64</sup> See Paul N. Rosenstein-Rodan, The International Development of Economically Backward Areas, International Affairs, Royal Inst. Int'l Aff., Apr. 1944, at 157. See also CYPHER & DIETZ, supra note 59, at 143.

<sup>&</sup>lt;sup>65</sup> RAGNAR NURSKE, PROBLEMS OF CAPITAL FORMATION IN UNDERDEVELOPED COUNTRIES (1953).

<sup>&</sup>lt;sup>67</sup> Id. at Chapter VII.

perspectives.<sup>68</sup> These heterodox economists did not believe that relatively minor changes, such as an increase in foreign aid or a sudden increase in investment, would be sufficient to create a "big push" or "take-off" into sustained growth. In their view, "such limited changes, in the context of existing structures and institutions prevailing in less developing societies, might result in strengthening of the backward socio-economic framework, consolidating adverse path dependence."<sup>69</sup>

In his work with Hal Singer, Raúl Prebisch was highly skeptical of Adam Smith's belief in the "international division of labor."<sup>70</sup> Prebisch distinguished between developed countries and the "periphery": "[e]conomies in the former are self-sustained through technological progress, whereas the peripheral ones play the role of row material suppliers for the industrial center."<sup>71</sup> The main thrust of the theory was that this center-periphery system was marked by a bipolar evolution favoring the technological development of the center, while for the periphery technical progress penetrated only to the degree that was necessary to generate exports of low-cost foodstuffs and raw materials for the markets of the center. Adam Smith's theory was thus flawed, because it was based on the assumption that the two systems are "strictly complementary"; this was not the case, since "there are specific differences in structure and functions among countries that participate in international trade."<sup>72</sup>

Neoclassical price theory was criticized for being disconnected from the realities of the periphery, in particular as it did not take into account their historical (political, economic and social) background. Prebisch focused on the structure of export trade in under-developed economies, highlighting that the terms of trade based on comparative advantage put the developing societies in a less favorable position than that of the centre, as the long term trend of primary commodity prices would be negative.. The Prebisch-Singer thesis of export pessimism proposed a solution: "programmed" industrialization via import substitution based on protectionist policies."<sup>73</sup> The new policy solution was to pursue a national program of industrialization behind protective tariff barriers and the suppression of competition.

This approach was widely adopted by Latin American countries until the 1960s, when it became obvious that it failed to fulfill its promises. However,

<sup>&</sup>lt;sup>68</sup> GILBERT RIST, THE HISTORY OF DEVELOPMENT FROM WESTERN ORIGINS TO GLOBAL FAITH 124 (3d ed. 2009).

<sup>&</sup>lt;sup>69</sup> CYPHER & DIETZ, supra note 59, at 168.

<sup>&</sup>lt;sup>70</sup> U.N. Dept. of Econ. Affairs, Econ. Comm'n for Latin America, The Economic Development of Latin America and its Principal Problems (1950) (by Raul Prebisch); Hal Singer, Comments to the Terms of Trade and Economic Development, 40 REV. ECON. AND STAT. 84 (1950).

<sup>&</sup>lt;sup>71</sup> INTERNATIONAL ECONOMICS AND DEVELOPMENT: ESSAYS IN HONOR OF RAUL PREBISCH 5 (Luis Eugenio di Marco ed., 1972).

<sup>&</sup>lt;u>7</u>2 ld.

<sup>&</sup>lt;sup>73</sup> Gerald M. Meier, Biography of a Subject – An Evolution of Development Economics 66 (2005).

at a later stage, structuralists shifted their focus to internal political economy aspects and the very skewed wealth and income distribution in Latin America as a factor blocking development.

In more recent jargon, even using neoclassical economics, developing countries are characterized by non-linearities that originate all kinds of growth traps. The first trap to be formulated was Malthus theory of population. Rosenstein-Rodan, Nurske and Hirschman formulate traps due to externalities that can originate from infrastructure or lack of coordination, and there are dozens of theories about all kinds of traps. If the country does not overcome the trap it falls back into a low equilibrium level. If it overcomes the trap it starts a phase of sustained growth. The work of Banerjee and Dufflo is being applied to prove or disprove the existence of these traps.<sup>74</sup>

Elsewhere,. , there was considerable appeal in strong state action to "catch up" with the advanced Western nations. Beginning with the creation of a central planning commission by Nehru in 1950 in India, many other developing countries followed suit, believing in the efficiency of a national development plan that would determine priorities, set quantitative targets, and establish public policies to achieve the desired objectives. Governments of emerging nations turned to national planning as if this was a precondition for development. Confidence in planning also came from the background experience of active state intervention during the Great Depression of the interwar period (including import substitution policies in Latin America), the role of foreign aid through the Marshall plan after World War II, and the example of the Soviet planned industrialization."<sup>75</sup>

This led to the debate between the proponents of "mono-economics," that is the claim that economics consists of principles of universal validity, with the proponents of the view that developing countries have particularities that require a different kind of economics.<sup>76</sup> The concept of the "underdeveloped country" that emerged was instrumental in the flourishing of the separate discipline of development economics.<sup>77</sup> The rejection of the mono-economics claim presupposed that underdeveloped countries shared a set of specific socio-economic and institutional conditions that set them apart from the developed world, thus requiring the adoption of new economic strategies to promote development and growth.<sup>78</sup> The essence of their claim was that

<sup>&</sup>lt;sup>74</sup> ABIJHIT BANERJEE, ESTHER DUFFLO, POOR ECONOMICS: A RADICAL RETHINKING OF THE WAY TO FIGHT GLOBAL POVERTY, (BBS Publications, 2011).

<sup>&</sup>lt;sup>75</sup> GERALD M. MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS (Oxford University Press, 2005), p. 72.

<sup>&</sup>lt;sup>76</sup> Albert O. Hirschman, The rise and decline of development economics, in ALBERT O. HIRSCHMAN, ESSAYS IN TRESSPASSING: ECONOMICS TO POLITICS AND BEYOND (Cambridge University Press, 1981), p. 4.

<sup>&</sup>lt;sup>77</sup> ALBERT O. HIRSCHMAN, THE STRATEGY OF ECONOMIC DEVELOPMENT (Yale University Press: New Haven, 1958).

<sup>&</sup>lt;sup>78</sup> ALEXANDER GERSCHENKRON, ECONOMIC BACKWARDNESS IN HISTORICAL PERSPECTIVE – A BOOK OF ESSAYS, (The Belknap Press of Harvard University Press: Cambridge, MA, 1962).

institutional differences between developed and underdeveloped nations affected not only the speed, but also the path of economic development. It was thus necessary to establish a distinction between the concepts of growth, an essentially quantitative process of market expansion, and that of development, an inherently qualitative operation of generating a new equilibrium.

Drawing on the history of European industrialisation in the 19<sup>th</sup> century, Gerschenkron provided evidence that the roadmap for development of advanced economies was not necessarily applicable to developing jurisdictions.<sup>79</sup> Gerschenkron argued that features of late industrialization are distinctively different from that of the advanced countries<sup>80</sup> For him, State intervention should compensate for the inadequate supplies of capital, skilled labour, entrepreneurship and technological capacity found in backward countries.

A different strand of structuralist literature was the dependency theory,<sup>81</sup> which argued that peripheral countries provide the center countries with the needed inputs and function as markets for their manufactured products. As Baran explains, it was the colonial powers that caused the underdevelopment of these poor nations. He attributed this result to "monopoly capitalism,"<sup>82</sup> In his view, based on historical research on underdeveloped nations, colonization was the main "source of poverty" for developing countries, as it operated to channel their economic surplus.<sup>83</sup> The center had an inherent interest in maintaining the status quo –the

<sup>&</sup>lt;sup>79</sup> Id., pp. 26-30.

