A Note on Asian Development Paradigm(s)

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Appendix: A Philosophically Rigorous Look at the Concept of (Kuhnian) Paradigm with an Example

The East Asian financial crisis was by all accounts the most significant event in the world economy in 1997. The topic dominated the headlines, attracted the attention of the world and generated much despairing rhetoric. The economists naturally joined the cacophony of condemnations. The dismal science had never looked so dismal since the great depression of the 30s. Without doubt, the speed and depth of the collapse of financial markets in East Asia caught all by surprise. Neither the existing surveillance mechanisms nor markets warned the euphoric investors adequately of impending calamity. The reversal of fortunes in East Asia came suddenly and surprised even the experts. The contagion spread rapidly, engulfing a number of economies in quick succession. It started as a currency crisis, then became a financial crisis. By 1998 it had become a full-blown economic crisis.

The actual trigger for the crisis was the 1996 export slowdown in Asia. The cyclical downturn in the demand for electronics, in conjunction with a rising dollar and a declining yen, slowed export growth, and led to some skepticism about future growth. The initial export downturn and growing skepticism threatened the inflow of foreign capital, now badly needed to sustain the increasing current account deficits. This in turn led to market concerns about the more or less fixed exchange rates, culminating in pressure on them and their eventual collapse. Investors suffering losses started to withdraw from these markets, and the bubble in asset prices burst. Falling asset prices resulted in insolvency of financial firms, resulting in a full-fledged financial crisis.

Although the 1996 export slowdown triggered the currency crisis, the roots of the financial crisis go much deeper. It is important to note the fact that the crisis occurred in those countries in the region that were more advanced and more integrated with global financial markets and, for that reason, were more successful in attracting large inflows of foreign private capital. In this sense, the crisis can be viewed as a new challenge facing the Asian developing countries as they move up the ladder of economic development and engage in capital account liberalization. It is fair to say that the problems were not confined just to the affected economies and they can emerge in other developing countries when they reach a similar stage of economic development and integration globally.

Not withstanding the above observation about the generality of financial crises- in particular of crisis preceded by rapid capital account liberalization - some have seized this opportunity to claim that the previous development paradigm(s) in Asia, marked by their departures from the orthodox development paradigm must be questioned. Some have gone as far as advocating the complete jettisoning of the Asian Development Paradigm(s) by radical institutional reforms that will reshape these economies in the image of an Anglo-Saxon ideal type.

Clearly, a scientific reexamination of the Asian Development Paradigm(s) is a welcome change from the litany of adoration succeeded by waves of condemnation recently. A scientific investigation into the logic, methodology and substantive propositions of the Asian Development Paradigm(s) can go beyond conceptual clarification to addressing substantive issues of development strategies for various regions and countries of Asia after the crisis. The main body of the paper will address the issues related to post-crisis development paradigm(s) for Asia from this paradigmatic point of view. Since the word paradigm, ever since its introduction into

the literature by Kuhn (1962) has caused some controversies an attempt will be made to clarify conceptually the meaning of paradigm in one of the appendices¹.

This paper is structured in the following way. First, the paradigmatic approach to sustained growth and development is presented. In this section, the role of both markets and non-market institutions are emphasized for the future development strategies. It is hoped that at the end of our exercises throughout the project we will refine the paradigmatic aspects in light of the empirical country and regional statistics.

It also is important to emphasize that the methodology of ADP is a combination of deductive and inductive approaches. On the one hand, the theoretical premises and functional analyses of institutions provide key propositions and guidelines for further testing and policy formulation. These methodological aspects are discussed further in the light of the substantive issues of Asian Development Paradigm(s) in the first section.

Unless the abstract discussions of paradigms and methodologies of research can be related to concrete pragmatic issues related to development strategies and policies, we cannot really claim to have accomplished much that is useful. While it is impossible to cover applications exhaustively in such a paper, in a companion paper an important example, namely the long-term human resource development strategies and policies to illustrate the usefulness of framing the discussion in terms of Asian Development Paradigm(s) will be discussed. Finally, a brief concluding section sums up the approach(es) and offers some general guidelines for future research.

