

The Professional and Political Impacts of the Internationalization of Economics in Brazil

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Introduction

If the increasing intervention of the state in the economic sphere in Brazil since the 1930s and the adoption of a Keynesian model of action, even in embryonic fashion, from the 1940s and 1950s on, had implied the presence of a great number of “technicians” (as economists were called in that period) in the Brazilian government, this process was consolidated with the military regime (1964–84).¹ The intensification of the process of political centralization, the hypertrophy of the executive power and of its control over the economy, and the need to provide legitimacy for an authoritarian government on the grounds of economic efficiency, brought about an increase in the number of governmental positions that were practically monopolized by economists. From 1964 on, ten of sixteen finance ministers were economists; in the Ministry of Planning from

1. In the 1930s, a political movement broke down the power of the agrarian oligarchies that had dominated the country during the period known as the First Republic (1889–1930) and unleashed an important process of political and administrative centralization. A central agency was then set up for the coordination of the civil administration and for control, by the federal government, of several policies adopted by the various states. Most important, a broad and complex institutional system was established for control over strategic spheres of the economy by the federal government. Thus it was that the leader of that revolutionary movement, Getulio Vargas, who governed the country for fifteen years (1930–45), was then able to start the formation of the so-called developmentalist state which, in the 1950s, carried out the process of industrialization and modernization of Brazil. Detailed analyses of this process can be found in Wirth 1970, Leff 1968, and Lowenstein 1944, to quote only books written in English.

1963 when it was created and headed by Celso Furtado, nine of eleven ministers were economists. These professionals also almost exclusively held the positions of president and director of the Central Bank and of the National Economic and Social Development Bank (BNDES).

The aim of this article is to link the internationalization of economics in Brazil with the process of consolidation within the academic system for the training and qualification of economists and with their participation in government.

The main features of the process of modernization and internationalization of economics that have taken place in Brazil since the 1960s were analyzed in an earlier paper (Loureiro and Lima 1995). It was defined as the systematic incorporation, on the part of Brazilian research and teaching institutions, of the theoretical and methodological patterns prevailing in the most advanced countries, particularly in the United States. As a result, academic production in economics started taking a more theoretical shape, expressed mainly in formal models and in accordance with scientific standards that characterize international academic publications.

Here, this discussion is resumed and improved with the study of professional and political impacts. By professional impact or effects of internationalization, I mean the reinforcement of the polarization of the schools of economics around two divergent positions: at one pole, the schools that are completely integrated into the international or North American scientific patterns; and, at the other pole, the schools that resist this process for theoretical and ideological reasons; and also the different academic practices and professional strategies generated by this polarization.

Because the scientific field of economics in Brazil is closely connected with the governmental agencies of economic policymaking, the process of internationalization also generates political impact due to the way economists provide their specific legitimation as ruling elites. The more an economist is integrated into the international scientific network, the more recognized he is in the government and more credible his decisions.

The present paper is organized as follows: section 1 presents the consolidation of the academic system that took place in Brazil from the 1960s on and links this process with the internationalization of economics. Section 2 analyzes how the internationalization process reinforced the polarization existing in the scientific field of economics in Brazil and generated differentiation in terms of professional strategies on the part of the members of each pole. Finally, section 3 shows that

some assets provided by participation in the international scientific network bring prestige to certain economists and give them legitimacy for high positions in the government.

1. The Internationalization of Economics and the Consolidation of the University System

Parallel to the increased availability of positions in government agencies, important modifications have taken place in the system of training and qualification of economists in the last few decades in Brazil. Until the 1950s and 1960s the preparation of personnel for economic management occurred mostly outside the university system, for instance in international agencies such as ECLA (the Economic Commission for Latin America, an agency of the United Nations created in 1948, with headquarters in Santiago, Chile); in applied economics research centers such as the IBRE (Brazilian Institute of Economics) of the FGV (Getulio Vargas Foundation); and within organs of government, the so-called practical schools of economic knowledge such as the Superintendency of Money and Credit, created in 1945, inside the Banco do Brasil, with an important function in the monetary area and in exchange; the BNDE (National Economic and Social Development Bank), and the CFCE (Federal Council for Foreign Trade) (Loureiro 1992).

Since the 1970s, university courses, in particular graduate programs, have become the principal mechanism for training specialists in the area of economics and the privileged path that gives access to high positions in governmental agencies of economic policymaking.

With the University Reform of 1968, the system of higher education in Brazil experienced substantial modifications. The French model of faculty organization in public universities, based on chairs held for life, was replaced by North American style teaching departments. There was also an enormous expansion in the overall number of schools of higher education (above all, of private establishments) and a corresponding increase in the numbers of enrollments, from fewer than 100,000 in 1960 to over 1,500,000 in the 1990s. According to statistics provided by the Ministry of Education, in 1968 there were 84 schools, and 17,000 enrolled students in undergraduate courses in Brazil in the area of economics; in 1980, the figure reached 129 schools with more than 62,000 enrolled students. Another significant element of the Reform of 1968 was the establishment of graduate programs in all areas, which received systematic

support from federal government agencies in the form of funding and institutional support for improvement in the academic qualifications of their faculty. The institutional setup of graduate programs was a considerable step forward in terms of the consolidation of scientific competence as a whole in Brazil. Between 1969 and 1982, the numbers of graduate courses in Brazil increased from 125 to 1,324, and by 1989, in the area of humanities alone, there were about 290 graduate programs.