<sup>&</sup>lt;sup>80</sup> C.P Chandersekhar, Alexander Gerschenkron and Late Industrialization in THE PIONEERS OF DEVELOPMENT ECONOMICS: GREAT ECONOMISTS ON DEVELOPMENT 181 (2005). ALEXANDER GERSCHENKRON, ECONOMICS BACKWARDNESS IN HISTORICAL PERSPECTIVE: A BOOK OF ESSAYS 182 (1962),

<sup>&</sup>lt;sup>81</sup> There are a number of variations of the dependency theory with contributions from different scholars from various countries and disciplines. Contributors include Raúl Prebisch from Chile, Enzo Faletto and Celso Fernado from Brazil, Orlando Fals Borda from Colombia, Rodolfo Stavenhagen from Mexico, Samir Amin in Africa, André Gunder Frank, Pierre Jalée, Dieter Senghaas and Johan Galtung in Europe and Paul Baran and Paul Sweezy in the United States. See GILBERT RIST, THE HISTORY OF DEVELOPMENT: FROM WESTERN ORIGINS TO GLOBAL FAITH 125 (3d ed. 2009). Dependency theory also featured in non-Marxist schools. Fernado Henrique Cardoso, the former Brazilian President, identified three stages that underdeveloped countries went through. The first stage was during the colonial era: the agro-export period. The second stage was post-Second World War where countries in Latin America made some progress through the ISI policies. The third stage was the authoritarian corporate regime where multinational co-operations came into the picture. See FERNANDO HENRIQUE CARDOSO, CHARTING A NEW COURSE: THE POLITICS OF GLOBALIZATION AND SOCIAL TRANSFORMATION (2001); PETER EVANS, DEPENDENT DEVELOPMENT - THE ALLIANCE OF MULTINATIONAL STATE, AND LOCAL CAPITAL IN BRAZIL (1979).

<sup>&</sup>lt;sup>82</sup> PAUL BARAN & PAUL SWEEZY. THE MONOPOLY CAPITAL: AN ESSAY ON THE AMERICAN ECONOMIC AND SOCIAL ORDER (1968) (developing the theory of "monopoly capitalism"). See also BARAN, supra note 11.

<sup>&</sup>lt;sup>83</sup> He defined "economic surplus" as the mass resources, actual and potential, which a society could have at its disposal in order to facilitate economic growth; it is the amount that might be reinvested in productive ways to increase the future level of social output. Id. at 132.

backwardness- of peripheral countries. Dependency was the crux of the relationship between the center and the periphery. Baran was skeptical about the role foreign aid could play in stimulating development, arguing that international monopoly capital would form alliances with pre-capitalist domestic oligarchies with the intention to block progressive capitalist transformations in the periphery. The operation of multinationals would also have the effect of distorting the process of capitalist development in these countries. As a result, international monopoly capital would have easy access to peripheral resources and finance, and the traditional élites in the periphery would be able to maintain their monopoly on power and their traditional (mostly predatory and rent-seeking) modes of surplus extraction. This theoretical framework was instrumental in the demand for a New International Economic Order in the 1970s,<sup>84</sup> and the increasing international regulation, through codes of conduct, of multinational corporations.<sup>85</sup>

China's success since the reforms of the 1980s proves that international trade can act as an engine for growth. The introduction of a market economy in the new economic zones, and the massive technological transfer that has occurred, accompanied by foreign direct investment, has disproved the dependency theory in this case. The use of dynamic comparative advantages supported the industrialization process of those zones, as low wage labour is supplied in large amounts, as in the Lewis-Ranis/Fei dual model of development.<sup>86</sup>

### B. The Chicago Markets-Oriented Paradigm and the Washington Consensus

With the the government leading the development path, the default macro-strategies of the post-World War II period included state planning and

<sup>&</sup>lt;sup>84</sup> See JERZY MAKARCZYK, PRINCIPLES OF A NEW INTERNATIONAL ECONOMIC ORDER: A STUDY OF INTERNATIONAL LAW IN THE MAKING (1988); Norbert Horn, Normative Problems of a New International Economic Order, 16 J. WORLD TRADE L. 338 (1982); Robin C.A. White, A New International Economic Order, 24 INT'L & COMP. L. Q. 542 (1975).

 <sup>&</sup>lt;sup>85</sup> See, e.g., the adoption by UNCTAD of The Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices, Conference on Restrictive Bus. Practices, U.N. Doc. TD/RBP/Conf/10/Rev.2 (Apr. 22, 1980). Regarding The Set, see Ioannis Lianos, The Contribution of the United Nations to Global Antitrust, 15 TUL. J. INT'L & COMP. L. 415 (2007); Eleanor M. Fox, Harnessing the Multinational Corporation To Enhance Third World Development—The Rise and Fall and Future of Antitrust as Regulator, 10 CARDOZO L. REV. 1981 (1989). See also Org. for Econ. Cooperation & Dev., Recommendation of the Council Concerning Action Against Restrictive Business Practices Affecting International Trade Including Those Involving Multinational Enterprises 1 C(78) 133 (July 20, 1978).
<sup>86</sup> Arthur Lewis, *Economic Development with Unlimited Supplies of Labor*, 22(2) The

<sup>&</sup>lt;sup>86</sup> Arthur Lewis, *Economic Development with Unlimited Supplies of Labor*, 22(2) The Manchester School, 139 (1954); Gustav Ranis & John Fei, A Theory of Economic Development, 51 American Economic Review, 533 (1961) ; Arthur W. Lewis, *The Dual Economy Revisited*, 47 (3) The Manchester School 211 (1979).

state ownership of the main industries and banking facilities, import protection rules, restrictions on foreign investment, and industrial licensing.<sup>87</sup> These policies were in direct contradiction to the competition paradigm of the neoclassical economics school, hence, leaving almost no room to envisage a competition policy under such a state interventionist economic environment. The Chicago school's starting point was different: markets are usually efficient, there is no good alternative to the price mechanism, government might fail, and the risks of that happening are more important than market failures.<sup>88</sup> Government intervention resulted in many price distortions in the market and provoked enormous allocative inefficiencies, curbing competition and increasing rent-seeking activities. Anne Krueger highlighted the perils of having a large state sector which created opportunities for rents, hence affecting the judgment of the policymaker and turning the society into a rentseeking one: "bureaucratic failure" could be worse than "market failure." <sup>89</sup> On the other hand, through the lens of public choice theory. Basu reminds us that governments are neither omniscient nor necessarily benevolent.<sup>90</sup> Ian M.D. Little's influential study of seven countries with Tibor Scitovsky and Maurice Scott, showed that, under import-substitution-strategies (ISI), consumers were forced to purchase commodities at a higher price, either imported with large surcharges, or produced inefficiently domestically, while unprotected industries like agriculture and small and medium enterprises had low relative prices and profits were compressed due to high prices of industrial inputs..<sup>91</sup> Authors inspired by the Chicago neoclassical price theory paradigm noted that the "dirigist dogma" focused on the macroeconomics of development, ignoring the price mechanism and welfare economics altogether;<sup>92</sup> furthermore, they provided empirical support for the importance of microeconomics in development planning.<sup>93</sup>

The above criticism of development economics, the subsequent financial crises of the 1980s, and the fall of the USSR paved the way for its decline. Government failure in steering the development course was

<sup>&</sup>lt;sup>87</sup> CYPHER & DIETZ, supra note 59, at 16.

<sup>&</sup>lt;sup>88</sup> Paul Strassman, Development Economics from a Chicago Perspective, 19 J. ECON. ISSUES 63 (1976).

Anne Krueger, The Political Economy of the Rent-seeking Society, 64 AM. ECON. REV. Economic Review 291 (1974).

<sup>&</sup>lt;sup>90</sup> KAUSHIK BASU, PRELUDE TO POLITICAL ECONOMY: A STUDY OF THE SOCIAL AND POLITICAL, 195-96 (2000).

