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THE INTERPRETATIVE FRAMEWORK

Giovanni **Dosi** welcomed everyone and spelled out the "rules of the game" concerning the organization of the second meeting of the Industrial Policy Task Force. Discussants are supposed to present the relevant outline of each contribution (unless the paper has been circulated too late) and---after a discussion involving all the participants---authors have the chance to replicate.

Title: **A Note on the Institutions and Policies Shaping Industrial Development**
Authors: **M. Cimoli, G. Dosi, R. Nelson and J. Stiglitz**

Dosi presented his paper coauthored with Cimoli, Nelson and Stiglitz that is meant to set the theoretical foundations of the discussion. The general question concerning the relationship between institutions and public policies in the shaping of industrial development, Dosi argued, can be envisaged from two complementary angles: either observing that all historical experiences of enduring economic growth are sustained by a rich set of complementary institutions, shared behavioral norms and public policies, or focusing on the theoretical reasons supporting the notion that institutions and policies always matter in technological learning and economic coordination and change. The background paper "A Note on the Institutions and Policies Shaping Industrial Development" is manly concerned with the latter aspect, while most other contributions to the Industrial Policy Task Force focus on a wide range of historical episodes.

Public policies are often justified and evaluated in the light of the *market failure approach*, according to which public intervention is practicable exclusively when the assumptions required by standard "welfare" theorems do not hold. The problem is that virtually any economic system does not comply with the very unrealistic conditions concerning, for instance, market completeness, market power, knowledge possessed by economic agents, exogenous technologies and preferences, "rationality" of decision-makers. In the light of orthodox canons, the whole world can be seen as a huge market failure.

A more appropriate and pragmatic analytical point of departure is the one concerning the determinants of the boundaries between market and non-market institutions. Incidentally, such a distinction is often subtle since one wants to recognize that most real world markets are themselves embedded in non-market institutions that deeply affect their functioning. Such an approach has several advantages: first, it explicitly recognizes that, even today, many economic activities are not subject to decentralized production coordinated by market prices. Second, it opens a broader question concerning the fundamental differences between developed and developing countries and the ways their economies are organized. Third, it aims at evaluating markets not only in terms of their allocative efficiency or their ability to conveniently process dispersed information, but also as major (albeit imperfect) mechanisms of selection.

The above distinction sets the stage for a general taxonomy concerned with the different domains of policy intervention. Such taxonomy is intended to distinguish among distinct policy measures and different institutions that are relevant in each domain. A list of the principal domains follows: (i) Opportunities of scientific and technological innovation; (ii) Socially distributed learning and technological capabilities; (iii) Targeted measures affecting the modes of governance of business firms; (iv) The capabilities of economic agents; (v) The economic signals and incentives that profit-motivated agents face; (vi) Selection mechanisms; (vii) Patterns of distribution of information and of interaction amongst different types of agents.

Even in the era of globalization, selective policy measures and institutions affecting the above domains---and listed in the paper in a non-exhaustive vein---are still very effective for economic development. Most of developed countries seems to be fully aware of their practical importance, but are eager to persuade less developed ones that the contrary is true. Contributions from the Task Force participants should provide careful assessments and detailed descriptions of the relevant episodes in a wide number of the above domains.

Nelson agreed on the importance of the role played by non-market institutions in most of the historical episodes of sustained economic development. In virtually any sector of the economy there is a wide array of important non-market institutions coordinating agents' behaviors and knowledge creation and diffusion. Nelson added that the sectoral perspective is extremely useful in spelling out and evaluating the effects of these institutions.

Soete put forward four remarks. First, he noted that the important issue of government failure is to some extent overlooked by Dosi, Cimoli, Nelson and Stiglitz paper. Even if he agrees that "more market" is not always better than less, our knowledge on the effect of distinct public policies may indeed benefit from considering those policy experiments where public interventions had negative unintended outcomes. Historically, together with the successful episodes listed in the paper, government failures are, in fact, some of the most instructive cases. Second, experiences of effective "regional catching-up" are relevant and instructive in modern industrial policy. In fact, open economies, likewise regions, have less policy instruments than closed economies. Third, Soete stressed that the general scope of the taxonomy should understand the causal relationship between distinct economic policies and outcomes, rather than simply listing the relevant policy measures for each domain. Fourth, one wants to consider income distribution as an important factor constraining industrial policies options. It is in fact hard to justify the allocation of public resources to industrial development when poverty is widespread among significant shares of population. East Asian countries have been very effective in building their national systems of innovation also because of their social cohesion due to low levels of income inequality.

Hobday raised three issues that deserve more careful discussion among the Task Force participants. First, going beyond the simple criticisms of the market failure approach requires a more pragmatic and practical perspective. Which are the policies that have proven to be successful? Under which conditions? Conversely, what can we learn from past failures? Second, one wants to recognize that most of today's developing countries are very different from the Continental European states that were struggling to catch up with England after the first Industrial Revolution. Probably what they need is not a "big push" similar to the one described by Gerschenkron, but more selective and diversified sets of policy interventions. Third, economic development is not always coupled with the emergence of entirely new technological paradigms. Developing countries may achieve significant catching up rates implementing a more pragmatic strategy building on existing technologies.

Coriat stressed that the process of catching-up is not only about technology and innovation. One central aspect that should be considered by less developed countries policy makers is the improvement of the social mechanisms coordinating market and non-market institutions. In this respect reforms agenda is absolutely crucial. Quoting Amartya Sen, Coriat noted that one of the biggest differences between the East Asian and Latin American experiences concerns the timing of distinct interventions. In the former case key infrastructures, relevant non-market institutions, and major public goods have been built or provided before the setting of market mechanisms. The opposite happened in Latin America during the eighties where the naïve "markets fix it all" belief inspired most of national governments interventions.

Khan underlined that in the introductory chapter, beyond the critique of the market failure approach, one wants to make a sharp distinction between different functions markets are believed to perform. In the history of economic thought two functions have been studied: 1) markets as opportunity providers; 2) markets as systems of compulsion. The second interpretation well rooted in the Karl Marx legacy, is often overlooked. On the contrary, historically markets as systems of compulsion have been a major force behind sustained productivity growth. Their design and implementation should be considered as an effective industrial policy, especially where such systems are lacking.

Palma, speculating on Khan remark, noted that too often markets are wrongly envisaged as bottom up institutions, which emerge spontaneously. On the contrary, especially in small countries, making markets work properly and encouraging competition are both important public goods. In this perspective, market design is a crucial policy task.

Winter agreed on the importance of institutions in the process of economic development and policies should aim at shaping them. However, he stressed that the political economy of institution building is often very complex and both economists and policy makers still lack important pieces of knowledge in this respect. More often than not, those in charge of implementing public policies belong to groups, which have scarce interest in changing the *status quo*. Some reflections on our understanding of political interests involved in institutional reforms are needed.

Dosi, responding to the first round of comments, acknowledged the relevance of the political interests resisting institutional reforms. Dosi also recognized the importance of income distribution. On the other hand, he disagreed with the approach that considers social institutions as completely exogenous. In particular, income distribution is also shaped by industrial policies and should not be considered as given. Dosi also agreed that regional polices are indeed important and instructive. However, different degrees of freedom still persist between regional and national policies.

Perez expressed some concern about the market failure approach critique made by Dosi *et al.*. In particular, he felt that such approach is very progressive compared to other orthodox views, and one may design and implement a wide array of policy measures justified by the existence of traditional market imperfections. Moreover, one wants to carefully distinguish across different liberalization experiences in Latin America in order to distinguish among several policy options.

Castro stressed that most academics and policy makers study the East Asian case highlighting national differences. Conversely, when Latin America is at stake, scholars tend to refer to the liberalization experiences as if they were similar across different countries. An important challenge for the Task Force is to go beyond this simplistic view.

Soete returned to his previous statement concerning the importance of income distribution and suggested to compare less developed countries experiences with the Scandinavian ones. The importance of income distribution in the shaping of more effective and equal educational systems and, more generally, national systems of innovation, is self evident in such comparison.

Nelson recalled that Adam Smith characterized markets as a reaction to *mercantilism* and not as optimal institutions. Moreover, distinct markets are institutionally different and their functioning is clearly affected, for instance, by levels of literacy and education. He agreed with Dosi saying that the East Asian emphasis on education was probably at the roots of a more equal income distribution and not vice versa.

Palma argued that "economic counterfactuals" are not interesting in the Latin American experiences of structural reforms. In fact, any alternatives to liberalization would not have been politically feasible in Latin America, given the interests of the first generation of political leaders and their constituencies (e.g. Menem, Collar, Fujimori…).

Primi agreed with Coriat on the importance of policies as coordinating devices. She noted the divergence in the timing chosen by Latin America and East Asia to intervene on their national systems of innovation. For instance, given the co-evolution of educational and industrial policies, East Asian countries avoided bearing unnecessary educational expenditures (i.e. expenditures that favored developed counties having as only effect the brain drain phenomenon). She also disagreed with Hobday, and stressed the importance of pro-industrial policies: big-push theories are not irrelevant nowadays in many less developed countries.

Cimoli stressed the importance of unequal income distribution in shaping capital accumulation and economic development. One wants to asses and explicitly considers the two broad interpretative hypotheses on the table. Higher inequality may foster capital accumulation and more investments. On the other hand, as suggested by Soete, more equal social arrangements may facilitate capabilities building and, in particular, effective learning. With respect to the liberalization episodes in Latin America, he agreed that the paths were very diverse in distinct countries. However, ultimately all of them lead very rapidly to open economies, which typically have to face similar challenges.