Partly because of the participation of economists in the government, the area of economics was particularly privileged by governmental funds for graduate programs. Besides the regular funds allocated to all graduate programs in the country, the specific area of economics was provided with additional financial resources from agencies such as BNDES and IPEA (Institute for Applied Economic Research, associated with the Ministry of Planning). BNDES has been giving annual awards to the authors of the best theses in economics (master's and doctoral levels), and IPEA provides complementary funds to the annual conferences of ANPEC (National Association for Graduates in Economics) and its publications. And, as will be shown later, economics received privileged benefits in the international exchange programs sponsored by North American agencies such as USAID (U.S. Agency for International Development) and the Ford Foundation in the 1960s and 1970s.

Since 1966 fourteen graduate programs have been created in different parts of the country in the area of economics. About five hundred candidates apply every year for the national selection competition, coordinated by ANPEC. Those who achieve the highest overall grades have preferential choice of program, and thus get accepted to those programs considered the most selective. Among these graduate programs, five stand out as the most selective: the graduate school in economics of the Getulio Vargas Foundation, set up in Rio de Janeiro in 1964;² the Depart-

2. This school arose from a former program for further studies in economics created at the Getulio Vargas Foundation at Rio de Janeiro in the early 1960s. One of its aims was to make up for undergraduate-level deficiencies in candidates who were applying for doctoral degrees in economics in the United States. Indeed, the Getulio Vargas Foundation is a pioneer institution in the formation of technicians and high-level staff for the state bureaucracy. Founded in 1944, its principal area of activity has been the production of studies and applied economic research. Since the late 1940s, it has produced a great deal of statistical data based upon Keynesian variables, for example, national accounts and price indexes (in 1986 the official inflation index was calculated by the Getulio Vargas Foundation). Moreover, some directors of the Brazilian Institute of Economics, the branch of the Getulio Vargas Foundation that carries on those statistical activities, were members of economic councils in the federal government as well as

ment of Economics of the Catholic University of Rio de Janeiro (PUC), which opened in 1977; the Institute of Economic Research (IPE/USP) in São Paulo, which was created in 1964 by the faculty of economics and business of the University of São Paulo, today considered the most important university in the country; the graduate program in economics of the Federal University of Rio de Janeiro (IEI/UFRJ), which replaced the first National School of Economics, established in Rio de Janeiro in 1946; and the Institute of Economics of the State University of Campinas (IE/UNICAMP), which is a more recently created university, also in the state of São Paulo, and which is currently considered the second most important university in the country.

As far as the expansion of the academic market is concerned, studies carried out by ANPEC show that between 1967 and 1985, 564 professors taught in these fourteen programs and supervised 688 theses in economics, 92 at the doctoral level. It is also estimated that between 1978 and 1987, some 906 articles were published in the country's leading journals of economics (Agarez 1986).

The establishment of graduate programs, together with the other changes that occurred in university teaching of economics (the increase in numbers of both students and courses, the growth of academic production, the development of a system of institutional research, the publication of new journals, etc.), should be seen within the broader context of the modernization of economics in Brazil. These transformations are part of a process of internationalization or North Americanization of economics. As previously mentioned in Loureiro and Lima 1995, this process occurred from the 1960s on through two basic mechanisms.

The first and most important step toward the integration of Brazilian economics into the mainstream of international economics was pursuit of young Brazilian students, on a systematic basis, of doctoral studies abroad, particularly in the United States. The data in table 1 indicate that 60 percent of those professors now teaching graduate courses in Brazil in economics qualified outside Brazil. Of these, 46 percent (158 professors) went to American universities, 7.5 percent studied in France, and 5.5 percent in England. Of the American universities that trained Brazilian economists, seven have played an important role: Vanderbilt, where 18 Brazilian professors completed their graduate studies thanks to

of international economic committees, including Bretton Woods, where they met Keynes himself. This was before some of them became ministers of finance in the 1950s and 1960s.