<sup>&</sup>lt;sup>91</sup> Id. at 217. Further empirical research of the ISI polices and protectionist policies showed the detrimental impact of the costs of rent seeking resulting from ISI policies. See ANNE KRUEGER, THE BENEFITS AND COSTS OF IMPORT SUBSTITUTION IN INDIA: A MICROECONOMIC STUDY (1975). <sup>92</sup> DEEPAK LAL, THE POVERTY OF DEVELOPMENT ECONOMICS 5 (2000).

<sup>&</sup>lt;sup>93</sup> See Peter. T. Bauer, Dissent on Development: Studies and debates in development ECONOMICS (2008); Peter T. Bauer and Basil S. Yamey, Economic Progress and Occupational Distribution, 61 ECON. J. 741 (1951); Peter T. Bauer, The Working of Rubber Regulation, 56 ECON. J. 391 (1946).

unquestionable, leading to another shift in economic policy. Contrasting the performance of Latin American countries to East Asian Countries triggered scepticism of the "dirigiste" policies and led eventually to the resurgence of market economy..<sup>94</sup> The recognized success of the Asian Tigers showed that an outward policy, based on export promotion, clearly taking advantage of the global trade, was far superior than the inward/autarchic policies of Latin America. The other lesson was that a country could develop and industrialize even starting from a resource poor economy, by pursuing vigorous policies of human capital development and promoting domestic savings. These policies proved that the centre-periphery vicious circle could be broken and that export promotion allowed a much higher rate of technology transfer and global markets discipline acted as a competitive pressure against inefficient manufacturing firms.

The Chicago School provided the required theoretical framework for this resurgence. Milton Friedman, one of the most prominent Chicago school scholars, argued for minimal state intervention in the economy and for political freedom which can only be achieved through laissez-faire capitalism.<sup>95</sup> He explained the role markets play in conferring political freedom.<sup>96</sup>

These policies of protection of property rights, privatization, liberalization of markets, and macroeconomic equilibrium became enshrined in the Washington Consensus, a testament to the resurgence of monoeconomics as well as the return to orthodox economics.<sup>97</sup> The teachings of the Chicago School greatly influenced the policies of major international organizations, such as the World Bank and the IMF in the 1980s.<sup>98</sup> The policy promoted by these institutions was coined the "Washington Consensus,<sup>99</sup> a term that later evolved to denote "an extreme and dogmatic commitment to the belief that markets can handle everything."<sup>100</sup> The Washington Consensus advised protection of property rights, market liberalization,

<sup>96</sup> Id.

<sup>&</sup>lt;sup>94</sup> See Sebastian Edwards, Openness, Trade Liberalization and Growth in Developing Countries, 31 J. ECON. LIT. 1358, 1359 (1993).

<sup>&</sup>lt;sup>95</sup> MILTON FRIEDMAN, CAPITALISM AND FREEDOM 7–17 (1962).

<sup>&</sup>lt;sup>97</sup> GERALD MEIER, BIOGRAPHY OF A SUBJECT – AN EVOLUTION OF DEVELOPMENT ECONOMICS 92 (2005).

<sup>&</sup>lt;sup>98</sup> PRESTON, supra note 49, at 255.

<sup>&</sup>lt;sup>99</sup> John Williamson coined the term in 1990. The term was used to refer to "the lowest common denominator of policy advice being addressed by the Washington-based institutions to Latin American countries as of 1989." John Williamson, What Should the World Bank Think About the Washington Consensus?, 15 World Bank Res. Observer 251 (2000). See also John Williamson, A Short History of the Washington Consensus (Sept. 24–25, 2004) (unpublished manuscript), available at http://www.iie.com/publications/papers/williamson0904-2.pdf.

<sup>&</sup>lt;sup>100</sup> PRESTON, supra note 49, at 252.

deregulation, privatization, and specific fiscal policies.<sup>101</sup> As Joseph Stiglitz explained, the Washington Consensus demanded liberalized trade, macroeconomic stability, and getting prices right and "once the government 'got out of the way' private markets would allocate resources efficiently and generate robust growth.".<sup>102</sup> Accordingly, followers of the Washington Consensus focused their policy reforms on maximizing efficiencies through markets and integrating developing economies into the world economic order.

The shift in development economics towards more market oriented policies and less state intervention paved the way to a less conflict-prone position to mainstream welfare economics, and thus to some degree of convergence with the theoretical framework of competition law and economics. However, the Washington Consensus did not advocate the adoption of competition law frameworks, perhaps because of its belief in the superior efficiency of the market system.

#### C. Development Economics Post-Washington Consensus

The Washington Consensus did not survive the test of time. On the one hand, while Latin American countries were ideal students to the Consensus, others like China, East Asian countries and India, adopted only some of their recommendations. However, they achieved record growth in comparison to Latin America.<sup>103</sup> The success of the latter put the Consensus in a vulnerable position, and many started to question its effectiveness.<sup>104</sup>

Accordingly, toward the end of the 1990s, multilateral agencies and policy economists suggested an adjusted approach (the "second-generation"), focusing on institutional reform and "good governance."<sup>105</sup> Now the

<sup>&</sup>lt;sup>101</sup> These policy reforms could be summarized in ten propositions: (a) fiscal discipline, (b) redirection of public expenditure priorities toward fields offering both high economic returns and the potential to improve income distribution, such as primary health care, primary education, and infrastructure (c) tax reform (to lower marginal rates and broaden the tax base), Interest rate liberalization, (d) competitive exchange rate, (e) trade liberalization, liberalization of inflows of foreign direct investment, (f) privatization, (g) deregulation (to abolish barriers to entry and exit); and (h) secure property rights.

<sup>&</sup>lt;sup>102</sup> Joseph Stiglitz, More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus, Wider Annual Lecture (Jan. 7, 1998) available at http://www.wider.unu.edu/publications/annual-lectures/en\_GB/AL2/.

<sup>&</sup>lt;sup>103</sup> See BEYOND THE WASHINGTON CONSENSUS: INSTITUTIONS MATTER (Shahid Javed Burki and Guillermo Perry eds., 1999); EDRO-PABLO KUCZYNSKI & JOHN WILLIAMSON, AFTER THE WASHINGTON CONSENSUS: RESTARTING GROWTH AND REFORM IN LATIN AMERICA (2003); Dani Rodrik, Goodbye Washington Consensus, Hello Washington Confusion? A Review of the World Bank's Economic Growth in the 1990s: Learning from a Decade of Reform, 64 J. ECON. LIT. 973 (2006).

LIT. 973 (2006). <sup>104</sup> Dani Rodrik, Growth Strategies, in HANDBOOK OF ECONOMIC GROWTH, supra note 31, at 967.

<sup>&</sup>lt;sup>105</sup> Id. at 974. See Ha-Joon Chang, Bad Samaritans – Rich Nations, Poor Policies, and the Threat to the Developing World (2007) (noting that there is not yet a consensus on the functions the "good" institutions should perform, nor is there an agreement as to which institutional forms can serve these good functions best). The dominant view backed by the

Washington Consensus's list expanded to include other goals such as corporate governance, anti-corruption, flexible labor markets, social safety nets and targeted poverty reduction, leading the way to some state intervention in the economy.<sup>106</sup> Though one cannot deny its merits and functionality for some countries at a given point in time, "its recipes were neither necessary nor sufficient for successful growth."<sup>107</sup> Shapiro notes that the "default policy recommendation is still the market"; however, "the emphasis of reform has switched to institutions that will allow the market to perform more efficiently."<sup>108</sup> This belief that markets work well only when they are founded on a sound institutional background challenged the Washington Consensus's unidimensional focus on deregulation, and highlighted the importance of adopting appropriate, market-friendly, regulatory mechanisms, such as competition law.