Burlamaqui raised two points. First, the market failure perspective is intrinsically neo-classical. If one wants to understand entrepreneurial success, one needs to adopt a market shaping perspective. Second, financial institutions deserve more space in the background paper. Issues like debt management and financial fragility are at the roots of Latin American problems.

Khan stressed that in the "market failure approach" markets are envisaged essentially as trade opportunities providers and their failure implies less gains from trade. One has to address a broader notion of failure which encompasses "compulsion". For instance, as far as education is concerned, financing and designing infrastructures may not be enough. Often policies fail to implement systems of "compulsion to learning".

Blankenburg observed that the mainstream perspective in development economics stresses the importance of good governance and accumulation of human capital. The Task Force may explicitly address these issues rather than focusing solely on the market failure critique. She also mentioned the importance of Kaldor contribution in elaborating a co-evolutionary framework entailing capital accumulation and absorptive capacity of society.

Ferraz stressed that Latin American countries differ from East Asian ones for geopolitical reasons. In particular, in Latin America intellectual property regimes and financial institutions have been affected by the proximity of the United States.

Castro recalled the debate between Prebisch and Furtado concerning the importance of national heterogeneity in Latin America. Furtado believed that it was misleading to consider Latin America as a single country. Despite Prebisch's view have been more influential, one needs to recognize that national institutions are likely to persist over time and their degrees of plasticity are limited.

Noman agreed with Soete on the importance of government failure. He also emphasized that in order to grasp their importance one needs a reliable taxonomy of types of States.

THE ROLE OF RESEARCH AND TRAINING INSTITUTIONS IN TECHNOLOGICAL CATCHING-UP AND ECONOMIC DEVELOPMENT

***Title*: The Roles of Research at Universities and Public Labs in Economic Catch-up**
***Authors*: R. Mazzoloeni and R. Nelson**

Abstract

The role of research in indigenous universities and public laboratories is very important in the processes through which countries behind the technological and economic frontier catch up in industrial technology and practice. The central thesis of the paper is that (i) the new legal environment (e.g. WTO and TRIPS), (ii) a context in which both business and finance are operating on a more global frame, (iii) and more connected scientific and technical communities make that the development of domestic capabilities in research and advanced training are nowadays more important in enabling catch-up than they use to be, and their importance will grow. The paper focuses on what is known about the roles of indigenous public research institutions in three catch-up episodes that may be considered by and large successful: Japan, in the late 19th and early 20th century, Korea and Taiwan later in the last century, Brazil in the second half of the last century.

Soete presented the paper by Nelson and Mazzoleni stressing and appreciating its pragmatic attitude in tackling three important issues: 1) the role of universities and research laboratory in sustaining the catching-up process; 2) the shift in the international institutional framework (e.g. TRIPS); 3) the increasing importance of national systems of innovation in the catching-up process. The main implication of the paper is the need for a shift from the old model of catching-up (i.e. imitation) towards new ways of enhancing domestic tacit knowledge accumulation. Soete put forward three main remarks. First, episodes of failure are also interesting and the authors, in addition to the successful ones, should add more case studies of mismanaged "catch-up" polices in addition to the successful ones. Second, skilled labor mobility is indeed very important in the catching up process, but it is often difficult to be managed domestically as the paper seems to suggest. The important issue of coordinating education and industrial policies is at stake here. Third, the paper highlights the constraints posed by TRIPS to the diffusion of codified knowledge. Conversely, the importance of domestic tacit knowledge is somewhat overlooked.

Nelson acknowledged Soete's points and clarified that the empirical content of the article will be enriched.

Dosi, commenting on previous remarks, stressed three issues: 1) one needs to match education and industry polices. The risk here for less developed countries is to indirectly subsidize rich ones; 2) technology cannot be envisaged as a simple blue print (i.e. a codified recipe ready to use). The importance of tacit knowledge has to be considered; 3) university-industry links have to be close, but not too close in order not to transform public research labs into training subsidiaries.

Coriat underscored again the general importance of coordination and institutional complementarities referring to the special case of the industrial and educational systems. In this respect it is clear that "one size fits all" policies can be misleading. In fact, the university-industry link studies need to acknowledge the existence of different institutional arrangements beyond US research universities, such as school of engineering and *Grand Ecoles* (i.e. specialized schools in France).

Hobday noted that beyond the distinction between social and physical technology, the paper might consider the one concerning wealth generating versus non-wealth generating technologies. Hobday also suggested encompassing a few case studies in which public labs creation did not work.

Palma wondered if the educational problem of a few developing countries is not simply the level of expenditures, but the structure of such expenditures, with a misleading emphasis on tertiary education.

Khan put forward the existence of a few examples of public research labs failures. In Tanzania, for instance, labs were completely disconnected from what was happening in the economy. A different but complementary issue is to avoid social waste in education.

THE SUBTLE BOUNDARIES BETWEEN "INFANT PROTECTION", "SCHUMPETERIAN" INCENTIVES AND EXPLOITATION OF MONOPOLY RENTS: THE ROLE OF COMPETITION POLICIES

COMPETITION POLICY AND INDUSTRIAL DEVELOPMENT

Possas presented the outline of his paper which is divided into three sections: 1) Objectives and scope of competition policy as related to industrial policy; 2) Industrial policy and competition policy: some lessons of international experience; 3) Implications for industrial development. The main insights of the paper are: first, it is argued that it may be misleading to consider competition policy in opposition to industrial policies. Rather, the former has to be envisaged as a subset of the latter. On the other hand, it might be useful to distinguish between catch up policies---clearly biased towards a few sectors and industries---and competition ones. Second, several episodes of sustained growth among developed countries suggest that different combinations of industrial and competition policies were able to lead to similar results. Third, the lesson for less developed countries is that while they may benefit from setting radically new agendas in terms of selective sectoral intervention, competition policies do not need to differ radically from those adopted by developed economies.

Kahn noted the existence of distinct broad interpretations of what one means for competition policy and anti trust law. Clear-cut definitions should be included in the paper in order to avoid misinterpretations.

Dosi suggested providing a more careful account concerning significant historical episodes, including a detailed mapping from competition policies to industrial ones. The following cases may be particularly interesting: 1) subsidies coupled with compulsion to compete; 2) competition as the sole device of selection.

Nelson added that competition policies do not only encompass antitrust laws, but also the planning of very important infrastructures such as railroads and even education systems. In this broader sense competition policies are a subset of industrial ones.

Palma argued that competition polices have to be considered at the same sectoral disaggregation of catching-up policies. Unfortunately in the former case such sectoral dimension can be very difficult to disentangle.

Coriat raised an analytical issue: often competition policies are biased in favor of market institutions, implicitly envisaged as the best allocative mechanism. If this is the case, the only accepted policies are the ones which remove the obstacles for competition. Industrial policies often start from the opposite perspective: market competition left alone often produces inefficient outcomes. One important challenge is to reconcile the two approaches in a coherent framework.

POLICES AFFECTING THE ENTRY OF NEW FIRMS: A COMPARATIVE ASSESMENT

***Title*:** **Entrepreneurship and Bureaucracy in Developing Countries: a Policy Perspective**
***Authors*:** **M. Hobday and F. Perini**

Abstract

The paper reviews several empirical studies analyzing which are the sources of entrepreneurship in developing countries and how entrepreneurship contributes to economic development. In the first part of the paper classical and more recent definitions of entrepreneurship are compared. In particular, the distinctive features of latecomers entrepreneurship are identified and compared with the ones in advanced countries. The second part of the paper concentrates on the discussion of the Washington consensus policy approach to entrepreneurship (largely inspired by de Soto's contributions). The paper discusses some of the current polices towards entrepreneurship in developing countries, i.e. policies for small and medium enterprise and venture capital polices. The argues that even if the empirical evidence show that there are considerable bureaucratic barriers to entrepreneurship in developing countries, nonetheless the current policy (the 'augmented' Washington) consensus is flawed and a more pragmatic and country specific approach should be used.

Ferraz presented the paper by Hobday and Perini. He acknowledged the difficulties in relating policies and entrepreneurship and agreed with the paper's criticism to the so-called de Soto perspective (i.e. stronger property rights and less bureaucracy are sufficient preconditions for development). Ferraz stressed that such a perspective does not take history seriously. Rather, one needs to explain why, for instance, social networks have been less helpful in some regions than in others or why some areas have experienced vitality in job creation. A very important question raised in the paper is the one concerning the importance of the historical and geographic context: given that development is time and geography specific, doesn't entrepreneurship present the some features? Ferraz underlined that, partly for the same reasons, also the Schumpeterian literature does not adequately explain entrepreneurship in developing countries. As a general remark to the paper, Ferraz noted that it does not clearly distinguish between entrepreneurship (or self employment) and marginality. In fact, too often informality is taken for entrepreneurship and vice versa. In order to avoid this problem, the authors need to deepen their analytical section. Ferraz also wondered if it is feasible to construct a taxonomy mapping different *types* of economic environment into distinct *types* of actors. Finally, Ferraz asked for a deeper discussion concerning the different role played and the relative contribution made by new entrepreneurs and by the incumbent (possibly diversified) firms to the development process.

Amsden argued that entrepreneurship in developing countries does not automatically trigger economic development. Indeed, especially in Latin America, there is very little evidence of the progressive role played by small firms. On the contrary, post World War II experiences show that the period in which small firms are predominant has to be short and that scale is fundamental to success. The empirical evidence also suggests that entry in new sector is mainly undertaken by incumbent firms that diversify. The policy implication is that governments need to help firms to grow.

Winter recalled that the main sources of U.S. entrepreneurship are spin-offs (i.e. new firms founded by people who worked in the same industry in another company). The fact that empirical evidence shows that new entrepreneurs come from incumbent firms suggests that trade secrets regulation represents a critical policy issue.