Table 1 Faculty Members Affiliated with Graduate Programs in Economics in Brazil: National Origin of Master's and/or Ph.D. Degree, 1991

Graduate Program*	Total**	U.S.A.	%	France	%	U.K.	%	Brazil	%	Others	%
CEDEPLAR	35	15	43.0	3	8.5	3	8.5	14	40.0		
EPGE/FGV	30	24	80.0					4	13.3	2	6.7
IEPE	27	17	63.0	2	7.4	1	3.6	7	2.6		
IPE/USP	55	21	38.2	3	5.4			31	56.4		
NAEA	24	5	21.0	5	21.0	1	4.0	13	54.0		
PIMES	27	13	48.0	1	4.0	5	18.0	8	30.0		
PUC/RJ	17	14	82.3			2	11.9	1	5.8		
UFBA	17	7	41.1	3	17.8			7	41.1		
IEI/UF RJ	20	5	25.0	1	5.0	4	20.0	10	50.0		
UNB	32	14	43.8	8	25.0	2	6.2	6	18.8	2	6.2
IE/UNICAMP	28	2	7.2					26	92.8		
CAEN	18	13	72.2					5	27.8		
FGV/SP	14	8	57.1			1	7.1	5	35.7		
TOTALS	344	158	46.0	26	7.5	19	5.5	137	40.0	4	1.0

Source: Catalogues from graduate programs associated with ANPEC. Does not include the newly created program at Fluminense Federal University.

*CEDEPLAR - Federal University of Minas Gerais; EPGE/FGV - Getulio Vargas Foundation at Rio de Janeiro; IEPE - Federal University of Rio Grande do Sul; IPE/USP - University of São Paulo; NAEA - Federal University of Para; PIMES - Federal University of Pernambuco; PUC/RJ - Catholic University of Rio de Janeiro; UFBA - Federal University of Bahia; IEI/UF RJ - Federal University of Rio de Janeiro; UNB - Federal University of Brasilia; IE/UNICAMP - State University of Campinas; CAEN - Federal University of Ceara; FGV/SP - Getulio Vargas Foundation at São Paulo

**Includes both full- and part-time faculty members.

agreements with universities in Brazil; the University of Chicago, where 16 economists received their Ph.D.s, 13 from EPGE and 3 from USP; Berkeley, with 12 doctorates; and Harvard with 11. Yale University has graduated 8 Brazilian economists, and the Universities of Michigan and Illinois 7 each. This process was greatly facilitated by the agreements mentioned below.

The second mechanism was the arrival of American professors to teach in the newly created graduate programs. This process was subsidized by USAID (U.S. Agency for International Development) and by the Ford Foundation, which signed cooperative agreements with several schools in Brazil. The faculty of economics of the University of São Paulo (FEA/USP) was one of the academic programs that benefited from those agreements. Through agreements with USAID as well as with the Council for Technical Cooperation of the Alliance for Progress, its graduate program was set up in 1964. USAID assumed responsibility for the travel, board, and lodging expenses of some North American professors by means of a contract with Vanderbilt University, which in turn undertook “the duty to advise the creation of the program, the development of its curriculum, the planning for research, and student grading” (FEA/USP, 1981, 229–30).

The Ford Foundation also took part in that cooperative agreement by providing several faculty members associated with FEA/USP with grants for graduate studies in Brazil and abroad, resources for the purchase of equipment and books, and financial support for visiting professors to teach graduate courses in the newly created programs.³ Indeed, the Ford Foundation can be conceived as having played a quite decisive role in the internationalization process discussed here. According to a Brazilian sociologist who has done extensive research on the history of social sciences in Brazil:

the amount of resources granted by Ford Foundation to Latin American countries, and particularly to Brazil, was the largest and most important inflow of external finance for educational purposes, so that it exerted decisive money influence over the process of consolidation of the social sciences in Brazil. . . . In the early 60s, most of the resources

3. The professors who taught there were W. O. Thweatt (who was responsible for the management of the cooperative agreement) from Vanderbilt University, Warner Baer, Gian Sahota, Samuel Levy, and Andrea Maneschi.

granted by Ford Foundation to social sciences in Latin America were for economics and business which were conceived as being more in conformity with the Ford Foundation's concerns with development issues. (Miceli 1990, 17–22)

As far as government agencies are concerned, the University of California at Berkeley sent some professors to advise economists at IPEA, an agency associated with the Ministry of Planning. Outstanding in the Berkeley group was Albert Fishlow, in particular for his extensive work on Brazilian income distribution, a topic of great controversy in the 1970s.

According to a Brazilian professor who was involved with the cooperative process, the North American economists were more concerned with the transmission of a model of organization of teaching and research than with actual knowledge of advanced economic theory. In his view, Brazilian academia was already endowed with professional economists who had considerable theoretical background, so that "what was really missing at the time was the spread, on a reasonable scale, of attitudes and positions which might characterize a solid scientific community. And it was here that the North American economists really came in" (Ekerman 1989, 127).

2. Professional Impacts: The Polarization of Economics in Brazil

The internationalization of economics, with its implications of bringing into Brazil the theoretical and methodological practices prevailing in developed countries, particularly in the United States, had acquired the concrete meaning of North Americanization; to a certain extent, one can indeed refer to it as a process of neoclassicalization. Such a process was not, however, uniform in all the various Brazilian institutions, some of them seeing it as just another form of cultural colonialism carried out by North American imperialists. There was strong resistance, in particular from groups lying further to the left politically, so that not all graduate programs in economics adhered with the same intensity to the international academic patterns. As shown in table 1, the Institute of Economics of UNICAMP (IE) has the lowest percentage of professors with doctorates from abroad. Only two have American Ph.D.s, as compared with twenty-six doctorates at UNICAMP itself or at the University

of São Paulo. On the other hand, the largest numbers of professors with North American doctorates are to be found at PUC-RJ, with more than 82 percent and EPGE/FGV, with 80 percent.