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¹ Merriam-Webster dictionary defines paradigms as "a philosophical and theoretical framework of a scientific school or discipline within which theories, laws, and generalizations and the experiments performed in support of them are formulated "

2. Asian Development Paradigm(s): A Brief Overview

The Asian Development Paradigms can be regarded as alternative ways of explaining the Asian development experience and identifying challenges and tasks to build the foundation for renewed and sustained development. A distinction should be made within ADP between the Asian development experience as object of study on the one hand, and the set of ideas prevalent among Asian scholars on the other. Fortunately, we do not have to start with a tabula rasa here. Existing works by a number of Japanese and non-Japanese scholars have tried to articulate the unique features of Asian Development Paradigm(s). As Ohno and Ohno (1998) point out, the Asian Development Paradigms are characterized by an emphasis on the real sectors, long-term development issues, active role for the government and a realistic assessment of the long-run nature of transformation. Recently, Stiglitz (1999) has also emphasized the last factor. Others, such as Ishikawa (1998) have framed the issues as problems of "underdeveloped marketization", among other things. Yanagihara (1998), has contrasted the 'ingredients' approach with the standard 'framework' approach. Hara (1998) emphasizes ".....whether or not the indigenous society is equipped with the ability to respond positively to appropriate government policies", among other cultural (in the broad sense) factors. Non-Japanese scholars such as Amsden (), Khan (1998) and others have emphasized the role of broad-based development of both markets and the capacities of the state. Khan (1998), emphasizes in particular the creation of innovation systems with positive feed back loops. Such positive feed back loop innovation systems (POLIS) are expected to play an increasingly important role in the knowledge-based development of the Asian NIEs in the next century.

What emerges from this literature is that in contrast to the standard paradigm (see the appendix) the ADP emphasizes broad state-market interaction, formation of new, competitive industries in crucial sectors, the need for innovating and enhancing the market system in the presence of incomplete or missing markets, coordination failures, increasing returns and multiple equilibria. Some of these factors are also emphasized by Aoki et. al in their evolutionary game theoretic approach where features such as path dependence, multiple equilibria and strategic complementarity occupy the center stage in contrast with the atomistic, isolated optimizing agents in the standard paradigm.

Another way of looking at ADP is to focus on the role that both market and non-market institutional arrangements play. In the standard paradigm, non-market institutions play a minimum role, as shown in the appendix. In the ADP non-market institutions are instrumental in both enabling markets to function properly and enhancing the dynamic efficiency aspects of the market system. In a complex, non-linear world with dynamic increasing returns and innovation the proper underpinning of markets by the legal system, governance structures, generalized trust and social capital and other social and political institutions can constitute the difference between success and failure in economic development. Such broad and comprehensive institutional aspects are often neglected in the standard paradigm.

The institutional aspects referred to above are also important in augmenting the post-crisis ADP. A systematic examination of the pre-crisis ADP might reveal governance structures- both in society at large and corporate governance- as an important area in which the reach of ADP can and should be extended.

In addition to reexamining the role of state the research agenda should include the examination of governance and incentive structures in firms and in both the financial and non-financial sectors. The ultimate goal should be to identify clearly the informational and organizational constraints on good governance. However, such an approach may not necessarily lead to a wholesale set of institutional reforms that will bring the Asian institutions closer to the "best practices" that the Anglo-American institutions currently provide, although this is a possibility. In general, however, not only is there no single best set of institutions that every Asian country should build, even institutions that work well in one context, may perform suboptimally if the total network of institutions in which they are embedded do not provide the right kind of institutional complementarity. At the end, only a fine-grained analysis informed by historical data can decide which institutional reforms are "best" within the ADP.

3. Some Methodological Issues

Even the all-too-abbreviated discussion of ADP above raises some fundamental methodological issues. It is important to at least note them quickly, since they have substantive implications for further research.

In contrast with the standard paradigm ADP follows a largely non-deductive methodology. This is not to deny the role of deductive logic in ADP in specific contexts. In fact, both theoretical-functional and historical-inductive approaches are crucial in a sophisticated presentation of ADP. But unlike the standard paradigm where the procedure is one of axiom-theorems-corollaries, refined by theorists such as Arrow, Debrew and others, the starting point of ADP is the concrete historical

development experiences of the Asian developing countries. This is not the same as the naïve inductivism that has been put to rest by philosophers such as Karl Popper. Rather it is a constant shifting of the scientific gaze from the historical-empirical features to the abstract theoretical realm and back.