Kuznetsov noted that even if technical entrepreneurship is quite a rare event in Latin America, there are a few isolated but notable cases. In this respect, venture capital has proved to be an important policy measure (e.g. Chile).

Amsden disagreed on the possibility that high tech spin offs in Silicon Valley are relevant examples for developing countries.

Nelson stressed that the Task Force's collective exercise will benefit a lot from a contribution on entrepreneurship. At the same time, he suggested to reshuffle the paper in order to make it more in tune with the general approach of the Task Force. Nelson also put forward three observations. First, development is a learning process in which innovation is key and entrepreneurship is often important for the latter. Second, rich institutional structures have to be analyzed in order to understand diverse typologies of entrepreneurs. Third, very high entry rates are not always a positive indicator. As stressed by Amsden, one can observe a lot of entrepreneurship which is counterproductive for the development process.

Dosi discouraged the use of narrow definitions of entrepreneurship. Conversely, entrepreneurship should be interpreted as a new way of doing things. Entrepreneurs are not simple dealers. Therefore, it is very important to employ a rich set of measures in order to better understand the phenomenon. Indeed, there is the risk that some forms of entrepreneurship are proxies for social exclusion. A more careful consideration of this aspect can improve the quality of the tables presented in the paper. In addition to the data provided, one wants to investigate if there are significant differences in the entry-exit dynamics between developed and developing countries.

Noman, quoting Hausmann and Rodrik, argued that entrepreneurs, beyond being important dealers and carriers of new capabilities, also enhance a process of discovery concerning the domestic costs of production of goods that are produced abroad.

Palma wondered how general is the Chilean salmon industry case: after a period of incubation, successful domestic entrepreneurs are likely to sell to foreign multinational enterprises which typically arrest the indigenous process of capabilities accumulation.

Hobday replied to comments and suggestions acknowledging that entrepreneurial functions is indeed very different in less developed countries.

INTELLECTUAL PROPERTY RIGHTS REGIMES: INCENTIVES AND CONSTRAINTS FOR TECHNOLOGICAL AND INDUSTRIAL DEVELOPMENT, AND THEIR SOCIAL IMPLICATIONS

Title: **Intellectual Property Right (IPR) Regimes Incentives and Constraints for Technological and Industrial Development**
Authors: **M. Cimoli, B. Coriat and A. Primi**

Abstract

The paper studies the impact of the new Intellectual Property Right international framework on technological and industrial development, with a special focus on Latin America and the Caribbean countries. The work is organized in two distinct sections. The first part of the paper provides a detailed analysis of the genesis and the impact of the new rules governing US patent system and the trends of international homologation of such shifts (i.e. TRIPS and bilateral agreements). The second part of the paper focuses on the consequences of the above changes for less developed economies (mostly Latin American and Caribbean) and analyzes the correspondence among asymmetries in IPR systems, technical capabilities and the characteristics of the production structure.

Winter presented the paper by Cimoli, Coriat and Primi. The paper addresses the new challenges posed by the recent developments of IPR legislation to the catch-up process of less developed countries. The basic outline of the most important sections of the article follows: 1) a comprehensive history of the recent US institutional changes that have affected IPR; 2) an evaluation of the efficiency of research and development in Latin America; 3) an assessment of the strengthening of IPR regulation in the US; 4) an analysis of the difficulties experienced by developing countries in implementing their own IPR regimes. Winter put forward a few remarks. First, the general alarm is more intellectual than practical, since very little is known about the actual impact of the new set of rules. Second, TRIPS are not "per se" institutions. In fact most of the action concerns the institutions which are supposed to regulate their private enforcement. Third, the general importance of patents, both as appropriability enhancers and as diffusion barriers, is overrated. Fourth, a more careful analysis of the shortcomings of the U.S. system is needed. For instance, the impact of the Bayh-Dole act is often exaggerated. Fifth, one wants to address the relevance of a famous paradox: many surveys have shown that managers do not consider patents as an important mean through which securing the profits of their innovations, but the same managers do care about patents portfolios.

Nelson stressed that sectoral specificities are important in order to address the central question: are patents incentives for innovation? In fact, if in a few sectors patents seem to be effective instruments for appropriability (e.g. pharmaceuticals), in others they are not. Moreover, the paper does not discuss the role played by domestic legislation in providing internal incentives. Finally, a complete evaluation for TRIPS requires a detailed understanding of what types of goods and services developing countries are able to produce and provide.

Coriat clarified that his paper (co-authored with Cimoli and Primi) is about homogenisation and TRIPS, rather than IPR "per se". The overriding objective is to assess how such homogenisation incentivizes and facilitates technology diffusion. It is found that, irrespectively of the sectors considered, western countries use TRIPS in order to build institutional rents.

Amsden noted that in India there is a general consensus that in a few sectors (e.g. software) patents are beneficial; while in others (e.g. pharmaceuticals) the opposite is the case. What one needs in less developed countries are flexible institutional arrangements which acknowledge that patents and other protections have always mixed effects. The causal link between IPR and economic performance should be analysed in more depth.

Soete acknowledged the general tendency towards institutional homogenisation in patents regulation, but stressed that there is still much more cross-country variation than usually believed. Moreover, he noted that recently, even among mainstream scholars, the common wisdom regarding patents and their beneficial effects on innovation has shifted towards more sceptical positions. In the case of the software industry, for instance, such a change is self-evident.

Dosi provocatively asked for convincing empirical evidence concerning the cases in which more appropriability increases the rate of innovation. He believes this evidence is lacking.

Winter argued that economists do not have solid pieces of evidence concerning the consequences of strong patent protection.

Coriat answered pointing out some disturbing cases in which stronger patent protection has caused deep failures in health care, e.g. the booming prices for heart disease treatments.

Cimoli raised the issue of the asymmetrical effects that patent protection has in the center (i.e. developed countries) and in the periphery (i.e. less developed ones). Moreover, he stressed that bilateral agreements (most often between the US and distinct Latin American countries) are becoming more important than TRIPS in regulating and enforcing intellectual property protection. He also argued that if less developed countries do not build production capacity in advance, they do not have anything to protect afterward and therefore any form of protection is detrimental.

THE ROLE OF FINANCE AND FINANCIAL INSTITUTIONS IN ECONOMIC DEVELOPMENT

Dosi presented the outline proposed by Mayer for his will-be paper spelling out its seven main messages. The first one addresses the role of equity sources of finance in the development of enterprises and the function that equity performs in the financing of firms. The second concerns the means through which financial and in particular equity markets develop and the factors that are conducive to their development. The third message stresses the limited influence that regulation plays in the development of equity markets and the fourth one underlines the significance of informal relations based on trust and local organizations for equity markets. The fifth point concerns the contrast between informal and formal relations respectively in equity markets and in debt finance. The sixth underlines the role of banks and legal systems in the enforcement of debt contracts and the importance of collateral in the provision of bank lending. The paper concludes by suggesting how relations of trust in equity markets have developed and the role that different types of institutions have played in the process.

A set of brief interventions stressing the importance of several informative case studies follows:

Nelson noted that a few episodes highlight distinct possible modes of coordination concerning the multifaceted relations between the industrialization processes and financial institutions (e.g. Taiwan and Korea).

Noman emphasized the importance of low price credit in fostering economic development. In particular, he recognized that both the loan's structure and the established target matter.

Hobday underlined the importance of informal mechanisms in the initial stage of development of the financial architecture in China. Policies coordinating the transition towards a formal set of rules have been effective in the Chinese case and may be particularly valuable for Mayer paper.

Ferraz stressed the importance of East Asian financial sectors described by several case studies. Latin American countries can benefit from understanding how ICT boom have been financed without major imbalances in East Asia.

Palma added to Ferraz remark that if one wants to understand major differences between East Asian and Latin American financial architectures, one has to focus on the role played by household savings which is completely different in the two regions. In East Asia, also due to a more equal income distribution, household saving rates are much higher.

Castro raised a few points concerning the tangled relationship between financial institutions and development. First, historically catching-up has been achieved through banks' credit, rather than equity markets. Second, recent institutional restrictions and regulations (e.g. Basel 1 and 2, Central Bank independence…) have created new challenges and constraints, which deserve careful attention. Third, nowadays, in every industry the risks are higher because of new technologies. This risk affects differently developed and less developed countries. For instance, developing countries cannot hedge the risk for quicker machinery obsolescence using capital markets that do not exist.

Perez suggested that the financial aspect of industrial policies should be explicitly addressed by every chapter of the Task Force book in order not to have disturbing gaps between goals and resources.

FLYING-GEESE AND WADDLING-DUCKS: THE DIFFERENT CAPABILITIES OF EAST ASIA AND LATIN AMERICA TO 'DEMAND-ADAPT' AND 'SUPPLY-UPGRADE' THEIR EXPORT PRODUCTIVE CAPACITY

***Title*:**	**Flying-geese and waddling-ducks: the different capabilities of East Asia and Latin America to 'demand-adapt' and 'supply-upgrade'their export productive capacity**
***Authors*:**	**G. Palma**

Abstract

The paper investigates two related issues concerning the importance of the technological contents of exports for developing countries. First, do (i) productivity of growth potential, (ii) welfare gains from trade, and (iii) institution building processes critically depend on the technological content of exports? If this is the case, which are the roles played by domestic supply and international demand? Second, are (macro)regional dynamics an important component in explaining the sectoral pattern of specialization of developing countries exports? Both issues are analysed by the present paper through the study of the diverse export and growth performances of Latin America and East Asia since the 1960s. The comparison supports two hypotheses. First, export capacity to generate and sustain (trade-induced) GDP-growth is closely related to their composition, to the effectiveness with which they are 'anchored' to the domestic economy, and to the ability of the state to implement appropriate trade and industrial policies. From the supply point of view, the fundamental difference is found in the different capacity of each type of product to induce productivity growth in the economy via cumulative causation-type processes. From the demand point of view, the main difference arises from the fact that international demand for some types of products has grown much faster---and is likely that it will continue to grow much faster---than for others. Second, regional dynamics, especially the specific type of leadership that Japan has exerted, have played a significant positive role in East Asian superior continuous effort to supply upgrade and demand adapt its export productive capacity.