This new approach is explicit in the final report of the Commission on Growth and Development. Released in 2008, the report highlights the importance of markets for the development process, but also notes that "the task is to improve the effectiveness of government institutions rather than stripping them of their tasks."<sup>109</sup> Commenting on the report, Rodrik notes that it provides a balanced approach as it does not tip the scale to either "market fundamentalism" or "institutional fundamentalism," thus avoiding easy answers like "just let markets work" or "just get governance right." The report's main message is that circumstances of each country are unique, hence each should customize its own development plan.<sup>110</sup>

The new consensus is that developing countries differ from developed countries "by much more than their level of capital – or even their human capital," and that "even a transfer of funds may not have a large effect on

<sup>&</sup>quot;augmented Washington Consensus" is that "good institutions" are those of the developed countries, especially in the Anglo-American world. Ha-Joon Chang, Kicking Away the Ladder – "Good Policies" and "Good Institutions" in Historical Perspective, in PUTTING DEVELOPMENT FIRST – THE IMPORTANCE OF POLICY SPACE IN THE WTO AND IFIS (K. Gallagher ed., 2005). Good governance thus has common attributes to the Rostovian mono-economics view for development.

development. <sup>106</sup> Dani Rodrik, After Neoliberalism, What? 17 (May 22–23 2003) (unpublished manuscript), available at http://www.policyinnovations.org/ideas/policy\_library/data/01029. <sup>107</sup> Joseph E. Stiglitz, Is There a Post Washington Consensus Consensus?, in THE

 <sup>&</sup>lt;sup>107</sup> Joseph E. Stiglitz, Is There a Post Washington Consensus Consensus?, in THE WASHINGTON CONSENSUS RECONSIDERED: TOWARDS A NEW GLOBAL GOVERNANCE 41 (Narcís Serra & Joseph E. Stiglitz eds., 2008).
<sup>108</sup> Helen Shapiro, Industrial Policy and Growth 14 (DESA Working Paper No. 53, 2007);

 <sup>&</sup>lt;sup>108</sup> Helen Shapiro, Industrial Policy and Growth 14 (DESA Working Paper No. 53, 2007);
Helen Shapiro & Lance Taylor, The State and Industrial Strategy, 18 WORLD DEV. 861 (1990).
<sup>109</sup> Comm'n on Growth & Dev., THE GROWTH REPORT STRATEGIES FOR SUSTAINED GROWTH AND INCLUSIVE DEVELOPMENT 30–31 (2008), available at http://cgd.s3.amazonaws.com/GrowthReportComplete.pdf. The Commission included an independent group of policy makers, business leaders, and scholars, and was headed by two Nobel laureates, Professor Andrew Spencer and Professor David Solow.

<sup>&</sup>lt;sup>110</sup> Dani Rodrik, No More Laundry Lists, GUARDIAN, July 10, 2008, http://www.guardian.co.uk/commentisfree/2008/jul/10/economics.development (last visited November 15, 2011) ("(i)f there is a new Washington consensus, it is that the rulebook must be written at home, not in Washington [...] (a)nd that is real progress.").

economic growth."<sup>111</sup> An important insight of this literature is an evolution in the perception of the concept of development. As noted by Hoff and Stiglitz,

"[...] industrial and developing countries are on different production functions and are organized in different ways. Development is no longer seen primarily as a process of capital accumulation but rather as a process of organizational change."<sup>112</sup>

Economics of information, institutional economics, and the theory of coordination problems, depart from the narrow assumptions of neoclassical price theory and provide new insights to development economics, offering the challenge for a more holistic, historically and culturally aware perspective.<sup>113</sup>

In conclusion, the answer to governmental failure is not a full retraction and deployment of a market economy. When contemplating a country's development path one needs to understand that there are no given answers as both ends of the spectrum –state intervention and free market- come with their own limitations. Each country should thus find its own balance. Other variables, such as history and culture, also count. In his study on the causes of under-performance in continental Europe, Edmund Phelps found that various cultural values like competition and workplace attitudes are significant in explaining differences in economic performance.<sup>114</sup> The institutional context does matter. Developing countries do need to devise economic policies that serve their special attributes, but there is no consensus as to what these are.

### IV. The Emerging New Consensus: Establishing Links Between Competition Economics and Development Economics

Despite the missing links between development economics and competition law and economics,, it is important to acknowledge the need for the establishment of a sustained dialogue between the two disciplines. This is essential in light of the enactment of competition law statutes in several developing economies, and the rising levels of competition law enforcement in the developing world. However, the two disciplines have made important steps towards the creation of a two-way communication system. The implementation of competition law and policy has recently attracted attention from development economists. Recent competition law and economics literature has also focused on the implications of different levels of development for the enforcement of an optimal competition law regime. This two-way effort of communication is facilitated by the attention both disciplines

<sup>&</sup>lt;sup>111</sup> Karla Hoff & Joseph Stiglitz, Modern Economic Theory and Development, in GERALD M. MEIER & JOSEPH E. STIGLITZ, FRONTIERS OF DEVELOPMENT ECONOMICS, supra note 53, at 389. <sup>112</sup> Id.

<sup>&</sup>lt;sup>113</sup> ld.

<sup>&</sup>lt;sup>114</sup> Edmund Phelps, Perspectives on the Performance of the Continent's Economies, Introductory Remarks, Conference of CESifo and Center on Capitalism and Society (July 21, 2006), available at http://capitalism.columbia.edu/files/ccs/30pening.pdf.

now pay to institutions and to economic growth. This section will briefly examine this argument.

#### A. Institutions Matter

Economic development cannot be explained simply by using a model of a benevolent government that maximizes inter-temporal welfare like most of the formal theoretical models assume. In fact, the level of participation in a democracy and the type and influence of interest groups differs substantially with the level of education and development of a country. Olson has made a prominent contribution in the recent theory of political economy models of development.<sup>115</sup> He applies his well-known theory of collective action<sup>116</sup> to explain why some countries grow and others stagnate. Olson uses the concept of a "distributional coalition," a group whose collective action can secure a larger share of the resources generated by the economy for its members at the expense of the population at large. The instruments used to redistribute income and wealth to these special interest groups are tax and subsidy policies, entry and mobility barriers, and tariffs and quotas on imports, among others. Encompassing groups have an incentive to promote growth because their interests do not differ substantially from society's goals.

In a stable society, distributional coalitions gradually find ways to solve their collective action problems. Once they are formed and established, they prefer the status guo and are likely to oppose innovations that would increase the growth rate of the economy. Thus, coalitions can trap a society into a stagnant economic state. In fact, Parente and Prescott have built a formal model that captures the idea that insider groups that operate with a given technology may oppose the introduction of innovations and thus block economic growth.<sup>117</sup> The way they usually oppose that change is by using monopoly rights like labor regulations coupled with restrictions to enterprise entry. In each industry there is a coalition of input suppliers that uses its monopoly power to block the access to a superior technology. In their model, calibrated with parameters to replicate a typical economy, GDP could be multiplied by a factor of 3 if monopoly rights are eliminated. In the Parente and Prescott model there is no place for the government, and all the action is between the coalition of the status quo and a new coalition that has to bribe the first one in order to get into business.

<sup>&</sup>lt;sup>115</sup> MANCUR OLSON, THE RISE AND DECLINE OF NATIONS: ECONOMIC GROWTH, STAGFLATION, AND SOCIAL RIGIDITIES (1982).

<sup>&</sup>lt;sup>116</sup> MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION, PUBLIC GOODS AND THE THEORY OF GROUPS (1965).

<sup>&</sup>lt;sup>117</sup> Stephen L. Parente & Edward C. Prescott., Monopoly Rights: A Barrier to Riches, 89 AM. ECON. REV. 1216 (1999).

A similar model had already been built by Krusell and Rios-Rull in which a group that innovates and receives rents creates vested interests that oppose the next innovation.<sup>118</sup> This generates a cycle of growth and stagnation, depending on which group dominates. They let agents use a majority vote to choose a policy of regulation or laissez-faire, with young, unskilled agents preferring a reduction in costs through innovation, and workers with higher levels of human capital interested in maintaining their high rents. The setting is very general and the results in terms of ergodic states are difficult to interpret and apply in terms of policy, as the authors recognize.

