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"The National Trajectories of Economic Knowledge:  
Discipline and Profession in the United States,  
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**THE NATIONAL TRAJECTORIES OF ECONOMIC KNOWLEDGE:  
DISCIPLINE AND PROFESSION IN THE UNITED STATES,  
GREAT BRITAIN AND FRANCE.**

**A Thesis presented**

**by**

**Marion Cécile Fourcade-Gourinchas**

**to**

**The Department of Sociology**

**in partial fulfillment of the requirements**

**for the degree of**

**Doctor of Philosophy**

**in the subject of**

**Sociology**

**Harvard University**

**Cambridge, Massachusetts**

**January 2000**

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## **Abstract**

This dissertation takes as its starting point the disjunction between the claims to universality of economics as a discipline, and the empirical observation of the variability of economic knowledge production across countries. Indeed, 'being an economist' stands for quite different institutional and intellectual realities in different nations. Early political and economic histories launched the professional and intellectual forms of economic knowledge production on particular paths, which, in spite of their many transformations over time, we may still identify as long term, and relatively coherent, 'traditions'.

I examine three of these national traditions (the United States, Britain and France) in their development from the end of the nineteenth century up to the present day. I then seek to understand them in relation to the 'polity structures' they are embedded in, by articulating, for each case, the embeddedness of economic knowledge production in a number of key mediating institutional systems defined at the national level: higher education, the state, and the economy. Over time, I argue, these three domains have defined the particular trajectory taken by the disciplinary and professional project of economic knowledge within each national context.

In the United States, understandings of 'what it means to be an economist' have crystallized around the notion of a scientific professionalism rooted in the 'credentializing' power of the university, and rely on the 'relevance' of economic knowledge for a large number of occupational domains in policy and business. In France, professional and intellectual definitions are more segmented, due to the existence of



separate and mutually exclusive career tracks for academic and bureaucratic functions. In a nation where sovereignty is traditionally vested in the state, the latter also constitutes the main source of legitimation for the production of economic knowledge. Finally, in Great Britain, the economist's identity has been historically constituted within the broader realm of civil society, and legitimated by the traditional role of the educated (the Oxbridge-London elite in particular) in conducting the affairs of the nation. Both the British and French fields, however, have tended to converge towards a greater acceptance of 'American' professional and scientific norms in the recent period.

## **Acknowledgements**

This dissertation has been in gestation for a very long time, implicitly since my undergraduate years in France when, unable to choose between economics and sociology, I ended up studying both. I feel very fortunate to have had the opportunity, once again, and under this quite unexpected form, to reconcile two profound interests of mine.

My first debt is to all the persons who took my subject seriously enough to lend themselves to an interview. I owe incalculable thanks to the “economists” who opened their offices, their private homes, sometimes their libraries to me, who shared their views, their stories, but also their coffees and lunches, who introduced me to their friends and colleagues, who walked me back to the bus or the subway station for fear I would get lost –and even, once, insisted on lending me their hat to keep me from getting wet in the rain. As much as the interviewing process seemed daunting at its beginnings, I came to cherish every moment of it and regard it as one of this dissertation’s most rewarding achievements, both intellectually and personally.

When this research was still an unrealized potentiality with no tangible shape, I was fortunate enough to be able to count on the support of many people and institutions. The Fulbright Program, the Harvard Sociology Department, and the Minda de Gunzburg Center for European Studies at Harvard University offered precious help in the form of generous fellowships. Besides Harvard, I had the unique chance to spend time in two other wonderful places, with different, and equally challenging, intellectual traditions. I am very grateful to the Stanford Sociology

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**‘The political and administrative structure of every nation  
reflects itself in the organization of its scientific work’.**

**Joseph A. Schumpeter, 1994, *History of Economic Analysis*, p510.**

## **Chapter 1. The Social Organization of Economic Knowledge.**

The rise of the modern nation-state has been accompanied throughout the world by a process of societal transformation, which has involved the emergence and increased authority of groups of professionals constituted around the monopoly of new forms of knowledge. Since the end of the nineteenth century the sphere of economics has developed as one such enterprise, building itself as a relatively autonomous practice with increasingly distinctive discourses, credentials, and occupational yearnings. The ascent of economists can thus be described as a fairly global historical process whose steps most countries have achieved (or will achieve) in one way or another in the course of their development. Broadly speaking, these range from the progressive delimitation of a legitimate field of scientific study and practice through the securing of a position within the higher educational system (a process we may call 'academicization'), to the gradual expansion of jurisdictional claims towards a wide range of work areas and social institutions, including governments, individual corporations, or international organizations. If we think about the detailed historical processes whereby economic knowledge expanded during the past century, we will thus find that advanced Western countries -Britain, France, the United States, Germany, Sweden...- all became involved in the production of organized economic knowledge (in science, policy and business) at roughly the same times.