Such a methodology is consistent with what has been termed by some philosophers of science 'Scientific Realism'. Richard Boyd, a philosopher of science at Cornell University, has argued rigorously that the 'best' scientific theories are able to identify progressively the real mechanisms by which a certain causal structure brings about certain effects. From such a scientific realist perspective, the correct explanation of both the past successes and of the recent crises in Asia could constitute a test of appropriateness of ADP or an alternative to ADP. In any case, the methodology of scientific realism is rigorous but open-ended and offers a serious methodological alternative to standard positivism or Popperian falsificationist approach. The idea is to bring the theories implicit in ADP closer to reality by constant examination of both the theories and realities of Asian development.

4. Some Tentative Conclusions

In sum, ADP can be developed as a serious alternative to the standard paradigm. It can define a set of research problems particularly germane to the Asian developing economies in the next century. At the same time, it is quite possible that further research will unravel broader applicability of ADP outside Asia.

What needs to be done is to articulate the theoretical propositions and empirical hypotheses implicit in ADP clearly and in a logically rigorous manner. Such

a development will also make it easier to apply ADP for practical analysis of development strategies and policies. As mentioned at the beginning, this is an ongoing research imperative.

Given the wealth of historical and cross-country data it should be possible to develop an agenda for regional studies of both markets and non-market institutions and their interrelationships in various regions of Asia. In the light of these concrete studies it would then be possible to assess realistically the opportunities and constraints faced by each region in its development efforts. Identifying the specific institutional and other bottlenecks will enable the policymakers to approach the task of formulating future strategies and policies in a realistic manner. As emphasized in this paper, the major message of ADP is that this is both scientifically possible and desirable for making good policies in a complex and uncertain world.

References

Amsden, Alice, 1989, "Asia's Next Giant", New York: Oxford University Press Aoki, Masahiko (1998), Controlling Insider Control: Issues of Corporate Government in Transition

Economies, in Ohno and Ohno (1998)
______, Kevin Murdock, and Masahiro Okuno Fujiwara (1995), "Beyond the East Asian Miracle:

Introducing the Market Enhancing View", CEPR Publication No. 442, Stanford University

Asian Development Bank, 1998, *Asian Development Bank Outlook*, Manila: Asian Development Bank Boyd, Richard (), *Metaphors and Theory Change*

Deolalikar, A., Rana Hasan, Haider A. Khan and M.G. Quibria, "Human Resource Development in Asia: Facts, Issues, Policy", 1997, *Asian Development Review*

Hara, Yonosuke (1998), A Blueprint for Asian Economics, in Ohno and Ohno (1998)

Ishikawa, Shigeru, 1998, *Underdevelopment of the Market Economy and the Limits of Economic Liberalization*, in Ohno and Ohno (1998)

Khan, H.A. (1990), Scientific Realism and Theory Change: The Counterrevolutions in Development, Denver: GSIS Working Paper

____ (1998), Technology, Development and Democracy: Limits of National Innovation Systems in the Age of Postmodernism, Cheltenham: Edward Elgar

Kornai, Janos (1971), *Anti-Equilibrium on Economic Systems Theory and the Task of Research*, Amsterdam: North-Holland

Kuhn, Thomas, 1962 (1970), *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press

Lakatos, Imre and Alan Musgrave, 1970 Criticism and Growth of Knowledge, New York: Cambridge University Press

Lawson, Tony 1995 (?), Scientific Realism in Economics, Cambridge: Cambridge University Press Leplin, Jarret (1984), The Current Status of Scientific Realism, Berkeley: University of California Press Ohno, Kenichi and Izumi Ohno (1998), Japanese Views on Economic Development, London: Routledge

Popper, Karl, 1934 (1959), The Logic of Scientific Discovery, Berlin: Springer

____1963 (1968), Conjectures and Refutations, London: Routledge

Stiglitz, Joseph E. (1996), "Same Lessons from the East Asian Miracle", *World Bank Research Observer* Vol II, No.2, August, pp. 151-77

_____, 1998, "Towards a New Paradigm for Development", Raul Prebisch Lecture at UNCTAD, Geneva, October 19

Yanagihara, Toru, 1998, *Development and Dynamic Efficiency: "Framework Approach"* versus "Ingredients Approach", in Ohno and Ohno (1998)

Yanagihara, Toru and Susumu Sambommatsu (eds) (1997), *East Asian Development Experience: Economic System Approach and Its Applicability*, Tokyo: Institute of Development Economics