Indeed, these figures indicate a quite complex process of polarization on the part of the local schools of economics around theoretically divergent positions. To a certain extent, such a polarization dates back to the antagonism within the Brazilian political field in the 1950s and 1960s, when economics as a separate discipline was taking shape. During that period, economic development was the key issue that led to manifest conflicts in both intellectual and political circles. On the one side were the members of a liberal group that strongly opposed any proposal of state intervention in the economic system, thus accepting only corrective measures for market deficiencies and/or conventional monetary and fiscal policies; given their rejection of any protectionist policies for the infant national industry, they were often identified as representatives of the interests of foreign capital. On the other side was a variety of nationalist groups on the left of the political spectrum, which strongly stressed the necessity of state intervention to promote the industrialization process; in their view, this would involve a great deal of state intervention and the protection of local industry against external competition. Associated with some of these groups were economists affiliated with ECLA. As is well known, this agency of the United Nations played an active role in shaping both Brazilian and Latin American economic thought during the 1950s and 1960s, in particular with regard to the chronic inflation experienced by most Latin American countries.⁴ Briefly, ECLA economists developed theories that explained the backwardness of the continent through factors related to the structure of the terms of trade between developed and underdeveloped countries, and so they became known as structuralists.

Not surprisingly, the Brazilian economists associated with ECLA were opposed to the economists affiliated with the Getulio Vargas Foundation in Rio de Janeiro, who were frequently identified with groups

4. The principal Brazilian representative to ECLA, Celso Furtado, was the minister of planning in the last civilian government before the military coup of 1964, which resulted in his exile. Furtado was one of the best known and most widely read economists in the 1960s in Brazil. His classic book, *The Economic Formation of Brazil*, written while he was still working for ECLA and published in 1959, can be considered "the cornerstone of Brazilian political economy" (Mantega 1985).

on the right of the political spectrum due both to their close professional links with foreign enterprises and to their theoretical adherence to monetarism.⁵

To a certain extent, those antagonisms still persist today, though transformed by new and more complex elements in that ideological and theoretical conflict. Notwithstanding the more solid university qualification that currently prevails, the growth of academic production (in the form of theses, articles, and books), and the creation of several research institutions, it is reasonable to argue that the current polarization goes back to the old opposition between structuralists and monetarists. Thus, one way to classify the most representative local graduate programs in economics is as follows.

On the one hand, there is the EPGE/FGV school in Rio de Janeiro, which is considered the home of the most orthodox strand of neoclassical thought in Brazil and whose faculty attribute a great deal of importance to mathematical modeling and the tools of econometrics; it is not just by chance that 72 percent of its members majored in engineering and mathematics. On the same side is the PUC-RJ, made up of ex-students and dissident professors from the EPGE/FGV and other universities. Most of these professors are qualified in engineering and mathematics; thus their programs also place emphasis on mathematical modeling. These two schools constitute the most internationalized pole, that most fully integrated with the mainstream of the profession. It is worth recalling that 80 percent and 82 percent, respectively, of their faculties hold Ph.D.s from North American universities.

On the opposite side stand the graduate programs in economics offered by UNICAMP and the UFRJ, most of whose faculty members

5. The leaders and founders of the group of professional economists associated with the Getúlio Vargas Foundation were Eugênio Gudin and Octávio Bulhões. The former was an engineer and a director of English firms connected with the construction of public works and railways in Brazil. An intellectual and self-taught in economics, Gudin became a professional economist not only through his activities as a professor and author of textbooks, but mainly through his membership on several economic councils during the Getúlio Vargas government (1930–45) and his role at the Bretton Woods conference. Bulhões was a lawyer who became known as an economist through his activities as an economic adviser to the Ministry of Finance in the Vargas government, through his teaching, and as Brazilian representative to several international technical councils and committees. It is worth mentioning that in the 1950s and 1960s, though some schools of economics already existed, the education of those economists who were appointed to high office occurred not through university education but mainly through their participation in government agencies (Loureiro 1992).

are former disciples of ECLA and are concerned with issues that can be broadly defined as structural. This group comprises a considerable number of professors trained in law and the social sciences; their work, especially at UNICAMP, is carried on in language with little mathematical formalization and emphasizes a historical and sociopolitical approach to economic processes. Somewhere in between these two extremes lies the graduate program offered by the University of São Paulo, the largest in terms of number of professors. Although most of them (thirty-one professors) hold doctorates from USP itself, quite a significant number also studied in the United States (twenty-one professors). Only EPGE has a higher number of faculty members with doctorates from the United States (twenty-four professors).