Grossman and Helpman built a simpler model to explain why there are different protection rates in external trade by industries and sectors.<sup>119</sup> They develop a model in which special-interest groups, organized in lobbies, make contributions in order to bias the government choice of trade policy in their favor. Politicians maximize a two-part welfare function that depends on the contributions collected and the welfare of voters at large because they need them for reelection. The need for party financing and particularly campaign financing in a democratic state puts the politicians in a position that they put out "protection for sale." The model generates a set of protection rates that obey a Ramsey modified rule: protection would be higher in sectors with lower import demand and export supply elasticities, and stronger interest groups. Mitra extends the work of Grossman and Helpman,<sup>120</sup> and shows that a greater inequality in income or wealth distribution leads to a higher rate of rent extraction from lobbies, thus lowering social welfare. He also shows that more concentrated industries with higher capital intensity and inelastic demand have stronger lobbies. A test of the protection for sale model by Gawande and Bandyopadhyay for the U.S. gives high marks to that theory.<sup>121</sup> Ethier questions this success.<sup>122</sup>

Acemoglu, Aghion and Zilibotti<sup>123</sup> also tackle an issue in the line of Parente-Prescott<sup>124</sup> and Krusell-Rios-Rull:<sup>125</sup> a change in policy by the

<sup>&</sup>lt;sup>118</sup> Per Krusell & José-Víctor Ríos-Rull, Vested Interests in a Positive Theory of Stagnation and Growth, 63 REV. ECON. STUD. 301 (1996). <sup>119</sup> Gene M. Grossman & Elhanan Helpman, Protection for Sale, 84 AM. ECON. REV. 833

<sup>(1994).</sup> <sup>120</sup> Devashish Mitra, Endogenous Lobbying Formation and Endogenous Protection: A Long-

<sup>&</sup>lt;sup>121</sup> Kishore Gawande and Usree Bandyopadhyay, Is Protection for sale? Evidence on the Grossman-Helpman Theory of Endogenous Protection, 82 REV. ECON & STAT. 139. <sup>122</sup> Wilfred J. Ethier, Selling Protection for Sale (Penn Inst. for Econ. Research, PIER Working

Paper Archive, 06-014, 2006). Ethier demonstrates that the "Protection for Sale" model implies that organized export sectors will be subsidized , unorganized sectors will be taxed and unorganized import-competing sectors will be subsidized, which contradicts empirical observations.

<sup>&</sup>lt;sup>123</sup> Daron Acemoglu, Philippe Aghion & Fabrizio Zilibotti, Distance to Frontier, Selection and Economic Growth, (NBER Working Paper 9066, 2002).

<sup>&</sup>lt;sup>124</sup> Stephen L. Parente & Edward C. Prescott, Monopoly Rights: A Barrier to Riches, 89 AM. ECON. REV. 1216 (1999).

<sup>&</sup>lt;sup>125</sup> Krussell & Rios-Rull, supra note 120.

government against vested interests would increase the level of development. In their case, this is a change from an investment-based strategy, i.e., a strategy where low-quality firms (with low quality entrepreneurs) invest and imitate and adopt technologies from more advanced countries, to an innovation-based strategy focused on selecting only efficient firms and on innovation (approaching the technological frontier). The problem is that the vested interests incorporated in the investment-based strategy can buy out the political power. Thus, societies are trapped with "inappropriate institutions" and relatively backward technologies. The authors find evidence using an OECD industry database that shows a positive correlation between "proximity" to the frontier" (relation between the firm TFP and the firm with the best TFP) and R&D intensity. They also empirically investigate the relationship between high barriers to entry/low competition and growth rates across a sample of developing countries, and find that high barriers are more harmful to growth close to the technological frontier with growth rates slowing as they approach it.

In their model, the authors prove the existence of a dynamic equilibrium and the possible occurrence of a political economy trap where capitalists bribe the government in order to maintain a regime of monopoly rents with low competition, blocking growth over the long-term. Such a trap is more likely in societies with weak institutions (more corruptible). The model also suggests that there may be a need for more government intervention at the beginning of a nation's development in order to solve coordination problems. However, the country ultimately must switch to a more competitive environment in order to approach the technological frontier, though this may be difficult due to the capture of politicians by groups that benefited from the initial interventions. Cases like Brazil, Mexico and Peru come to mind, when contrasted with some East Asian economies like Hong Kong and Singapore. These studies emphasize the role of competition in the process of building stronger institutions for growth.

Another strand of the literature that is relevant to this study links competition, rents and corruption. Andes and di Tella build a model of compensation and corruption for government agencies.<sup>126</sup> They claim, in the spirit of Gary Becker and George Stigler, that when the principal (the people) pursues multiple and diffuse objectives, state contingent contracts with the agent (government) are hard to write and rents have to be allocated to enhance performance.<sup>127</sup> The authors deal with a similar problem, but

<sup>&</sup>lt;sup>126</sup> Alberto Andes & Rafael Di Tella, Rents, Competition, and Corruption, 89 AM. ECON. REV. 982 (1999). There is a large literature on corruption and non-directly productive activities, which deals with "petty" corruption in public administration and bureaucracies. This is only lateral to our analysis. Unless corruption at all levels of administration is rampant, this type of corruption is dwarfed by capture of governments by vested interests.

<sup>&</sup>lt;sup>127</sup> Gary S. Becker, & George J. Stigler, Law Enforcement, Malfeasance, and Compensation of Enforcers, 3 J. LEGAL STUD. 1 (1974).

between another principal (government) and agent (bureaucracy). They use an efficiency wage theory to determine the optimal level of corruption. When a firm under the influence of a bureaucrat enjoys rents, the value of his control rights is high. Bureaucrats can trade part of this control in exchange for bribes. In a regime of monopolies there would be a higher level of corruption when compared with a more competitive world. The public (citizenry) would incur greater losses if they were to try to redefine the contracts with the bureaucrats or spend more resources controlling corruption. The problem with this approach is that they disregard the Olsonian view that large groups have difficulty in coordinating their actions, while the monopolists form a small group benefiting from high rents.

Although these models have certainly helped illuminate the interaction between political parties, governments, and vested interests, there are still unanswered questions. What is the role of political competition and the party system in development? What is the role of checks and balances on the decisions of the government? In models of protection for sale, how much power do interest groups have in comparison to specific institutions, such as competition authorities that promote social welfare? Their respective power depends on the institutional development of each jurisdiction and the relevant political constraints: it depends on how mature a democracy is, the balance of powers between branches of government, the level of control by institutions of corruption and the influence of economic interests in the political process. The political process is thus endogenous and should be taken into account. Contrary to Chicago economists who believe that neither institutions nor wealth distribution matter for efficiency, new theories of economic development argue that distribution of wealth matters: "if the distribution of wealth is so unequal that some individuals have more than enough wealth to put their skills to best use while others have so little wealth that they cannot even obtain credit to undertake a productive project, the catalytic role of wealth will be limited," Hoff and Stiglitz remark, noting also that "[...] the welfare of any single agent depends, in general, on the entire distribution of wealth."<sup>128</sup> The common thread in this literature is the role of coordination failures, such as rent-seeking, inefficient institutions (formal and informal), and underinvestment in research and education. in developing nations. This provides a richer picture than the government failure paradigms' exclusive focus on governmental explanation of under-development, thus initiating a "major shift in focus and in conclusions from neoclassical models"<sup>129</sup>.