Hobday presented the paper which constitutes the background text for the will-be chapter titled "The impact of trade policies on domestic development" to be jointly written by Palma and Blankenburg. Two basic questions motivate the paper. First, are there differences in export patterns driven by goods with distinct technological contents (e.g. potatoes and silicon chips)? Second, which are the dynamic consequences of distinct export patterns? The main conclusions of the paper are: 1) there are major differences in exporting goods with diverse technological content; 2) it is very important for national policy makers to understand those differences in order to shape their trade policies; 3) Regional dynamics (e.g. Japan in East Asia) may play an important role in the process of supply upgrading and demand adapting export capacities. Hobday put forward three basic remarks: first, Japan, differently from other countries, had the United States domestic demand financing its development. Second, emphasising the importance of high tech industries might be too simplistic: ex-ante is not easy to foreseen which are going to be the successful high tech sectors. Third, the detrimental role of rent seeking oligarchies (especially in Latin America) is somewhat overlooked in the paper.

Amsden noted that both the protection of national industry and a careful management of financial resources are necessary conditions for sound catching up policies. Indeed, Japanese historical experience shows that, first, every sector has been preserved by a strict selection over Foreign Direct Investments. Second, almost every industry was protected from foreign competition. Third, there were effective performance standards regulating the provision of subsides.

Castro raised the audience's attention on the changed institutional and technological conditions affecting policies that aim at activating new sectors. Nevertheless, it is still possible to run industrial policies which concentrate on the development of new products.

Noman stressed that two important issues should be addressed by the chapter addressing trade and industrial development relationships. First, macroeconomic instability caused by trade imbalances is still a very important problem in many less developed countries. Second, sector biased trade policies have to cope with the constituencies that do not benefit from selective interventions. Therefore, the political economy of their implementation has to be taken seriously.

Coriat stressed that product differentiation and design innovation, even in less developed countries, may be more important than cheap labor for successful export performances. The latter is an important lesson for policy makers who naively believe in the standard economic tale of static comparative advantages.

Palma showed some pieces of evidence concerning the Latin American exports dynamics: despite an increase in the overall output exported, not a single country did improve its specialization. Contrary to East Asian countries, Latin American ones show dynamically inefficient patterns. Market compulsion was probably effective in fostering export growth, but other means are necessary if one wants some improvements along the technological content dimension.

THE POLITICAL ECONOMY OF INCENTIVES AND CONSTRAINTS TO GROWTH: LESSONS FROM A LARGE ECONOMY (BRAZIL)

Title: **The 'political economy' of incentives and constrains to growth and learning capabilities. Lessons from a large economy (Brazil)**
Authors: **B. d. Castro**

Abstract

The paper addresses the specificity of the Brazilian "quasi-stagnation" period (1981-2003), comparing it with both the import substitution era (1940-1980) and the nowadays transition from quasi-stagnation to rapid and sustained growth. It is argued that the aborted growth surges during the period 1981-2003 have accumulated an additional growth potential (beyond that of unused capacity), which cannot be properly evaluated exploiting the available data regarding the performance of the economy. Moreover, there are signals that the repressed growth during the period of quasi-stagnation tends to spontaneously emerge if stability is assured, but it can be stimulated through adequate and specifically conceived policies. This suggests that the economy could immediately reach a fairly good pace of expansion that might lead it into an effective long-term rapid growth trajectory.

Cimoli presented Castro's paper, which focuses on two distinct historical periods in the Brazilian recent economic history: the so-called import substitution era (1940-1980) and the "quasi-stagnation" period (1981-2003). The general issue addressed concerns the subtle link between micro economic patterns of learning and macro economic growth phases. Castro's point of departure is the search for some micro economic shift, which has characterized the Brazilian economy during the "quasi-stagnation" period. In fact, if, on the one hand, during import substitution, the active role of the state has effectively sustained enduring economic growth without creating the right incentives for micro learning, on the other, the opposite happened during the second period identified, when the main policy concern was macroeconomic stability. Cimoli finds the central argument of the paper both interesting and intuitively appealing, but he put forward two remarks: first, how does the author precisely define and measure micro learning? The central claim of the paper needs to be more precise in this respect. Second, the paper seems to argue that economic specialization is not important and may be detrimental to the Brazilian economy. Is this true? In which sense?

Ferraz recalled the importance of country size in shaping the relative importance of export performance in the growth process. Brazil differs from other Latin American countries because of the magnitude of its domestic demand.

Palma remarked that politics is very important in order to understand the shift identified by Castro's periodization. A careful description of the changing interests of the elites that governed the two phases may be interesting.

Amsden remarked that any kind of comparison between Latin America and East Asian countries needs to take into consideration the importance of income distribution in the shaping of the support for industrial policies.

Dosi asked for more empirical analysis supporting the insightful argument of the paper concerning the importance of learning in distinct growth phases.

Castro responded with nine remarks: 1) macro-data show that the periodization used is accurate; 2) Brazilian state was incoherent in spelling out and implementing its policies; 3) pre-existent institutions made the economic system less flexible; 4) in particular, still today, there are only seven big banks in Brazil; 5) industrial structure remained by and large the same during the whole period; 6) imitation during the first stage has been harmed by very low standards of education, which only recently have started to change only recently; 7) there has been a shift from maximizing risk strategy to minimizing risk ones; 8) one wants to distinguish between plants and equipments change; 9) radical reforms are different from simple enhancement.

Friday, March 18th

INDUSTRIAL POLICIES IN LATIN AMERICA IN THE LAST FIFTEEN YEARS: THE POLITICAL ECONOMY OF CONSENSUS BUILDING AROUND SPECIFIC POLICES SCHEMES

Perez presented the outline of his will-be paper along one central message: Latin America has made huge progresses and most of today's problems do not concern policy design but its implementation. In particular, what needs to be clarified is which are the actors affected by industrial policy and which are their vested interests.

A clear-cut periodization is proposed organized along different attitudes most Latin American countries have had towards industrial policies:

1) (1990-1994) The best industrial policy is no industrial policy;
2) (1994-1999) Proliferation of programs, projects and strategies, with a revival of competitiveness policies, but with very poor implementation.
3) (1998-2003) New, efficient policy instruments; but, with limited impact and scope.

It is possible to spell out three kinds of basic programs: (i) policy agenda settings, (ii) micro measures aimed at financing small firms competitiveness, (iii) horizontal policies. At the end of last decade a consensus emerged concerning the importance of enhancing competitiveness, increasing horizontal investments, and supporting to micro firms. The instruments put in place in order to achieve the above goals are more controversial are; in particular, the unsettled issues concern "how" and not "why". To sum up, the policy measures envisaged as effective are: 1) export promotion; 2) initiatives attracting foreign direct investments; 3) technological diffusion enhancement programs; 4) labor training programs. Conversely a general scepticism regards: 1) subsided credit provision programs; 2) direct subsides. Finally, a few policy measures aimed at shaping corporate governance, protecting the environment, and incentivize women labor market participation emerged as promising.

If, on the one hand, huge progresses have been made in the policy design, on the other, problems still remains in the implementation and evaluation of such polices. The critical factors behind such weaknesses are

1) Planning and implementation have been usually kept separated;
2) The projects designed have been usually too complex and costly. Indeed, one of the most common mistakes made in the 1990s has been trying to replicate the "best practices" polices of developed countries.
3) The lack of governance capabilities.

Finally, Perez listed a few proposals aimed at improving policy implementation: 1) Promote state reforms which shift sectoral organized policy departments towards more horizontal ones; 2) Relocate the best human resources from planning to implementation; 3) Strengthen governance organization picking leaders from the private sector and incentivize intermediate implementation agents.

Having said that, two open questions deserve a more careful assessment: (i) can industrial policy live with an orthodox macroeconomic policy? (ii) Can industrial policy thrive without a social or political subject behind it? A new path-breaking element is that the new demand for industrial polices is now coming directly from a new generation of policy makers, rather than from the business sector (as it was in the 1990s).

Castro agreed with both the change of climate described by Perez and the criticalness of policy implementation. On the other hand, he argued that there are still two strong forms of opposition to industrial policy intervention. First, the orthodox one, which considers government failures more serious than private ones; second, the fiscal hardening opposition, which, even in countries with low fiscal burden and primary budget surpluses, fights industrial policies in the name of fiscal austerity. Two solutions are put forward: first, public opinion should perceive industrial policies as a pre-condition for innovation and technical change; second, industrial policies may be envisaged as insurance against risk.

Kosakoff, expressing his appreciation for Perez's insightful presentation, noted that mainstream studies assessing the impact of different combinations of macro and industrial policies in Argentina did not take into account their micro consequences (i.e. firms behavior). Effective policy implementation is very difficult if one does not consider the complex consequences upon micro technological capability.

Kuznetsov noted that an important part of policy implementation concerns the evaluation stage. In particular, polices should be evaluated in relation to second best outcomes they help to achieve. On the normative side, Kuznetsov stressed that industrial polices should be private sector driven.

Palma pointed out that even if many Latin American countries do have an industrial policy, coherent strategies are missing. On the other hand, one wants to recognize that sometimes markets are useful and important.