At first glance, then, the expansion of the discourse and profession of economics must be understood as a fairly homogeneous, world-level, trend of societal rationalization. And indeed scholars of science have repeatedly found modern economics

to be the most coherent and well-bounded scholarly enterprise in the social scientific field. (Whitley, 1987, 1984; Cole, 1973) Certainly, the dominant intellectual form in economic science (largely derived from the Anglo-Saxon tradition) generally presents itself as a universalistic paradigm. A commonly held view within the profession is that economists in various countries and various occupations (academics, administration, business) agree widely on what constitutes an economic problem, and on the appropriate tools to handle it. In addition, most economists in the world today consider themselves as working in an international field, which sets the intellectual standards for their national professions.<sup>1</sup>

While such an international convergence of professional and intellectual standards seems indeed well on its way in the present, 'globalized', world, the national paths leading to such an outcome appear to have been quite divergent. In short, historical analysis shows that countries have followed different routes to fill the various emerging niches for economic expertise in science, policy, or business. Consequently, 'being an economist' still has quite distinct meanings and evokes a diversity of jurisdictional domains in different cultures and societies –as it does in different institutional locations within these societies.

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<sup>1</sup> Fourcade-Gourinchas, 1999. This trend is reinforced by the fact that frequent assessments about the 'place' of national academic institutions and individual researchers in the international hierarchy of academic establishments are based on publication output in (almost exclusively) American journals. See for instance (Kalaitzidakis, Mamuneas and Stengos, 1999, on Europe).

## Three Patterns of Economic Knowledge Organization

The cases of the United States, France and Great Britain, for instance, constitute interesting –and important—examples of such cross-national divergences. These nations were all, albeit in different ways, historically central to the development of the modern discipline of economics. For instance, France and England in the nineteenth century, England and the United States between the wars, and the United States since then, have represented the most consequential and enduring intellectual influences on the global evolution of economic science.<sup>2</sup> Yet intellectual traditions, organizational patterns in the production of economic knowledge, and paradigms of economic governance, have differed in important ways between the three nations. Table 1-2, for instance, reports striking differences in economic policy ideas among economists in several Western nations. In sum, who has authority to speak about ‘economic issues’ in science, policy and the public sphere, and what the social, institutional and intellectual foundations of such authority are in each country, refer to very peculiar societal contexts, which we must explicit.

### The United States

In the United States, the economist’s ‘identity’ is deeply rooted in the academic world. A small elite of professors within top universities is able to exert efficient control on the rest of the profession, and to define the boundaries of what acceptable work is in

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<sup>2</sup> France (as well as Germany, which possessed a very well organized and influential intellectual field in the nineteenth century) have seen their impact on the ‘international’ discursive field of economics decline steadily since the nineteenth century. A 1982 survey thus showed that each country contributed less than 4% to the population of ‘eminent’ living economists (as opposed to over 10% of the ‘dead’). (See Table 1-1)

economics. Commanding widespread 'respect' (both nationally and internationally) from the lower strata of the field, it also holds institutionalized access to prestigious appointments in government and international organizations. The centrality of formal markers of worth (such as a PhD from a top graduate school) to professional definitions, the fact that capabilities are usually defined in highly technical terms, according to the standards prevalent in the scientific sphere, and the economists' close identification with the principle of market efficiency, reinforce a pattern which might be defined as 'scientific professionalism'. The formative period for the development of this particular stance was the Progressive era, and a political context, which was highly 'biased' in favor of rational, non-partisan, and 'useful' knowledge. Throughout the course of the twentieth century, this technical and empirical understanding of expertise has served as a basis for the formulation of jurisdictional claims in a large variety of areas in policy and business. These, in turn, feed back into the intellectual process itself, by fostering a form of 'intellectual imperialism' whereby economic tools may be applied to 'any' object.