Competition and industrial organization scholars also argue for the positive correlation between development and competition, and the

<sup>&</sup>lt;sup>128</sup> Karla Hoff & Joseph Stiglitz, Modern Economic Theory and Development, in GERALD M. MEIER & JOSEPH E. STIGLITZ, FRONTIERS OF DEVELOPMENT ECONOMICS, supra note 53, at 393. <sup>129</sup> Id. at 390.

importance of institutions for an optimal enforcement of competition law.<sup>130</sup> The role of competition law in development is linked to the prevailing economic policy: the greater the government intervention, the less significant competition law is and vice versa. Thus, competition law has only featured in development economics fairly recently.<sup>131</sup> The discussion has now moved to examine the kind of competition policy and law that would be suitable for developing economies.<sup>132</sup> There is almost a consensus that these policies/laws must account for the "special attributes" of developing countries, thus rejecting a mere transplantation of competition laws from developed countries.<sup>133</sup> Gall discusses the preconditions of enforcement of competition law in developing countries, noting that the challenges facing developing countries, such as a low level of economic development, institutional design problems, and complex governmental regulation and bureaucracy, create real-world challenges which should be taken into account in the early stages

<sup>130</sup> See, e.g., Jean Tirole, The Institutional Infrastructure of Competition Policy, in PROCEEDINGS OF THE ANNUAL BANK CONFERENCE ON DEVELOPMENT ECONOMICS IN EUROPE 113-18 (2000). Carlos M. Correa, Competition Law and Development Policies, in Towards WTO COMPETITION RULES 361 (1999); William E. Kovacic, Institutional Foundation for Economic Legal Reform in Transitional Economics: The Case of Competition Policy and Antitrust Enforcement, 77 CHI.-KENT L. REV. 265 (2001); Simon Evenett, What is the Relationship between Competition Law and Policy and Economic Development, in COMPETITION POLICY AND DEVELOPMENT IN ASIA (Douglas H. Brooks & Simon J. Evenett eds., 2005); FOX & MATEUS, supra note 3; Paolo Buccirossi, Lorenzo Ciari, Tomaso Duso, Giancarlo Spagnolo, & Cristiana Vitale, Competition Policy and Productivity Growth: An Empirical Assessment (WZB Working Paper No. SP II 2009), available at http://ssrn.com/abstract=1487489 (empirical study of the effectiveness of competition policy by estimating its impact on Total Factor Productivity growth for 22 industries in 12 OECD countries over the period 1995-2005); UNCTAD, The Role of Competition Policy in Promoting Economic Development: The Appropriate Design and Effectiveness of Competition Law and Policv (2010)available at http://www.unctad.org/templates/Download.asp?docID=13814&intItemID=2068&lang=1: UNCTAD, The Relationship Between Competition, Competitiveness and Development (2002) available at

http://www.unctad.org/templates/Download.asp?docID=1989&intItemID=2068&lang=1;

UNCTAD, Competition Policy, Trade and Development in The Common Market for Eastern and Southern Africa (COMESA) (2000) available at http://www.unctad.org/templates/Download.asp?docid=686&lang=1&intItemID=6031.

Mark A. Dutz & Shyam Khemani, The Instruments of Competition Policy and Their Relevance for Economic Development, in REGULATORY POLICIES AND REFORM: A COMPARATIVE ANALYSIS, (Claudio Frischtak ed., 1995); Ajit Singh, Competition Policy, Development and Developing Countries (Indian Council for Research on Int'l Econ. Relations, Working Paper No. 50, 2000), available at http://www.icrier.org/pdf/wto7.pdf; Ajit Singh, Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions (G-24 Discussion Paper Series, Paper 2002), available No. 18, at http://www.unctad.org/en/docs/gdsmdpbg2418\_en.pdf.

<sup>&</sup>lt;sup>132</sup>See Fox, supra note 3.

<sup>&</sup>lt;sup>133</sup> OECD, Promoting Pro-Poor Growth, Private Sector Development 43 (2006), available at http://www.oecd.org/dataoecd/43/63/36427804.pdf. However, there have also been some dissenting voices, see, e.g., George Priest, Competition Law in Developing Nations: The Absolutist View, in this volume (arguing that there is no need for special competition law with regard to developing countries).

of the adoption of competition law,<sup>134</sup> thus warning against a copy and paste approach.<sup>135</sup> Fox suggests six different models (including the US and EU model) for developing countries to choose from, noting that what is important is the "knowledgeable choice."<sup>136</sup> Singh asserts the significance for developing countries of having a competition policy that takes into consideration their level of development, in conjunction with the objective of long-term sustainable economic growth.<sup>137</sup> He further asserts the urgent need for competition policy to accompany the privatization process and safeguard the interests of developing jurisdictions, in the global merger wave.<sup>138</sup> There is an increasing consensus that jurisdictions at different levels of development and governance capacities require different types of competition policies than that of developed ones.<sup>139</sup> In a recent cross-country study using a sample of 101 countries. Ma shows that until a country reaches a certain threshold of institutional development, competition law will be idle: it is clear that in the least developed jurisdictions, competition law will have no effect on the country's economic growth. Once that threshold is reached, without an "efficient enforcement scheme," competition law may have an adverse effect on growth.<sup>140</sup> Along the same lines, Fox and Mateus advocate a targeted application of competition law for practices that have a significant impact on the most vulnerable, the poor.<sup>141</sup>

#### **B. The Common Emphasis on Growth**

The new theory of endogenous growth pioneered by Romer,<sup>142</sup> picks up on the "specialization" idea of Smith-Ricardo and shows how growth could

<sup>&</sup>lt;sup>134</sup> Michal S. Gall, The Ecology of Antitrust: Preconditions for Competition Law Enforcement in Developing Countries, in COMPETITION, COMPETITIVENESS AND DEVELOPMENT: LESSONS FROM DEVELOPING COUNTRIES, supra note 3 at 20.

<sup>&</sup>lt;sup>135</sup> Michal S. Gall, The 'Cut and Paste' of Article 82 of the EC Treaty in Israel: Conditions for a Successful Transplant, (NYU Law and Econ. Research Paper No. 08-03, 2008), available at http://ssrn.com/abstract=1082035.

<sup>&</sup>lt;sup>136</sup> Eleanor Fox, In Search of a Competition Law Fit for Developing Countries (NYU Law and Econ. Research Paper No. 11-04, 2011), available at http://ssrn.com/abstract=1761619.

 <sup>&</sup>lt;sup>137</sup>Ajit Singh, Competition Policy, Development and Developing Countries, supra note 133.
<sup>138</sup> Egypt serves as a prime example for the hazards of having a privatization policy without competition policy in place, where many privatization deals were recently struck down when reviewed by the court. See Ahmed Farouk Ghoneim, Competition Law and Competition Policy, What Does Egypt Really Needs? (The ERF Working Paper Series, Working Paper No. 0239, 2002), available at http://www.mafhoum.com/press5/158E13.pdf.

<sup>&</sup>lt;sup>139</sup> See Ajit Singh, Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions, supra note 133; Ioannis Lianos & Abel Mateus, "Cosi fan tutte"?: Linking Levels of Development and Competition Law Regimes, (UCL Center for Law, Economics & Society Working Papers, forthcoming 2012). <sup>140</sup> Tay-Cheng Ma, The Effect of Competition Law Enforcement on Economic Growth, 7 J.

COMPETITION L. & ECON. 301 (2011). <sup>141</sup> FOX & MATEUS, supra note 3.

<sup>&</sup>lt;sup>142</sup> Paul M. Romer, Growth Based on Increasing Returns Due to Specialization, 77 AM. ECON. REV. 56 (1987).

ensue from that process. There are two strands in this literature. The first is that Research and Development (R&D) expands the number of available inputs for production and thus increases the Gross Domestic Product (GDP) because of the spillover effects due to the accumulation of knowledge. The second is based on product innovation and not process innovation, as the economy generates more products. In all these cases, monopoly profits for innovators and patent protection play a major role, with competition prevailing in the rest of the economy. However, as we will see below, models where technological growth takes the form of a "quality ladder" can generate richer structures and bring competition to the fore of growth.