Amsden argued that economists should build a consensus for regulation in Latin America. In fact, it is somewhat ironic that regulation and regional polices exist in every country but in Latin America.

Nelson criticized the hypocrisy of supporters of the so-called horizontal policy. In fact, he argued, even policies that pretend not to be industry specific (e.g. research and development incentives) are most likely to have an uneven effect on distinct sectors of the economy.

Dosi forcefully asked for provocative contributions that challenge the conventional wisdom concerning industrial policies. Almost by definition, public policies should not be private sector driven and in some instances nationalization of some industry may pay off. He also asked to Brazilian participants to which extent Brazil is a special case in Latin America, given that, differently from other countries, a class of industrial technocrats still exists and the privatization agenda has not been pushed far too far. With respect to the last point one wants to have a clear assessment of what the waves of privatisation implied in terms of terms of trade, production efficiency, and knowledge accumulation.

THE CHANGING ROLE OF THE STATE IN INDUSTRIAL DEVELOPMENT. A COMPARISON BETWEEN EAST ASIAN AND LATIN AMERICAN EXPERIENCE.

Title: **The Political Economy of Industrial Policy in Asia and Latin America**
Authors: **S. Blankenburg and M. Khan**

Abstract

The central message of the paper is that catching-up strategies failures and successes are largely explained by whether or not the institutional systems of compulsion are compatible with the historically determined organization and structure of political power balance and political settlements. One important implication of this perspective concerning industrial policy regimes is that, given the diversity of episodes, transferability of 'lessons' from one historical context to another is very limited. The first part of the paper presents the theoretical framework. The second part discusses and compares the experiences of several developing countries (both Asian and Latin American ones) during the last forty years.

Khan presented his paper coauthored with Blakenburg, which calls for a reappraisal of the role and characteristics of industrial policy along a new dichotomy: system of opportunities *vs.* system of compulsion. The paper argues that, for instance, XVIII century England was the country where industrialization took off exactly because market not only created opportunities, but also became a system of compulsion. Industrial policy should be concerned with this transformation. In particular, Khan pointed out that, when the gap in productivity is bigger than the gap in wages, the market, as a system of opportunities, is not sufficient to attract foreign investments that could induce industrialization. In this case, state intervention through subsides and incentives (i.e. creating rents) can help to close the gap and attract investments. Obviously, one of the crucial issues is when such an intervention should stop. Korea and Malaysia, with different strategies, were able to manage effectively government policies. In particular Korea system of opportunities was very flexible: government was able to correct its error very quickly, withdrawing government created rents whenever it was needed. Khan emphasized the fact that this has been possible because there was no political support for protecting inefficient capitalists. Malaysia, on the other hand, has been able to attract multinationals and used centralized transfers in order to de-link redistributive rents from learning rents. Conversely, Indian powerful and fragmented intermediate class was the major obstacle, likewise the Latin America case, to a successful industrial policy.

Blakenburg concluded the presentation of the paper focusing on the description of the Latin American system of selective tariffs and import substitution polices between the 1950s and 1970s. Industrial policy regimes in Latin America invariably used a combination of import tariffs, cheap credit and state bailouts, in combination with state provision of infrastructure. But tariffs made that learning rents rapidly become redistributive rents. Differently from the successful East Asian cases, rent-management strategies very rarely involved subsidies that are easy to withdraw. In addition, Latin American states have not been able to increase their bargaining power *vis-à-vis* foreign high technology producers, as in the case of Malaysia. On the other hand, the 1980s represented a decade of rapid liberalization, widespread breakdown of corporate alliances and technological downgrading. During this period Latin American countries have been the laboratories for the implementation of the market driven strategy of growth. The disappointing economic performance of the region confirm that the removal of obstacles to market opportunities does not automatically deliver higher productivity growth or create dynamic capitalist economies. Blakenburg concluded noting that when catching-up economies are exposed to international market pressures without any accompanying system of compulsion to ensure that these market pressures are translated into learning and technology rents (as the Latin American countries in the 90s), they will end up downgrading their technological capabilities.

Perez, commenting the paper, agreed on the fact that case studies need to be understood in their own terms and for this reason he especially appreciated the clear presentation of the different country experiences. Discussing one of the main propositions of the paper, he argued that import substitution collapsed for its own problems in the 1970s. He added that he would have appreciated a more deep discussion of the concepts of rents and compulsion, because some doubts remain on their analytical importance. Perez argued that those concepts, and in particular institutional compulsion, should be discussed in the introduction of the book. Finally he made two general remarks to the paper: 1) the balance of the article is too biased towards Asian countries, 2) the paper should present empirical evidence supporting the statement that a technological downgrading would have taken place in Latin America in the 1990s. Finally he argued that referring to average data for the region can be misleading: indeed in Latin America the average ultimately conveys information about what happened in Brazil and Mexico. For example, aggregate data do not show, as micro data do, that fast and more radical reformers grew more.

Burlamaqui reminded the importance of the macro financial dimension of industrial policy. In particular, if one wants to solve the dilemma between rent seeking prevention *vs.* rent promotion one has to avoid bad management of debt crisis that took place in the 1980s, which was the very cause of the lost decade in Latin America

Coriat remarked the fact that import substitution indeed had very positive effects for developing countries. Then he wondered if the debt crisis stemmed from internal or external causes. His view was that the model itself produced an unmanageable debt.

Nelson made two remarks. First, he criticized the analysis of systems of compulsion and markets as if there was a golden age of pure market. Actors, conversely, are always dealing with complex environments and governmental institutions. Second, Nelson pointed out that nations do not have industrial policies homogenous across sectors. Rather, industrial policy is a collection of sector specific policies that have to be assessed with their strengths and weaknesses.

Noman emphasized that, given the existence of different levels and types of intervention (e.g. one stage, two stages policies; more or less flexible), the Task Force needs to develop a taxonomy of states and policies. In this direction, the contribution by Khan and Blakenburg is very promising.

Kuznetsov underlined two crucial questions relevant for designing successful and effective government's intervention: 1) how to develop a strategy in order to cope with vested interests; 2) how to design rents contingent on performance.

Coriat wondered if it is still possible for the government to create rents in the era of WTO.

Amsden referring to the Indian case argued that the big transformation was from small business to big one. To simplify, from Gandhi to Nehru. Moreover, developed countries are often dangerous comparison for developing ones which are trying to implement industrial polices because technological capabilities makes a huge differences concerning possibilities and constraints each country face.

Dosi argued that the paper uses too faithfully the indicator concerning total factor productivity. He also encouraged the authors to address the changing sociology of elites in Latin America. In particular, one wants to consider the fact that commitment to growth of Brazilin elites makes the country's experience very peculiar inside the region. Finally, Dosi emphasized that all the contributions should stress that it is not sufficient to get incentives right and then *wait* for agents to learn and behave accordingly: institutional support is always a necessary condition for industrial policy to be effective.

Cimoli acknowledged that import substitution created new capabilities but they were low quality ones. In addition, during that period, knowledge production was very standardized. On the other hand, there are no clear-cut evidence or analytical contributions which support the idea that liberalization has improved economic performance in Latin America. In particular he wondered why to continue to incentive privatization if investments, contrary to the expected, did not increase.

A collective discussion on privatization followed and **Coriat** suggested a new chapter should specifically address the issue.

Khan, answering to comments, raised three remarks: 1) market is neither the sole nor the primary source of compulsion; 2) when discussing rent seeking and rent creation the point is not getting rid of rents but managing them; 3) India is growing using its existing capacity without putting in place a system of compulsion.

Blakenburg agreed on the lack of balance in the paper between detailed Asian case studies and aggregated Latin American ones. Answering to Dosi she also argued that of course elites are important but she is not sure their importance have to be addressed in the present paper.

Palma proposed the inclusion of a paper addressing the legal issues concerning the challenges and limitations the new WTO rule pose to government intervention. Answering to Perez, and citing the Chilean case, he expressed his doubts on the taking place of any technological upgrading after liberalization.

Kosakoff raised the audience attention on the important role of the new Argentinean agriculture: this interesting case would show that even in traditional sectors there could be a technological upgrading.

Ferraz asked for a more careful comparison between East Asia and Latin America. Even if the exercise is not new, Latin American countries have still many things to learn. Moreover, a clear definition of technological downgrading is needed. In fact, Latin American process of technology accumulation has always been very weak.

Cimoli reminded that the most important contribution to technological upgrading during the import substitution period was not foreign investment but the import of foreign capital goods. The latter implied a substitution of capital equipments but also of workers with old capabilities. Indeed, the most important factor explaining productivity growth during that period was the fall of the employment rates.

Coriat acknowledged that the liberalization period coincided with technological upgrading but he wondered what would have happened otherwise. He also clarified that such upgrading had happened on the installed capacity, heritage of the import substitution period.

Dosi pointed out that a consensus among the Task Force participants is emerging. Liberalization implied an enormous selection shock and only few firms survived. Average productivity growth was due to high exit rate. Dosi also asked the audience which are the deep causes of such low R&D investments in Latin America.

Khan argued that an open economy it is likely to experience a technological upgrading even without much changes towards advanced sectors. Then he contrasted two cases. The apparent technological innovation process that it is taking place in India is not the effect of some industrial polices implemented by the state. On the contrary, it is the long-run effect of the previous economic polices. In Latin America, on the contrary, the low level of innovation is due to the technological characteristics of the sectors the region is specialized in.

Palma answering to Dosi described Latin America politics as the "Gattopardo" one: everything has to change in order to maintain the status quo. He also called for a more throughout understanding of the political and economic obstacles to implementing industrial policy today and also in the past.