The figures in table 2 reveal other aspects of the heterogeneous intensity with which the internationalization process occurred in the graduate programs as well as the degree of resistance that process has had to face in others. While 90 percent and 78 percent respectively of the bibliographical references used in EPGE/FGV and PUC/RJ graduate courses are written in English, less than 10 percent of the references used in UNICAMP graduate program are written in English. Almost 70 percent of the ones used in the latter are written in Portuguese (or edited in Brazil), 22 percent are written in Spanish, most by ECLA authors, and some are written in French. As far as the theoretical and methodological approach is concerned, EPGE and PUC present high percentages of references in the area of theory and quantitative methods: 98 percent and 95 percent respectively. By contrast, UNICAMP presents only 55 percent of the references in this area and 45 percent in the area of economic history, history of economic thought, and political economy.

In addition, table 3 shows the weight given by each graduate program to the various sections of the national examination for admission of candidates. Whereas the weights given to microeconomics and macroeconomics are relatively similar for all programs, the orientation toward the section on quantitative methods and the Brazilian economy, which is essentially historical, are quite another matter; the degree of dispersion thus reinforces the polarity outlined above. At one extreme, EPGE/FGV attributes greater weight to the sections on economic theory (macro- and microeconomics) and quantitative methods, and proportionately less to that in the Brazilian economy; at the other extreme, IE/UNICAMP gives the greatest weight to the section on the Brazilian economy, as well as

Table 2 Quantitative Balance of Bibliographic References Used in Selected Disciplines from Some Brazilian Graduate Programs in Economics

Part A National Origins of Books and Articles						
Selected graduate programs	A		B	C	D	
	Works written in Portuguese	Works translated to Portuguese	% of A over the total	Works in English	Works in other languages*	%
Getulio Vargas Foundation at Rio de Janeiro	18	0	8	208	4	2
Catholic University of Rio de Janeiro	39	9	16	233	19	6
State University of Campinas	280	53	69	45	108	22

*Spanish and French

Table 2 Continued

Part B Theoretical and Methodological Approach				
Selected Graduate Programs	Theory and Quantitative Methods*	Econ. History/History Econ. Thought/Political Economy**		%
Getulio Vargas Foundation at Rio de Janeiro	226	98	5	2
Catholic University of Rio de Janeiro	286	95	14	5
State University of Campinas	266	55	220	45

*Includes disciplines such as macroeconomic and microeconomic theory (game theory), monetary theory, international trade theory, industrial organization theory, agricultural economic theory, labor market economic theory (the two latter as applied microeconomic theory), economic development theory, mathematics, statistics, econometrics.

**Includes general economic history, history of economic thought, Brazilian economy, philosophy of sciences, methodology, sociology, political science, Marxist theory.

Source: Franco 1992, using information from ANPEC catalogues. As each program was asked to send to ANPEC not all the disciplines they offer to the students but only ones more representative of the program profile, these data are very expressive of the polarization stressed in the present paper.

Table 3 National Competitive Selection Examination for ANPEC: Weighting of Exams, 1993 (percentages)

Graduate program	Micro	Macro	Mathematics	Statistics	Brazilian Economy
Federal University of Minas Gerais	20	20	15	15	30
Getulio Vargas Foundation at Rio de Janeiro	22.5	22.5	22.5	22.5	10
Federal University of Rio Grande do Sul	20	20	20	20	20
University of São Paulo	20	20	15	20	25
Federal University of Para	20	20	10	10	40
Federal University of Pernambuco	20	20	20	20	20
Catholic University of Rio de Janeiro	20	20	20	20	20
Federal University of Bahia	20	20	15	15	30
Federal University of Rio de Janeiro	20	20	15	15	30
Federal University of Brasilia	20	20	20	20	20
State University of Campinas	17.5	17.5	12.5	12.5	40
Federal University of Ceara	25	25	15	15	20
Getulio Vargas Foundation at São Paulo	20	20	15	15	30
Fluminense Federal University	20	20	20	20	20

Source: National Association of Graduate Programs in Economics (ANPEC).

assigning the least weight to mathematics and statistics among all graduate programs.⁶

Another important professional effect of the process of internationalization of economics in Brazil is the internal differentiation within the academic field in terms of career strategies on the part of the members of each pole. Thus, the members of EPGE/FGV and PUC/Rio have more intense participation than others in the international scientific network (as members of scientific societies, and through their presence in international congresses or conferences and publication of articles in journals or in books abroad, especially in the United States)⁷ and in international agencies such as the International Monetary Fund or the World Bank. Tables 4 and 5 show that the professors of these two schools published the most in U.S. scientific journals or in others in English. On the basis of table 4, while 60 percent of the PUC/RJ professors' publications mentioned in the ANPEC catalogue refer to articles and books issued in English, only 6 percent of the publications from UNICAMP professors are in English. In general, the UNICAMP professors' publications abroad are restricted to Latin American issues. They published predominantly articles in Brazilian journals and books: 56 percent and 38 percent respectively of the total references mentioned in the ANPEC catalogue.⁸

Yet in terms of the differentiation of professional strategies, the pole constituted by EPGE/FGV and PUC/Rio might be called *privatizing* due

6. Loureiro and Lima (1995) have already analyzed other aspects of the process of internationalization of economics in Brazil, such as the curricula and syllabi of the local graduate programs as well as the quantitative balance of bibliographic references contained in the articles published in the main Brazilian journals of economics.