The main link in today's Industrial Organization models between competition and growth is the relation between competition and dynamic efficiency.<sup>143</sup> The earliest Schumpeterian models predicted that, through the operation of the appropriability effect, competition reduces the prospective monopoly rents spurring innovation and therefore growth. New models insist on the non-linear relationship between competition and growth: although the increase in the intensity of competition will tend to reduce the level of profits of a successful innovator, it will reduce the profits of an unsuccessful innovator even more, thus having an overall positive effect on the rate of innovation.<sup>144</sup> The management of the firm will be also forced to innovate more.<sup>145</sup> There are generally four channels that have been corroborated empirically.

First, competition creates a larger number of opportunities for benchmarking, so the market can monitor firm management.<sup>146</sup> Second, innovations tend to increase productivity and reduce costs, thereby generating a higher level of profits in a competitive environment where demand price elasticities are higher. Third, higher levels of competition increase the probability of failure which is an incentive for management to be more efficient.<sup>147</sup> Fourth, because workers share in rents, higher competition also leads to a higher productive effort.<sup>148</sup>

<sup>143</sup> Michael Spence, Cost Reduction, Competition, and Industry Performance, 52 ECONOMETRICA 101 (1984); Mark Dutz & Aydin Hayri, Does More Intense Competition Lead to Higher Growth? (World Bank Working Paper No. 2320, 2000).

<sup>&</sup>lt;sup>144</sup> Philippe Aghion, Mathias Dewatripont & Patrick Rey, Competition, Financial Discipline and Growth, 66 REV. ECON. STUD. 825 (1999). <sup>145</sup> Philippe Aghion, Christopher Harris, Peter Howitt & John Vickers, Competition, Imitation

and Growth with Step-by-Step Innovation, 68 REV. ECON. STUD. 467 (2001). <sup>146</sup> Edward P. Lazear & Sherwin Rosen, Rank-Order Tournaments as Optimum Labor

Contracts, 89 J. POL. ECON. 841 (1981); Barry J. Nalebuff & Joseph E. Stiglitz, Prizes and Incentives: Towards a General Theory of Compensation and Competition, 14 BELL J. ECON. 21 (1983). <sup>147</sup> Philippe Aghion & Peter Howitt, Endogenous Growth Theory (1998).

<sup>&</sup>lt;sup>148</sup> Jonathan Haskel, Imperfect Competition, Work Practices and Productivity Growth, 53 OXFORD BULL. ECON & STAT. 265 (1991).

The Schumpeterian models arguing that monopolies are necessary to generate innovation<sup>149</sup> are not only misleading, but are also subject to contradictions. Both Aghion and Howitt,<sup>150</sup> and Grossman and Helpman<sup>151</sup> have produced models showing that firms that innovative are new entrants that had zero profits before entering the market. Where are the deep pockets of money to finance R&D? The Schumpeterian models also assume that all firms have access to the same R&D technology and enter the market with the same productivity, which is contradicted by the large distribution of productivity and costs among firms, even in the same industry. Focusing on the different channels through which competition influences innovation, we can distinguish, among others: (i) The Darwinian effect introduced by Aghion<sup>152</sup> and Porter;<sup>153</sup> (ii) the "neck-and-neck" effect;<sup>154</sup> (iii) the Arrow effect;<sup>155</sup> and (iv) the mobility effect.<sup>156</sup>

Second, competition may lower the pre-innovation rents by more than post-innovation rents, and increase the after innovation profits, especially for new low-cost firms in oligopolies with not too dissimilar firms, thus eliminating the Schumpeterian effect. Empirical evidence on patents and other intellectual property rights shows that the impact of patenting is only beneficial in some intensive R&D subsectors, like pharmaceuticals or heavy chemicals. In these cases, the Schumpeterian effect is important as there are industries with very unequal firms in terms of costs, and the laggards have to catch-up to the technological leader before innovating. These two cases may lead to the empirical finding of a U curve by Aghion et al.,<sup>157</sup> relating market structure to

<sup>&</sup>lt;sup>149</sup> There are a lot of variants of this doctrine from the narrower (that we need big firms to generate innovation) to the broader (that industrial policies should take precedence to competition polices or that too much competition is bad for development). <sup>150</sup> Philippe Aghion & Peter Howitt, A Model of Growth Through Creative Destruction, 60

ECONOMETRICA 323 (1992).

<sup>&</sup>lt;sup>151</sup> GENE GROSSMAN & ELHANAN HELPMAN, INNOVATION AND GROWTH IN THE GLOBAL ECONOMY

<sup>(1991).</sup> <sup>152</sup> Aghion, Harris, Howitt & Vickers, supra note 145. The theory is inspired by Schumpeter's concept of "creative destruction", where competition is a Darwinian struggle whose survivors are those firms succeeding in creating, adopting and imposing new technologies. <sup>153</sup> MICHAEL PORTER, THE COMPETITIVE ADVANTAGE OF NATIONS (2000).

<sup>&</sup>lt;sup>154</sup> PHILIPPE AGHION & RACHEL GRIFFITH, COMPETITION AND GROWTH: RECONCILING THEORY AND EVIDENCE (2005) (noting that the greatest rate of innovation is observed in industries where the two main firms are technologically neck-and-neck. In these instances the incentive to innovate and thus to escape competition is the greatest).

<sup>&</sup>lt;sup>155</sup> Kenneth Arrow, Economic Welfare and the Allocation of Resources for Inventions, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS (R. Nelson ed., 1962) (noting that a monopolist that is not exposed to actual or potential competition has less incentive to invest in R&D than a firm in a competitive industry).

<sup>&</sup>lt;sup>156</sup> Robert E. Lucas, On the Mechanics of Economic Development, 22 J. MONETARY ECON 3 (1988) (noting that skilled workers become more adaptable and will switch to more productive industries faster).

<sup>&</sup>lt;sup>157</sup> Philippe Aghion, Richard Blundell, Rachel Griffith, Peter Howitt, & Susanne Prantl, Entry and Productivity Growth: Evidence from Micro-Level Panel Data, 2 J. EUR. ECON. Ass'n., 265 (2003).

innovation.<sup>158</sup> There is now important empirical evidence that competition is linked to growth in developed countries. Disney et al. conclude that competition increases productivity levels and the rate of growth of productivity.<sup>159</sup> Bloom and van Reenen's empirical research concludes that good management practices, which improve as competition increases, are strongly associated with productivity.<sup>160</sup>.

Finally, an efficient market for corporate control with open rules for takeovers reinforces the impact of competition on productivity.<sup>161</sup>

Research in developing countries has also shown the importance of the link between competition and growth. Dutz and Hayri find in a crosscountry model explaining growth rates, that competition policy has a positive impact on growth, even after taking into consideration trade and institutional policies.<sup>162</sup> Reviewing a large number of studies in the 1990s, Tybout concluded that there is evidence that protection increases price-cost margins and reduces efficiency at the margin, and that exporters (firms that succeed in the international market), are more efficient than non-exporters.<sup>163</sup> Using a new data set for Latin America, Haltiwanger et al. confirm that trade liberalization and competition leads to higher levels of efficiency at the firm level and also to reallocation of resources to more productive sectors.<sup>164</sup> Using data for Colombia, Eslava et al. show that trade and financial reforms of the 1990s were associated with productivity increases resulting in reallocation

<sup>&</sup>lt;sup>158</sup> However, these empirical models immediately narrow the problem by relating some measure of market concentration to the number of patents, citations or any other related measure related with R&D. The empirical work has been carried out for the UK, a developed country.

<sup>&</sup>lt;sup>159</sup> Richard Disney, Jonathan Haskel & Ylva Heden, Restructuring and Productivity Growth in UK Manufacturing, 113 Econ. J. 666 (2003).

<sup>&</sup>lt;sup>160</sup> Nicholas Bloom & John van Reenen, Measuring and Explaining Management Practices Across Firms and Across Countries, 120 Q. J. Econ. 1351 (2007).