Amsden provocatively argued that the main obstacle is U.S. influence in the region and she suggested that a good policy for Latin America would be to try to reduce it. In particular she argued that the fact that Latin American firms followed the American model of business is one of the causes of their lower performance vis-à-vis East Asian ones. Moreover she noticed that many multinationals that took over did not achieve outstanding technological capabilities.

Perez noted that there is no evidence of technological downgrading. Nevertheless he said that the productivity gap for big manufacturing firms has not narrowed.

A general consensus emerged on the need of a more careful empirical enquire concerning Latin American productivity and the overall effects of the liberalization episodes.

DO DIFFERENT IDENTITIES OF ECONOMIC AGENTS AFFECT THEIR LEARNING PROCESSES AND BEHAVIORAL PATTERNS? A COMPARISON BETWEEN MNCs AND DOMESTICALLY OWNED COMPANIES

***Title*:** **Nationality of ownership in developing countries: who should "crowd out" whom in imperfect markets?**

Authors: **A. Amsden**

Abstract

The objective of the paper is to identify the conditions (e.g. industry, history and initial conditions) under which nationally owned firms are superior to foreign multinational ones. It is argued that foreign owned multinational companies (MNCs) subsidiaries and the best nationally owned starts-ups are likely to have different assets and thus to make different contribution to economic development. The common wisdom is that, beyond capital accumulation, MNCs subsidiaries facilitate technology transfer to the host country. The present paper shows that this reputation is highly exaggerated. In fact, subsidiaries are more bureaucratic and, typically, they do not transfer high value functions abroad. Conversely, it happens that nationally owned firms are often more entrepreneurial, more diversified, and more effective in raising the local content levels. The policy implications are straightforward. In industries with firm level horizontal demand curves, government policy should "crowd in" foreign firms. On the contrary, in monopolistic industries the objective of government intervention should be to "crowd out" foreign firms. A different challenge is faced by poor developing countries. Their major goal is to regulate and control foreign firms activities and investments in capital-intensive raw material abundant industries. This objective can be achieved by building an OPEC style international organization to control FDI. The paper discusses the historical experience of East Asian and Latin American countries in order to support the above arguments. In particular, the effect of the de-colonization process on firms' ownership and organizational structure and the role of state-owned enterprises in the development process are analyzed. The paper concludes arguing that if developing country want to be able to do frontier research and to earn the entrepreneurial rents that technology and brand names produce they should involve national firms, government and university research laboratories on a large scale.

Winter provided a summary of Amsden and Hikino's paper. The main insight of the paper is that, contrary to the common wisdom, whether a firm is national or foreign owned makes a difference for its contribution to the development process. In particular, the authors argue that, in developing countries, government support to nationally owned firms is a viable alternative to subsidization of multinational firms. In fact, national firms tend to be more entrepreneurial, flexible and innovative than the MNCs subsidiaries. Moreover, MNCs contribution to national technological up grading is often overestimated: most of the R&D is undertaken in the home country. Winter noted that the paper highlights an interesting of trade-off: while MNCs provide higher static production capabilities, national firms' learning potential is much higher in the medium-long run. Moreover, the proposal of an OPEC style model of organization is very interesting. Raw material abundant poor countries may indeed better defend their economic interests in the international arena.

As a general remark, Winter argued that more data are needed in order to convincingly support the theoretical propositions of the article. Three important claims made in the paper deserve more compelling evidence: 1) the assumption that the first benefit of multinationals is the provision of capital; 2) national firms are more entrepreneurial while MNCs are more bureaucratic; 3) MNCs expand around the core, while the national owned firms are more likely to expand diversifying. Two more specific observations follow: first, a more careful analysis of the importance of market power is needed, since the examples presented in the paper do not adequately address this important issue. Second, performance criteria different from the ones centered on manufacturing could be also used in order to evaluate strengths and weaknesses of the two types of enterprises. Winter concluded remarking that, as stated in the conclusion of the paper, the devil stands in the details: for the present paper the challenge is to develop a well organized set of caveats to the central argument concerning the superiority of national firms.

Ferraz pointed out that the Brazilian experience is interesting for evaluating the importance of nationality ownership. In fact, a few multinationals that established subsidiaries in Brazil have created decent jobs. The interesting aspect of the MNCs that located in Brazil has been their high capacity to adapt to very different economic institutional contexts, i.e. the ISI period and the neo-liberal period. The main goal for policy makers should be to discriminate among the different attitudes of foreign firms in terms of their willingness to invest in R&D in the host country and to create high skilled jobs. However, such an evaluation is indeed extremely difficult.

Nelson argued that the paper should discuss in more depth three important issues: 1) the differences among sectors; 2) the national bargain power; 3) the importance of infrastructure. Multinationals behave in very different ways in diverse sectors and it is important to understand which sectoral capabilities MNCs are likely to affect the most. In this sense, the pharmaceutical sector could be a very interesting case to be investigated. Nelson also suggested that, even if WTO imposes new rules that are likely to harm the attempts to protect national firms, domestic institutional environments still matter a lot. In particular, every country is different in terms of the opportunities it offers (e.g. availability of engineers, level of public investment in education and infrastructures, etc…)

Dosi suggested that, instead of simply distinguishing between high-tech and low-tech sectors, the paper should take on board a sectoral taxonomy based on the way firms process knowledge and develop new technologies. The Pavitt's taxonomy is of course a useful starting point. Dosi strongly recommended dropping the econometric analysis, in order to focus more on descriptive statistics concerning the share of R&D which multinationals perform overseas. To the best of Dosi's knowledge, several empirical investigations have shown that typically over 80% of R&D expenditures by MNCs are performed in the home country.

Khan felt that two lines of investigations are particularly important for the present paper. First, how do MNCs affect the flow of knowledge between countries? Second, how do MNCs influence the management of rents of national governments? It could be that what matters is not nationality "per se", but national governments capability of curbing MNCs interests towards the host country ones.

Blakenburg added to the discussion a new element concerning the difference between the East Asian experience and the Latin American one: while in the former, MNCs have created backward linkages, in the latter this did not happen. As an example of this she put forward the case of *maquila* in Mexico.

Amsden thanked for the comments she found very stimulating and useful for improving the next draft of the paper and stressed two important points.

First, historical evidence shows that entrepreneurialism, in its multi-facets, is the major advantage of national firms over multinational subsidiaries. National firms are typically the first to establish a global industry in their own national market. In addition, first, they are highly pro-active in learning and implementing foreign technology, which enables them to move quickly along their learning curve and to become good at production engineering, and, second, without any original core technology, they do not expand by specializing but are good at diversifying. All the above features make domestic firms essentially different form subsidiaries of MNCs and therefore the Task Force should concentrate on their economic trajectories.

Second, there is a sort of adverse selection within MNCs towards foreign departments: innovative people are more likely to work at the headquarters while bureaucrats are sent oversee to monitor standardized activities.

Amsden also raised the audience attention on the *maquila* case, arguing that this is a jobs generating sector that can also develop managerial capabilities and know-how. However, *maquila* is completely de-linked from the domestic production structure. Industrial policies in East Asian countries, conversely, have been much more effective in attracting foreign investment and building a coherent domestic industry around them. For instance, Taiwan government has built its domestic economy around high tech sectors; Korea was able to retain the best national firms privatizing only the worst ones; and China joint ventures with foreign owned MNCs can last at most ten years.

FROM MACRO POLICY SHOCKS TO MICRO ECONOMIC BEHAVIORS: THE ARGENTINEAN EXPERIENCE OVER THE LAST THREE DECADES

Kosakoff presented data and empirical evidence describing the Argentinean economic performance during the last three decades. Describing the macroeconomic history of the country, Kosakoff emphasized that instability and strong uncertainty have always been essential aspects of the Argentinean economic environment. In this context, defensive strategies, e.g. widespread reluctance to invest in specific assets or to commit to long term strategies, have became dominant. It can be said that short-termism is indeed the major weakness of the Argentinean economy.
Describing the economic production structure Kosakoff pointed out that during the last forty years, manufacturing activities have constantly decreased their share in total value added, reduced the number of occupied workers and increased the degree of openness. During the 1990s, after a long period of stagnation, natural resource intensive activities have strongly recovered becoming among the most dynamic sectors of the economy. Nonetheless, this was not sufficient to generate a new pattern of specialization. Discussing the effects of the liberalization process, he claimed that it is still lacking a careful empirical analysis about firms' responses to the macro economic changes the reforms produced. Of course such responses are very heterogeneous but they are not completely erratic. For instance, exports quickly responded to distinct exchange rate regimes.
Finally, Kosakoff elaborated on the role of the interest rate which, given the extreme volatility of the Argentinean economy, has always been the keystone of the micro-macro interaction. While during the 1940s and 1970s real interest rate was negative, starting from the 1970s it has always been very high. Kosakoff also remarked that the large imperfections in the financial market have negatively affected the screening and monitoring of investment projects in the country. In particular credit restriction have been an obstacle for the internalization of Argentinean multinational.
The main goal of the will be paper is an evaluation of Argentinean economic performance keeping in mind two issues: 1) a micro perspective can, better than the standard macroeconomic one, shed light on the overall Argentinean experience; 2) a few individual successes in an environment with high uncertainty an poor institutions are not enough to conclude that the liberalization process produced positive results. The general insight of the paper is that if on the one hand openness increases the competitiveness of the economy on the other it increases the levels of uncertainty with which firms have to cope with.

Ferraz argued that high uncertainty could also burst flexibility. Indeed high and volatile interest rates, impacting on the organizational structure, obliges firms to learn how to cope with fluctuation in the economic fundamentals. Ferraz emphasized that this situation can make the firm to develop the ability to rapidly adapt to changing external condition, which is definitely a very important asset.