7. Six professors from PUC/RJ and three from FGV are mentioned as members of the American Economic Review and as fellows of the Econometric Society (see the survey of the members of *American Economic Review* and *Econometrica*, respectively, in 1989 and 1993). Three other professors from USP are also on this list. According to the present analysis, it is not necessary to say that no professor from UNICAMP is mentioned.

8. According to Whitley 1991 the features of each scientific field determine the importance given to books or articles in journals as privileged channels for communication of the research outputs to peers. Distinguishing three types of scientific field, "fragmented adhocracies," "polycentric oligarchies," and "partitioned bureaucracies," this author states: "In fragmented adhocracies, for instance, the relatively low degree of skill and concept standardisation, limited autonomy from lay elites and ordinary discursive language and variety of legitimate audiences for intellectual contributions, limit the ability of particular groups to dominate the reputational system and establish their goals and standards The lack of technical standardisation means that research outputs are not easily communicated through brief journal articles. . . . [In fields such as management studies, sociology, etc.] journals do not dominate the formal communication system . . . but monographs, general books and semi-popular articles are still legitimate means of communicating research outputs" (1991:24–25).

Table 4 Scientific Publication by Brazilian Professors from Selected Graduate Programs

Graduate Program	Articles in English			Books in English			Articles in Portuguese			Books in Portuguese			Total		
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.
Getulio Vargas Foundation at Rio de Janeiro (20 profs.)	11	22	3	6	21	41	16	31	51	100					
Catholic University of Rio de Janeiro (7 profs.)	9	45	3	15	4	20	4	20	20	100					
University of São Paulo (33 profs.)	9	10	4	4	43	48	34	38	90	100					
Federal University of Rio de Janeiro (24 profs.)	3	6	2	4	34	73	8	17	47	100					
State University of Campinas (18 profs.)	1	3	1	3	15	38	22	56	39	100					

Source: Catalogue from graduate programs in economics in Brazil published by ANPCEC/IPEA, 1992. Percentages are approximate.

Table 5 Publications in International Journals by Brazilian Professors from Selected Graduate Programs in Economics: Quantitative Balance of Articles

English-language journals	Graduate Programs		
	Getulio Vargas Foundation at Rio de Janeiro	Catholic University of Rio de Janeiro	State University of Campinas
<i>J. Math. Economics</i>	3	—	—
<i>J. Econometrics</i>	1	—	—
<i>Econometrica</i>	4	—	—
<i>J. Econ. Theory</i>	6	—	—
<i>Quarterly J. Economics</i>	4	2	—
<i>The Bell J. Economics</i>	—	1	—
<i>The Economic Journal</i>	—	1	—
<i>World Development</i>	—	8	—
<i>Economic Hist. Review</i>	—	1	—
Subtotal	18	13	—
Number of professors	30	17	28
Rate of English articles/professor	0.6	0.7	0
Spanish-language journals			
<i>El Trimestre Económico</i>	4	13*	6
<i>Revista de la CEPAL</i>	1	3	5
Total	23	29	11

Source: Data collected in the most important international economic journals, from the 1970s on. The journals in the list above are the ones where there are articles from Brazilian professors.

*Only one professor from Catholic University, Edmar Bacha, wrote seven articles published in *Trimestre Económico* in the period from 1984–92. This professor also wrote two articles in *Trimestre Económico* when he was at the Getulio Vargas Foundation (1970–71) and another three when he was at Brasília National University (1974–77).

not only to the theoretical value they place on the role of the market in the economic system (it is not by chance that most of the professors affiliated with EPGE/FGV got their doctorates at the University of Chicago) but mainly because its faculty members have close relationships with the private sector, in particular with financial institutions, for which several of them work as consultants.

On the other hand, the less internationalized pole constituted by UNICAMP and UFRJ might be called the *public* pole: their studies stress the political aspect of the economy, the work of their members is carried out in public universities, and in general they offer consultancy to government agencies and public sector enterprises. Finally, the intermediate position between these two poles represented by the faculty of economics of USP also is manifested in a wide variety of professional careers and consultancy practices, in private or public organizations attended by its members.

3. Political Impacts: Careers and Legitimation of Economists in Government

Two principal types of career may be identified for economists in government. The first is a career as *economist-employee*, that is, a governmental employee qualified in economics. Young economists enter, by competitive examination or on direct contract, certain governmental agencies for the management of the economy; there they carry out the most important part of their professional activity. Most of the economists who follow this career path remain at the intermediate level of government agencies.⁹

The second career type, and more important from the viewpoint of the present paper, is that of *economist-policymaker*. It is filled by scholars who are appointed to positions in the government not only as advisers but also as ministers or presidents and directors of federal banks. They are in general "brilliant" professors (some of them still young) who, on finishing their theses, are eager to put into practice the theories and models they have just learned. Indeed, the very subjects of the theses tend to express the more immediate needs of the political economy.¹⁰

9. Coats 1981 shows that in those countries where he carried out his comparative study of economists in government, these professionals were predominantly active at middle levels.