### **The United Kingdom**

In the United Kingdom, on the other hand, the 'professions' have been generally much less closely identified with such 'impersonal' signs of competence as formal credentials. In the nineteenth century, the professionals' authority in society emerged in the context of a socially dominant neo-aristocratic culture, which deliberately expressed its distance from, and distaste for, purely technical understandings of its role. (Szreter, 1993; Perkin, 1989) Economic knowledge was also much more diffuse in the general culture. As a result, the world of economic discourse long remained the province of skilled amateurs, from politics, the civil service, business, or journalism, alongside with

more academically grounded economic writers, all closely connected through interpersonal networks. The economist's role has thus been rooted in his/her embeddedness in this elite 'civil society' which, while lacking the type of formal channels of access to the policy-making arena that can be found in the United States, nonetheless entertained close relationships with it. The state –and this is not independent from such easy reliance on peripheral networks– long remained reluctant to incorporate economic knowledge within its own realm; when it did so, it relied heavily on arm's length arrangements. While this 'civil society' model of professional engagement gradually lost ground between the 1970s and 1990s (along with the declining power and authority of the key institutions that were sustaining it (the elite universities), the anti-intellectual mood of the Thatcher revolution, and rationalization of the scientific sphere in economics), the changing political climate with the election of the New Labour in 1997 seems to have revived it.

## France

Finally, in France, the identity of economists has been –and remains– more unsettled, due to a long association between economic discourse and laissez-faire political agitation. The legitimation of economics as an autonomous discipline worthy of a separate curriculum, and as a form of expertise relevant to the state administration, was a late phenomenon, which crystallized in the post-war period only. The higher education system was then reformed in order to supply state-trained experts to the new administrative agencies intended to lead France on the path to modernization. This 'statist' pattern, which had its heyday between the early 1950s and the late mid-1970s (but had antecedents as far back as the nineteenth century), produced institutional



arrangements that have profoundly influenced the organization and intellectual identity of the field as a whole. Economic knowledge in modern France is thus organized by juxtaposed and relatively independent production systems, which entertain different representations of what 'being an economist' means. Thus rather than being defined by a 'practice' rooted in a common body of knowledge, the latter is more loosely articulated around multiple jurisdictional claims over an 'object' (the economy). In sum, the French field often appears fragmented and contentious altogether.

### **An Analytical Model**

These three examples demonstrate, each in its own way, the variability of organizational and intellectual patterns in economics at the level of the national polity. Explaining the patterns identified for each of these three national cases, and understanding what the social foundations of economists' authority and identity in different national contexts are, represent this research's main theoretical challenges. Based on a comparative-historical analysis of the national routes taken by the United States, Britain and France<sup>3</sup> in their effort to institutionalize the production of economic knowledge since the end of the nineteenth century, this dissertation seeks to investigate the following empirical questions: What does it mean to be recognized as an 'economist' in each national context? Which types of knowledge, identities, occupations, and institutional locations are these 'economists' associated with? Thus, rather relying on preconceived notions of who is (and is not) an economist, I have tried to build these categories themselves, and their varying meanings across nations and cultures, at the very

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<sup>3</sup> I also researched the German case, although I will only refer to it sporadically in the present study. (See Appendix; also Fourcade-Gourinchas, 1998)

center of this research. In doing so, I have been led to employ loose understandings of the term, such as self-definitions by relevant actors, areas of jurisdictional engagement (e.g. ‘working’ on/about the economy), as well as broad forms of societal recognition (such as those found in the media).<sup>4</sup>

Understanding the development of ideas, ideologies, and the production of knowledge in the long run requires that particular attention be paid to the interactions between intellectual life and features of the larger social environment. Dobbin (1994), for instance, suggests that ideas about economic order might be formed in a manner that is ‘isomorphic’ (at a general, cognitive level) to pre-existing political cultures. Other scholars still have suggested that the intellectual nature and institutional organization of knowledge production (whether scientific, political, or philosophical) derives from complex webs of relationships, involving a vast array of social institutions –state structures, social networks, and universities.<sup>5</sup> As an organized ‘producer’ of scientific and political discourses, as well as of applied expertise for more ‘microsocial’ uses, the ‘field’ of economics seems particularly well suited to an empirical application of such ‘contextual’ analytical frameworks.

Broadly speaking, the present work shows that national institutional configurations and cultural understandings account for differences in organizational patterns of economic knowledge production across countries. More specifically, the

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<sup>4</sup> See Appendix for a more detailed assessment about the boundaries of the economics profession.