Perez asked if the paper aims at collecting more micro evidence which goes beyond the one presented in the slides shown. He felt that the Task Force should also consider the possibility of an additional chapter of the book entirely dedicated to the analysis of firms' behavior based on this micro evidence. Perez emphasized that the majority of Argentinean firms are small or medium ones. This make industrial policy implementation more complex. Indeed, citing the experience of the ECLAC, he argued that designing support programs for small big firms is much more difficult than for bigger ones. Generally, the objective of these type of programs is to create collaboration projects between public agencies and private firms. Perez remarked that the major obstacle is to gain the political **legitimation** for collaborating also with foreign big firms.

Blakenburg wondered if Argentinean import substitution strategy constituted a special case in LA.

Coriat suggested that the paper should focus more on one of the most interesting Argentinean institutions: the currency board.

Winter added that Kosakoff should take on board many of the policy prescriptions made by the so-called *Washington consensus* policy package possibly criticizing them. Indeed, the Argentinean experience can be extremely illuminating concerning both the macro and the micro effects of the neo-liberal reforms that several developing countries have been ‘suggested’ to implement starting from mid 1980s. Indeed Argentina seems to be the best case study to understand the mistakes that should be avoided in implementing a large privatization process.

Dosi asked if the overvalued exchange rates, through the very high interest rates paid by the ones borrowing abroad, could be the major cause for the switch from the old industrial regime to the new one. He also wondered if the high exchange rate also induced agents to over-import with the confidence that, in any case, they would have been bailed out by the state.

Palma provocatively envisaged Argentina as an oil economy which run out of oil. In particular he argued that the shock therapy of the 1990s did not change the old patterns which are affected by a perverse political environment. Palma explained why Argentina can be considered a case of predatory capitalism and expressed a pessimistic feeling about Argentinean capacity of escape such an environment.

Kosakoff clarified that in the last three years business firms increased their profits and the economy boomed. He remarked that there are now numerous examples of successful firms, not only in the natural resource based sectors, but also in the more technology advanced ones. Therefore, he agreed that there are still difficulties to overcome but he did not feel to share Palma’s too pessimistic view.

Palma wondered which type of policy can be successful in Argentina. He expressed his concerns that an East Asia type of industrial policy is impossible in Argentina. He provocatively concluded that, given the country’s political and social situation, market compulsion is better than the no compulsion of the import substitution period.

Kosakoff strongly disagreed on this conclusion pointing out that past failures should not prevent fresh start.

Coriat remarked that in the last years positive changes happened in Argentina: 1) beneficial negotiations with IMF over the huge debt; 2) fiscal policies have been less restrictive than in other Latin American countries; 3) the banking sector has shown signals of recovery. This are all promising signals that indeed a restart is possible.

Saturday, March 19th

GLOBALIZATION AND "NEO-DUALISM" IN CONTEMPORARY DEVELOPING ECONOMIES: THE ROLE OF POLICES

Title: **Globalization and "neo-dualisms" in contemporary developing economies: the role of policies**
Authors: **M. Cimoli, A. Primi and M. Pugno**

Abstract

The paper discusses the relationship between increasing globalization and the rise of informality in less developed countries. In the first part of the paper empirical evidence is presented showing the relevance of informality in developing countries and its association with increasing trade integration. In particular, starting from the early debate on dualism in economic theory the discussion then concentrates on the so-called "neo-dualisms" in contemporary developing economies addressing the problem of informality persistence in urban labor markets. In the second part, the paper proposes a two sector model showing that the coexistence of a modern outward oriented sector and a persistent, if not growing, informal one represents a structural barrier in urban labor market for export led growth. Indeed, given the adverse specialization pattern, productivity gains in the outward oriented sector inflate informality and thus reduces both per-capita income growth and deteriorates the overall income distribution The paper also discusses some normative implications concerned with informality reduction. It is argued that less developed countries require a productive restructuring in order to modify the contemporary adverse international trade specialization and to boost productivity and output dynamics in the formal sector. Thus, industrial policy aiming at reducing informality should improve the formal sector performance favoring high quality trade sectors.

Nelson presented the paper by Cimoli, Primi and Pugno stressing the importance of the issue addressed. In fact, the pieces of evidence presented in the paper are very much in tune with the Friday's discussions and with what seems to be happening in Latin America. The paper develops a theoretical analysis of the relationship between international trade and the dynamics of the informal sector. A two-sector dual economy is considered: the first sector is formal and produces for the export market. The second sector is informal and produces for domestic demand. Informality is envisaged from a dynamic perspective. According to Nelson the paper has been clearly inspired by the seminal work of sir Arthur Lewis and the basic framework reminds the one he proposed in 1968 in a paper concerned with the economic development of Colombia.

The first part of the paper presents data on the dimension of informality in Latin America. More specifically, as largely expected, the empirical evidence shows that the productivity and the wage rate in the informal sector are lower than in the formal one. Moreover, the data seem to support the view that economic growth is entirely driven by the formal sector. Nelson observed that the description of the productivity dynamics complements in a very useful way the pieces of evidence presented by Palma on Friday.

As a general remark, Nelson finds a bit of inconsistency between the verbal articulation of the model and it mathematical presentation. In particular, the wage determination mechanism needs to be better specified: in the model the basic reason for the existence of the wage differential is that efficiency wages are present only in the formal sector. Also different skills and learning capabilities should be explicitly considered as possible causes of that. Nelson noted that the dynamics of productivity in the formal sector is pivotal in the model. The basic idea is that industrial policies can increase productivity and thus induce export and aggregate growth. However, the (exogenous) labor supply has to grow in order to balance the labor demand growth induced by booming exports. If this is not the case, the final result will be a strong pressure on wages. It seems that the general argument of the model depends crucially from the starting point of the economy. Nelson also noted that there is another aspect of the model to be developed: export sectors often use intermediate imported capital goods. Finally, Nelson elaborated on the importance of Verdoorn law and on the role it plays in the model.

Castro asked for a more complete discussion concerning the normative implications of the paper. In his opinion, the paper may benefit from recognizing that institutions are likely to shape both market and non-market mechanisms. Since the model seems to be too much mechanical in its working, the entire paper may benefit from a more evolutionary touch.

Perez noted that the paper has important implications for two of the most critical aspects of nowadays less developed countries economies: 1) the constraints posed of foreign currency shortages and 2) the increase of employment. The authors should be clearer on where they stand in the debate concerning the policies aimed at shrinking the informal sector. In particular, it has to be clearly stated which of the following policy option is more effective: (i) increase productivity in the formal sector, (ii) foster diversification, (iii) facilitate the integration between the formal and the informal sector.

Soete focused on one of the most important differences between Latin America and East Asia: the weight of the primary sector (i.e. agriculture). In China, for example, there has been a deliberate policy aimed at stopping agricultural productivity growth in order not to increase unemployment. Does the paper consider informal employment in agriculture?

Amsden stressed that historically in less developed countries the informal sector has never shrunk unless a formal and technologically advanced sector emerged.

Khan underlined that booming exports are not sufficient in order to burst the whole process of economic development. Policies need to be more precise and simple “big push” recommendations are nowadays too simplistic. Indeed, the paper should tackle more seriously the issue of managing rents and adopting a more dynamical perspective concerning industrial policy implementation.

Palma elaborated on the importance of Verdoorn law. Three distinct theoretical approaches addressing economic growth can be found in the economic literature. A taxonomy that summarizes them follows: 1) activity neutral and sector neutral (Solow and AK model); 2) activity specific and sector neutral (Romer and new growth theory); 3) activity neutral and sector specific. Only if the last approach is adopted Verdoorn law becomes relevant.

Primi, responding to comments and remarks, agreed on the fact that the paper should concentrate more on the importance of the efficiency wages and she argued that Verdoorn law could be a unifying theme of the book. She clarified that the paper focuses on manufacturing and has a strong position against market flexibility policies in order to tackle the informality problem. Accordingly, the normative implication of the paper is that, contrary to the mainstream view, if one wants to shrink the informal sector, reducing labor market regulation it is not enough. She agreed with Castro on the fact that the paper should be more policy oriented. In particular, the important issue of education policies will be addressed by the next draft of the paper. Answering to Khan, Primi said that the paper should indeed be concerned with policies encompassing evolutionary learning and not only "big push". In any case, the model already contains parameters that allow for the consideration of learning and knowledge accumulation processes. Thus, the paper does not suffer from the "one kick" policy approach. Finally, Primi stressed the central conclusion of the paper: the productivity growth of the formal sector prevents the increase in informality. This is why industrial policy is the best instrument to deal with informality.

AN OVERALL ASSESSMENT OF THE ROLE OF NON-MARKET INSTITUTION AND POLICIES IN INDUSTRIAL DEVELOPMENT

Dosi briefly introduced the section concerning the role of non-market institutions. All speakers are invited to address the general goals of the Task Force and to put forwards crisp hints. The floor is left to Sid Winter who coordinates the section.

Winter discussed the importance of both market and non-market institutions for the development process. Markets mechanisms are effective only if a sound institutional architecture is present. Such architecture is particularly important in high-tech sectors, characterized typically by high degrees of uncertainty. However, the way in which non-market institutions respond to policy initiative is to a large extent an open question. Most specifically, the Task Force should concentrate on three distinct aspects: 1) the formulation of policies; 2) the agenda setting; 3) the implementation process. So far the meeting has been particularly useful especially with respect to the first two points but, as argued by Perez, implementation is also very important. On a complementary ground, an open issue deserves more careful scrutiny: policy makers have to be extremely precise in establishing clear boundaries between rents management and market discipline. Historically, the choices concerning such boundaries have been pivotal in the successes and failures of industrial policies. The Task Force should have a very pragmatic attitude in learning from past failures, both public and private.