10. A bibliographic investigation of three Brazilian journals in the 1970s, the *Revista Brasileira de Economia*, *Estudos Econômicos*, and *Pesquisa e Planejamento Econômico*, shows that one of the principal subjects of articles published was "the foreign sector." The authors of the study explained this thematic concentration by the opening up, at that time, of the Brazilian economy to the outside market and to the growing difficulties faced by the government in keeping control of the balance of payments (see Gonçalves and David 1982). Also, associated with economic development as the main issue on the political agenda from the 1940s to the 1960s, Brazilian economic thought at that period was centered around this subject (see Bielchowsky 1988).

To be invited to participate in government demonstrates recognition of the academic competence of an economist. These scholars used to be recruited by co-optation among colleagues from the university or from the international agencies network.¹¹

Each of the two profiles already mentioned for the careers of economists in government implies specific links between their members and the public positions occupied. While the economist-employees carry on in government posts the most extensive part of their professional careers, the scholars “pass through” government. The time, longer or shorter, spent there does not matter; their relationship with their posts is transitory, a stage in a broader career, usually organized from university to government to private consulting. Although they do not necessarily exclude each other, each new stage is considered more important than the one it replaced.

The different types of relationship between economists and government produce behaviors and attitudes that deserve emphasis. Leaving their universities to take up government office, scholars are filled with a mission: to resolve the problems of the economy. They put into practice the theories they have brought from their university of origin; in general, their action in government involves high-impact measures, shock tactics, economic plans intended, for example, “to do away once and for all with inflation.” They are less concerned with the machinery of government or with the need to construct a career therein, and are more involved with projects to change the economic order they criticize. Soon disillusioned by the impossibility of change and compelled to leave government, they are usually replaced by politicians or, sometimes, by economist-employees. These, driven by the characteristics of their own careers, carry out a specific type of economic policy, which is based only on the reorganization and maintenance of the bureaucratic machinery, with no great intention of change. Such was the case, for example, of Mailson da Nóbrega, who followed the scholar Bresser Pereira, with his so-called rice and beans (i.e., ordinary) economic policy.

After spending time in government posts, most scholars do not return to their universities. Instead, they choose a career in consulting for private or even public enterprise, where they have the chance to make a profit

11. There is no formal mechanism for appointing high-level officials to the Brazilian government, and informal patterns and personal relationships are the most frequent at those levels, therefore scholars' recruitment can be explained by features of the broader Brazilian political system (see Schneider 1991).

on their accumulated capital of information and knowledge acquired in the course of their experience in government.

To sum up, the increasing participation of economists in the government and the consolidation of a modern and international academic system for their training and qualification created a new ruling elite in Brazil: the economist-scholars. This elite has inaugurated a new path of access to power: the academic notoriety sustained by strong links with the international scientific network and with international economic agencies, such as the IMF and World Bank, as well as visibility in the local press and strategic relationships with political and entrepreneurial leaders.

The words below are very expressive of this process. They are quoted from a journalist's description of the work done by two Brazilian economists in order to obtain international approval (and consequently local political approval) for their inertial inflation theory, which was transformed some time later into an economic plan for inflation control.

September 1984, IMF meeting. Persio Arida was here with his proposal of monetary reform, written in English. André Lara Resende arrived with his Brazilian article, not yet published. The papers were distributed among the authorities. One copy was sent to Alexandre Kafka, the IMF Brazilian representative, who did not make any comments as it was convenient. Another copy was sent to Peter Knight from the World Bank, who said to the authors that their idea was splendid. Lara Resende explained the proposal to the Federal Reserve officials, who were reasonably receptive to his ideas. Persio Arida was invited to speak at a seminar at the Woodrow Wilson Institute, where he is working at the moment. The paper discussed in the meeting was his article, written in English, "Economic Stabilization in Brazil." The meeting was held in a large and classically decorated library and the audience was composed of World Bank, State Department, and IMF officials, people interested in Brazil for academic or professional reasons. Ana Maria Jul was present from IMF; she is a very well-known person, who had already participated in several missions in Brazil and who has become a symbol of that institution. She listened to Persio Arida's proposal in silence and did not take part in the discussion. As Arida had watched her reactions during the lecture, he was convinced that she did not like it at all.