<sup>5</sup> See notably: Wuthnow (1989); Hall (1989); Rueschemeyer and Skocpol (1996); Also Collins (1998).

research in this study represents an effort to provide medium-range analytical categories that can help us 'contextualize' this higher order relationship between societal institutions and knowledge. My investigation of each 'national' case is organized around three critical organizational factors, which, I argue, play a particularly important role in shaping the production of economic knowledge:

(1) The structure of the academic system and the place of economics education and research within it;

(2) The structure of the state and the nature of the incorporation of economic knowledge into policy;

(3) The organization of the economy and the role of economic knowledge in relation to different economic sectors.

These three aspects were identified essentially as heuristic devices in order to define a 'national' framework, or a social environment, within which the professional practice of economics is organized in various societies. Their ultimate selection comes both from the experience of fieldwork, and from a series of insights developed in previous studies dealing with similar topics. First, as an academically organized form of knowledge, and training ground for a vast array of business and administrative professions, economics is embedded in the research and higher education environments, which, in each national context, possess a distinctive mode of governance and intellectual and organizational ecology. A good example of the role of educational institutions in shaping the ecology of disciplines and fields of knowledge is the rise of the social sciences in the American

context, and its close articulation with the emergence of the institutional form of the modern university. (Bledstein, 1976; Ross, 1979)

Second, political institutions have been recognized as important legitimating factors for disciplinary and professional projects in the social scientific domains, shaping the way in which the latter are formed, expand, and change. Recent historiography on Germany, for instance, has linked the institutionalization of 'economics' in this country to the expansion of public finances and state bureaucracies. (Tribe, 1988; Lindenfeld, 1997) More generally, state structures and policies have been shown to play a critical role in defining both the social sciences' academic and professional space, and their relationship with policy. (Rueschemeyer and Skocpol, 1996; Wagner et al. 1991b) Since the end of the Second World War, modern polities have recognized the economic domain as a 'natural' area of state activity, and acknowledged the formal role of economic knowledge within governmental structures and administrations. In the years immediately following World War II, for instance, governments took a formal commitment regarding their role in the economy. Thus the *White Paper on Full Employment* in the United Kingdom (1944),<sup>6</sup> the *Employment Act* in the United States (1946), and the 'Preamble' to the 1946 Constitution in France, all officially recognized (to varying degrees) the state's duty to insure economic growth and welfare to its citizens.<sup>7</sup> The United Nations Charter proclaims protection against unemployment as a fundamental human right.

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<sup>6</sup> Beveridge also published this study as a private report (*Full Employment in a Free Society*, 1946.)

<sup>7</sup> These documents, however, also exemplify the diversity of national understandings concerning the proper and legitimate economic goals for the nation, and the role of government in achieving them. For instance, the 'basic law' in Germany insists mainly on the need for the state to maintain the 'requirements of economic equilibrium' but barely mentions economic growth.

(Dawson, 1953) In sum, state institutions constitute a critical locus for studying the way in which knowledge about the economic world is produced, validated, and put into practice.

Third, taking seriously Abbott's fundamental insight that 'professions both create their work and are created by it' (1988, p316), I consider the interactions between economic knowledge and its very own object –the economy. As Dobbin (1994) and others have shown, each nation produces distinctive understandings of how its economy is organized, operates, and ought to be 'managed', if at all. In certain cases, important traditions of economic governance were forged prior to the emergence of organized, let alone professionalized, economic discourse. For instance, Colbertism in France, which inaugurated a tradition of active state involvement in the economy, largely preceded the appearance of the Physiocrats (the first group of intellectuals to be publicly recognized as 'économistes').<sup>8</sup> Conversely, the development of 'classical economics' in the eighteenth century has been widely understood as a by-product of the industrial revolution in England -whether directly through the interest spurred by the distinctively 'new' nature of economic activities (hence Smith's celebrated description of the division of labor in a pin manufacture), or indirectly through its impact on the political field. (Hirschman, 1977) Polanyi (1944) also famously described the doctrine of *laissez faire* as a rationalization of the "free market society", which matured after the repeal of the Poor Laws in 1834. And naturally, one cannot understand the development of free trade theory in nineteenth century England apart from the country's role as a colonial power.

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<sup>8</sup> Source: *Dictionnaire historique de la langue française* (ed. Le Robert, 1992), etymological definition for 'économiste'.