Nelson suggested that the participants should consider the option of changing the label of the Task Force: "policy towards industrialization" may be more appropriate than "industry policy". In fact, many headings of the policies that promote industrialization are not *strictu sensu* industrial policies. In particular, during the meeting infrastructure building and education policies emerged as very important for industrial development.

Hofstetter reminded the audience that there might be overriding problems in changing the name of the Task Force, especially because Joseph Stiglitz considers important the label industrial policy.

Palma observed that during the discussion three diverse approaches to industrial policy have emerged: 1) the market failure approach (cfr. Wilson Perez); 2) the policy of the "big push" (cfr. Cimoli and others); 3) the policy of the "big push" plus continuous rent management (cfr. Khan). This distinction should be explicitly mentioned and discussed in the introductory paper.

Kuznetsov stressed that a good industrial policy should support a process of *discovery* (in the Hausmann and Rodrik sense) at the macro, meso and micro level.

Amsden reminded the audience that Latin America experienced very low growth rates in the last two decades compared to the ISI era. She thinks this is due to a sort of private sector failure.

Khan argued in favor of the "Industrial Policy" label; in fact it does not prevent participants from giving suggestions concerning domains that go beyond what is usually believed as industrial policy. The Task Force should build a general consensus along a central point: policy advocacy has to go beyond the conventional claim concerning governance structure improvement and the rule of law enforcement.

Cimoli, elaborating on Palmas's categorization, suggested that Perez's approach should not be labeled as "market failure", but simply as "realistic". Cimoli also agreed with Perez stressing that one wants to be very careful about the constraints posed by vested interests and implementation capabilities. Moreover, each contribution should aim at establishing a dialogue with different social actors involved in the implementation (e.g. policy makers would have problems in taking on board suggestions like "you have to manage rents more effectively").

Ferraz stressed the importance of the nowadays favorable political environment in Latin America for industrial policy implementation. However, the policy message must be very focused and sharp because simple comparisons with the East Asia case used in the last years have not been very fruitful.

Blankenburg put forward a practical remark. Palma's tentative taxonomy should be addressed by the introduction of the will-be book, which has also to spell out clearly a few policy conclusions.

Coriat agreed with Ferraz's remark: the discussion should go beyond a pure comparison between Latin America and East Asia. Coriat also wandered if the ultimate policy advice provided by the Task Force should simply aim at achieving reforms which fit within the established rule of the game, or, conversely, should be concerned with how such rules may be radically changed.

Castro reminded that policy makers have often to cope with low degrees of institution plasticity. History matters very much and options are limited. Responding to Coriat, Castro claimed that a pragmatic goal is to reform the existing rules of the game without aiming at establishing an entirely new set of rules.

Dosi spelled out four positive remarks on the foregoing discussion. First, the analytical novelty of incentives *vs.* rent management perspective. Even if incentives are often important, the second perspective explicitly (and rightly!) recognizes that there are a few things 'money cannot buy'. Second, most contributions explicit consider the organizational aspect of economic institutions. In particular, one wants to acknowledge that production functions do not tell much about production processes and their heterogeneous nature. The "old" development school has always neglected the role of organizations. Three, one wants to distinguish between frontiers and catching-up policies. They have different goals and need different pre-conditions in order to be implemented. Fourth, an important issue is to which extent industrial policy should be market-friendly. Dosi provocatively argues as less as possible. Finally, the Task Force need ideas on how "to sell" the policy package. In particular, as a few participants suggested, very popular issues like governance and human capital should be taken on board.

THE CURRENT INTERNATIONAL ARRANGEMENTS: CONSTRAINTS, OPPORTUNITIES AND REFORM REQUIREMENTS AND THE POLICY CHALLENGES

Coriat introduced the session concerning the current international institutional framework. He argued that newcomer countries and mid-income ones are facing two basic challenges: 1) liberalization of financial services; 2) homogenization of the IPR system. Both challenges make that today less developed countries face very different conditions from the ones faced by developed countries. In particular, national banks played a fundamental role in all the catching-up episodes of the past. Conversely, the new international regime is shaped by new institutions that are designed mainly by the first world countries. In this respect, two questions are pivotal: are the transformations in the North settled? How do these transformations will affect the South? The current situation is particularly risky because the South has been forced to implement new institutional arrangements that are not yet stabilized in the North. However, fortunately formal rules can be implemented differently in distinct contexts. In this respect, the speed of implementation is very important (cfr. Stiglitz on financial liberalization in East Asia).

Coriat also highlighted a paradox: North countries consolidate and expand their rents designing new institutions (e.g. IPR system) and at the same time they push new instruments and policies (e.g. liberalization of the financial and service sectors) in order to prevent the creation of such rents in the South. Fortunately, what happened recently with AIDS drugs and TRIPS shows that there are margins for reforming critical institutions.

Amsden agreed with Coriat's remarks and reminded that United States imperialism has to be taken seriously in order to understand the current international context. The Task Force acknowledgment of the failure of the neoliberal policies in Latin America may be one of the starting points for elaborating an original policy proposal.

Kuznetsov suggested that what should be avoided is the "failure complex", i.e. since industrial polices sometimes have failed in the past they cannot be successful anymore. In particular, policy proposals should be politically feasible and as pragmatic as possible in order not to raise opposition for ideological reasons.

Soete argued that gains from services' trade may be successfully exploited by less developed countries. Moreover, one wants to go beyond patents, assessing the importance of both trademarks and copyrights.

Coriat reminded that many services are strongly industry based and that TRIPS involve also copyrights and trademarks. This is why TRIPS are so important also in the context of industrial policy design.

Dosi argued that an important question concerns how hard are the formal rules in the international arena. In particular, the Task Force should investigate how flexible is the interpretation of the formal rules and what happens if less developed countries call themselves out (e.g. Argentina).

Palma stressed the current co-existence in most Latin American countries of old and new rules. In fact, even if WTO and TRIPS add new constraints, the main obstacles are often domestic and self-imposed. One of the reasons why industrial polices have performed so differently in East Asia and Latin America is that in the latter case they have provided unconditional rents.

Cimoli stressed the growing importance of bilateral agreements. Probably, they are already more important than WTO rules in determining the real limitations to government intervention. In particular, WTO rules still allow some flexibility on the allocation of R&D subsides, but nevertheless, nowadays R&D intensity in Latin America is not higher than it used to be during the import substitution period. This fact shows that the real constraints are internal. One wants to consider also the existence of a social constraint: governments prefer to use money for financing social programs rather than industrial polices because of their more immediate social consensus return. In this respect it could be interesting to more carefully evaluate two recently implemented policy packages that have been very successful: sectoral funds in Brazil and royalties in Chile.

Blankenburg raised the issue about why, instead of entering multilateral and bilateral disadvantaged agreement, developing countries do not create an OPEC style organization. She indeed agreed with Amsden and Hikino's paper on the fact this is one important possibility for poor countries to increase their bargain power and thus change the current situation in their favor.

Noman reminded that inside the IPD project there are already Task Forces focusing on the effects of trade and capital market liberalization. The papers they have produced could be very useful to enrich the comprehension of the evolution of the international macro and institutional environment and to contribute to the clarification of some of the points raised during the discussion.

Khan, answering Cimoli, emphasized the fact that rent managing polices are not too expensive and thus they are not to be considered alternative to social policies. In fact rents are often different from financial aids and they can have much bigger long-term returns. In fact, the real obstacle to the implementation of effective industrial policies is the practice of imposing to developing countries rules that are much more restrictive with respect to the ones nowadays developed countries faced during their industrialization process.

Ferraz speculated on the building blocks of the will-be book. In particular he argued that the policy framework requires addressing the learning issue and the macro-environment imposed constraints more explicitly and in more depth.

Dosi felt that in order to understand how self-inflicted are the above constraints, one wants to assess how much elite's interests curb the national ones.

Coriat went back on the issue of how much flexible are the new international rules. He pointed out that countries' behavior concerning WTO and TRIPS rules are evaluated very differently. For instance Cameroon is fighting against AIDS using generics pharmaceuticals, but this is not considered by the international community to be a problem. On the other hand Brazil is obliged by the international agreements it signed to spend 63% of its budget for three drug patents.

Dosi raised the issue of adding a chapter dedicated to the evaluation of the degrees of freedom and constraints that are currently present in the international arena. He expressed confidence on the Task Force's capability of doing it.

Winter stressed the importance of distinguishing between formal and real rules. He noticed that often lawyers are asked "how" questions rather than "whether" questions.

Nelson called for a discussion on the nature of enforcements mechanisms. He suggested that, in order to correctly evaluate the real constraints to industrial policy implementation coming from the new international arrangements, it would be important to evaluate their threats and in particular their credibility.

Cimoli pointed out that the Chinese attitude towards TRIPS (i.e. they are not completely enforced) should be considered as an important example in this respect. Again it is evident that political considerations are not to be overlooked in order to understand the effectiveness of current international arrangements.

PLANS AHEAD FOR THE COMPLETION OF THE BOOK AND OTHER INITIATIVES WITH POLICY MAKERS

Dosi observed an overall bias in favor of Latin America. In order to counterbalance it, two case studies on India and China are needed. Dosi strongly emphasized that the next deadline for paper completion is the end of July. The proposed date for the next meeting is November 2005. The very last meeting should be exclusively on policy implications and hopefully it will be held either in New York or in Santiago de Chile.

Noman added that in order to distinguish between industrial policy and industrialization policies one African case study might be included.

Dosi agreed on the importance of industrial policy for countries that are not yet industrialized.

The meeting concluded with an expression of thanks to the participants and to the organizers.