But the proposals resonated and the papers eventually fell into John Williamson's hands. He had been a professor at PUC-RJ and was

working at the International Economic Institute in Washington at that moment. He met Lara Resende and Persio Arida and they decided to organize an international seminar about the experience of inflation control in Europe and countries such as Brazil, Argentina, and Israel. Arida and Lara Resende promised to write a more detailed paper about monetary reform. The seminar happened in December 1984 and put together several economists who would lead, some time later, successive reforms in Israel, Argentina, and Brazil. The international connection was being shaped. . . . After the IMF's meeting, Arida stayed in the United States and Lara Resende came back to Rio de Janeiro. He arrived to find a tumultuous and even hostile climate [on the part of some orthodox economists]. . . . His articles had been published and gained the explicit approval of Professor Mario Henrique Simonsen [from EPGE/FGV]. This changed the nature of the controversy, at least for the greater public. Lara Resende, Arida, and Franciso Lopes [another professor from PUC-RJ involved with inertial inflation theory] were respected academic professors but not great public personalities as Simonsen was. The latter had been minister twice and his name was respected not only in the international academic community, but also in the entrepreneurial and financial ones. He was a frontline public man. [Following Simonsen's acceptance of inertial inflation theory] the press became excited: the news was in the headlines, with TV networks and the weekly magazines connected as well. (Sardenberg 1987, 42–43)

Both Persio Arida and Andre Lara Resende were at that time economists from PUC-RJ and both had studied in the United States, where they had the opportunity to establish contacts with the international scientific network as well as with agencies such as the IMF and World Bank. When they were appointed to high positions in the Ministry of Finance and Central Bank in Brazil during the Cruzado Plan (February 1986), they put into practice their inertial inflation theory through the mechanism of heterodox shock by freezing of wages and prices.¹² With them on the economic team of the Ministry of Finance and Ministry of Planning

12. As already mentioned, the theory of inertial inflation directly followed from the structuralist tradition of considering Latin American inflationary regimes as very specific in nature. Rejecting several orthodox approaches that saw the cure for Brazilian inflation exclusively in budget tightening and monetary restraint, the proponents of inertial theory explained that inflation perpetuated itself largely as an inevitable and perverse consequence of past inflation, transmitted through both formal and informal indexing of wages, public sector prices, and the exchange rate (see Loureiro and Lima 1995).

were several other economists from IE/UNICAMP who participated in the implementation of this plan as PMBD's economists (the government political party).

It is worth mentioning that the Cruzado Plan's failure produced not only economic and political effects, but also a professional impact on economists in terms of a relative decline in the social recognition of their professional competence. That this impact was greater on the professors from UNICAMP than the ones from PUC can be explained by two factors: first, while the economists from UNICAMP appeared in the economic policymaking arena through their relationships with PMBD's leaders, the economists from PUC-RJ participated in their professional capacity. Second, the latter knew when to leave their government positions, that is, before the press completely realized the plan's failure, and they could create political explanations for that failure that were accepted by academia.

According to frequent explanations at the time, "the Cruzado Plan was a good plan in terms of its theoretical coherence or technical correctness; its failure was due to the political constraints and to the populism of President Sarney and his party" (Pereira 1992; Sardenberg 1987).

Thus it is not by chance that the current Real Plan has been conducted by economists from Catholic University—the same ones who prepared the Cruzado Plan. In the present government, Persio Arida is president of the Central Bank; Edmar Bacha holds the post of president of BNDES; Pedro Malan, a professor from PUC-RJ after coming from the World Bank became Minister of Finance; and Gustavo Franco, another professor from PUC, is one of the most important directors of the Central Bank. As the Real Plan has been implemented with great autonomy from political parties' constraints and is considered a success, at least at the present time, the economic team claims that now they are putting into practice all the technical conditions they intended to in 1986, during the Cruzado Plan, but which the electoral interests of PMBD's politicians did not allow. Thus, the actions of the scholar-economists in the government are considered "the correct application of the adequate theory, unless the politicians hinder them," as the well-known technocratic viewpoint claims.

4. Concluding Remarks

In this paper, I have attempted to show that the internationalization of economics in Brazil is not only a process of modernization of economics, that is, a process of integration in an area of knowledge from a developing

country into the international or North American scientific patterns. More than that, it implies professional and political effects.

The internationalization of economics in Brazil has both reinforced the theoretical and ideological polarization existing between schools and research centers of economics in Brazil and generated different career paths on the part of the members of each pole, such as types of studies or research done, structures of graduate programs organized, vehicles privileged for publishing scientific outcomes, areas chosen to develop external professional consulting, whether private (financial institutions) or public agencies, and more.

As far as the political aspects are concerned, this paper recalls that the education of the first generations of economists in Brazil took place inside government agencies and economic studies in Brazil arose in close connection with the political agenda. It is worth mentioning as well that this feature did not change with the emergence of a modern and internationalized scientific field of economics. The links between academic circles and government are still very strong.

It is not within the context of this paper to analyze the historical and political factors that explain the presence of scholars in high positions in government (as economic policymakers) in Brazil. It is enough to indicate some dimensions, such as the authoritarian regime, the fragility of the party system, and the successful institutional work done by several groups from the 1940s on to set up new governmental agencies for economic management (attributed almost exclusively to the economists), as well as the use of economic schools as a path to power (see Loureiro 1992). What is stressed here is the role played by academic prestige, associated with the participation of professional economists in the international scientific network, in legitimating their presence in government posts.

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