<sup>&</sup>lt;sup>161</sup> Stephen J. Nickell, Competition and Corporate Performance, 104 J. POL. ECON. 724 (1996); Stephen J. Nickell, Daphne Nickolitsas & Neil Dryden, What Makes Firms Perform Well?, 41 EUR. ECON. REV. 783 (1997); Silke Januszewski, Jens Koke & Joachim Klaus Winter, Product Market Competition, Corporate Governance and Firm Performance: An Empirical Analysis for Germany, 56 RESEARCH ECON. 299 (2002). Other studies have also confirmed the above results. See Richard Blundell, Rachel Griffith & John van Reenen, Market Share, Market Value and Innovation in a Panel of British Manufacturing Sector, 66 REV. ECON. STUD. 529 (1999); AGHION & GRIFFITH, supra note 156. A study of Australia shows that competition enhancing reforms in the 1990s increased GDP by 2.5%. OECD, The Sources of Economic Growth in OECD Countries (2003). <sup>162</sup> Dutz & Hayri, supra note 145.

<sup>&</sup>lt;sup>163</sup> James Tybout, Manufacturing Firms in Developing Countries: How Well Do They Do, and 2000, Why?, ECON. LIT., Mar. at available J. 11 at http://ideas.repec.org/p/wpa/wuwpdc/9906001.html.

<sup>&</sup>lt;sup>164</sup> John Haltiwanger, Adriana Kugler, Maurice Kugler, Alejandro Mico & Carmen Pages, Effects of Tariffs and Real Exchange Rates on Job Reallocation: Evidence from Latin America, 7 POL'Y REFORM 191 (2004).

from low to high productivity firms.<sup>165</sup> Similar evidence has been shown for Chile due to trade liberalization<sup>166</sup> and for India due to the elimination of the Raj licensing scheme.<sup>167</sup> Aghion et al. provide evidence that increasing competition in South Africa manufacturing should have "large productivity effects."168 Carlin et al. have been researching the relative importance of infrastructure and competition in transition countries, using survey data, and have found some evidence that institutions and competition play a distinctive role in growth beyond their impact on innovation.<sup>169</sup>.Using Schumpeterian growth theory, Grossman and Helpman show that strengthening patent protection in the South will weaken the incentive to perform R&D in the North as fewer products get imitated, thereby causing labor in the North to move from R&D to manufacturing.<sup>170</sup>

On the reverse causation side, Aghion and Schenkerman find that countries can find themselves in a competition trap that blocks growth<sup>171</sup>. Countries most vulnerable are those in which the initial level of competition is low, the initial degree of cost asymmetry among firms is low and politicians are less driven by social welfare concerns. They also show that the old Schumpeterian result that an increase in market competition intensifies ex post competition, reduces post-entry rents and thus discourages entry, breaks down. With cost asymmetry and selection considerations they get the inverse result, because more competition encourages the entry of low-cost firms.

According to Jenny, the characteristics of developing countries pose particular challenges to competition policies and antitrust enforcement.<sup>172</sup> Most are small economies with high levels of enterprise concentration, and regionally- or locally-segmented markets with high barriers to entry. These barriers may result from poor transportation and telecommunication infrastructure, the monopolistic behavior of operators of essential facilities, or

<sup>&</sup>lt;sup>165</sup> Marcela Eslava, John Haltiwanger, Adriana Kugler & Maurice Kugler, The Effects of Structural Reforms on Productivity and Profitability Enhancing Reallocation: Evidence from Colombia, 75 J. DEV. ECON. 333 (2004). <sup>166</sup> Nina Pacvnick, Trade Liberalization, Exit and Productivity Improvements: Evidence form

Chilean Firms, 69 REV. ECON. STUD. 245 (2002). <sup>167</sup> Philippe Aghion, Robin Burgess, Stephen Redding & Fabrizio Zilibotti, The Unequal

Effects of Liberalization: Evidence from Dismantling the License Raj in India, 94 AM. ECON. REV. 1397 (2008). <sup>168</sup> Philippe Aghion, Matias Braun & Johannes Fedderk, Competition and Productivity Growth

South Africa, 16 ECON. TRANSITION, 741 (2008), available http://ssrn.com/abstract=1269693.

<sup>&</sup>lt;sup>169</sup> Wendy Carlin, Mark Schaffer & Paul Seabright, A Minimum of Rivalry: Evidence From Transition Economies on the Importance of Competition For Innovation and Growth, (William Davidson Institute Working Paper No. 670, 2004). <sup>170</sup> Gene M. Grossman & Elhanah Helpman, Quality Ladders in the Theory of Growth, 58

REV. ECON. STUD. 43 (1991).

<sup>&</sup>lt;sup>171</sup> Philippe Aghion & Mark Schankerman On the Welfare Effects and Political Economy of Competition-Enhancing Policies, 114 ECON. J. 800 (2004).

<sup>&</sup>lt;sup>172</sup> Frédéric Jenny, Cartels and Collusion in Developing Countries: Lessons from Empirical Evidence, 29 WORLD COMP. L. REV. 109 (2006).

trade barriers, among others. Markets are also small because of the low income level and limited consumer demand, as well as a small industrial base. Economic theory would thus predict that those economies are prone to anticompetitive structures, behavior and transactions.

It follows that, since development is a dynamic process of entry, and competition is central to productivity increases and innovation, competition policies should equally as important as other major development policies. International organizations, when advising on economic policies or setting conditionality for loans for development aid, are well-advised to take this route, which has heretofore been almost completely neglected. Examples abound of privatizations that have turned public monopolies into private ones, or trade liberalization that was barred due to problems of concentration in the import sector. As UNCTAD recognizes, competition policies are essential for development, and competition law is only one of the areas of these policies.<sup>173</sup> The general promotion of competition in the economy requires a broad spectrum of measures and instruments, for example in fields of trade policy and public procurement. To be successful, competition policies have to be embraced at the highest level of government, rather than relegated to a specific agency. They have to permeate all policies of the government and be part of a culture practiced by the executive, legislative and judicial branches. It is thus crucial to establish a continuous conversation between competition and development economists. The seclusion of scholars antitrust (competition) law and economics from the macro-economic level should end.

#### V. Conclusion

The preceding analysis has brought to the fore the limitations of traditional approaches. Development economics of the 1950s relied on an all-pervasive state intervention to start growth and industrialize, substituted market allocations by planning mechanisms and external protection. History has shown that governments and administrations do not have enough information (and required economic knowledge), and agents may lack adequate incentives, introducing large distortions and wasting a large amount of resources. But it has also been shown that the idea of a benevolent government acting to maximize welfare is far removed from the reality of developing countries – governments are too often captured by large interest groups and corruption may be rampant, so their actions and policies may instead block economic growth. By emphasizing markets the recent economic theory was not only reintroducing the role of the price mechanism and market incentives but also trying to limit government intervention in general. What

<sup>&</sup>lt;sup>173</sup> See UNCTAD, Competition, Competitiveness and Development: Lessons from Developing Countries (2004), available at http://www.unctad.org/en/docs/ditcclp20041\_en.pdf.

experience has shown is that this is a chimeric approach: by simply containing government intervention, governance issues will not be resolved. Democratic reforms may contribute to solve part of the problem, but its sustainability is sometimes threatened by entrenched power.

The rebalancing that occurred after the 1990s towards a more eclectic economic and institutional approach and also a more "clinical" approach suited for each country, abandoning all-country recipes, may be more productive. Moreover, recent empirical research<sup>174</sup> has also shown that we have to be more humble not only on the questions we ask but also on what we may achieve with development policies. E.g. we should not expect that external aid would solve most of the development problem (like Sachs) or to declare overall foreign aid ineffectiveness (like Easterly), but ask under what limited conditions aid may contribute to solve a particular health, education or infrastructure problem. Within this more limited agenda we think competition policy can contribute to improve market efficiency and also for some cases of poverty alleviation.

<sup>&</sup>lt;sup>174</sup> ABIJHIT BANERJEE, ESTHER DUFFLO, POOR ECONOMICS: A RADICAL RETHINKING OF THE WAY TO FIGHT GLOBAL POVERTY, (BBS Publications, 2011).