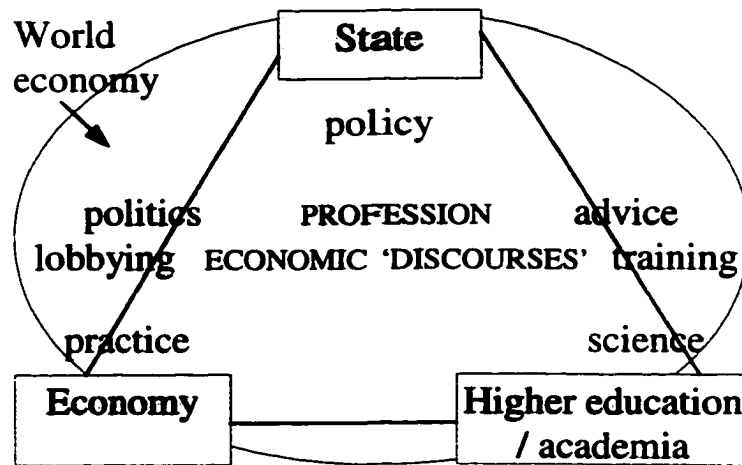
All these examples demonstrate that national economic structures and histories provide the backdrop against which economic discourses are constructed. This statement does not, naturally, exclude a possible reverse action of economic discourses in transforming the structures themselves. Yet it represents a serious challenge to essentialist and universalist conceptions of knowledge, which see the latter as arising from a purely cumulative process, independently from the conditions of its production. Against this view, I argue that *economic knowledge is endogeneously determined by the economic process itself*: the economic discourses, which serve to transform economic institutions, are themselves routinely produced on the basis of their authors' intimate experiences (as opposed to purely 'scientific' understandings) with the functioning of their, as well as other, economies.

Interactions within and between education, policy, and the economy, I argue, explain dynamic evolutions in the construction of the professional space and identity of economists –in other words their 'jurisdictional' framework, as well as the intellectual patterns, which have come to characterize economic science in different countries. During the twentieth century, the rise of a mass education system, the emergence and institutionalization of the welfare and interventionist state in depression and war, and the expansion of a service economy, have had a distinctive impact on economic knowledge production, contributing to its increased codification into specialized knowledge forms and occupational functions.

A fourth element in this model refers to the articulation between the national and international levels. Although the production of economic knowledge takes different forms at the national level, that are shaped by a constellation of unique social, political

and economic factors, the rise of economics itself should also be understood as a global phenomenon, having to do with such processes as the transformations of the modern state, the globalization of economies, the internationalization of science and education. A related point is that national forms of economic knowledge production tend to lose their specificity over time, as organizational and intellectual models, 'ways to practice economics' get routinely imitated, diffused, or adapted across national borders. In particular, it seems indispensable in a project like the present one to account for the major intellectual and disciplinary facts of this century, that is, the progressive normalization of economic science worldwide on the 'neoclassical' mainstream, and its increased governance by a small elite located in American universities and international organizations.

Figure 1-1: A Model



The figure above (1-1) represents an attempt to summarize this entire discussion by providing a visual representation of the social environment of the professional practice in economics (as envisioned in the analytical model just described).<sup>9</sup>

In this schematic representation, the locus of professional expertise (the economists' 'jurisdiction' in Abbott's (1988) terms) is situated at the crossroads between the higher education system, the state and the economy. Naturally each of these institutional realms plays a distinctive role in the profession's economy. I have tried to understand the particular relationship they entertain with economics in each of the three case studies, and how these relationships, in turn, may be articulated into a coherent model of 'knowledge production'.

### Two 'Dependent Variables'?

Throughout this dissertation, I will consider the question of the occupational jurisdiction of economists in different countries, and the question of the substantive knowledge they produce, to be intimately linked –in other words the professional question and the intellectual, or scientific, question.<sup>10</sup> Paradigms in social science, after all, are partly nationally constituted, and, as Dobbin demonstrated in his study of industrial policy, 'may be rather tied up with a country's political institutions.' (1994, p224-227) Galtung, for instance, argues that there are distinct ensembles of 'cultural' intellectual styles for interpreting reality in the social sciences, which are somehow connected to characteristics of the social structure:

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<sup>9</sup> I am indebted to Ronald Jepperson for a very helpful discussion on this subject.

<sup>10</sup> Galtung refers to three aspects of the social structure in particular: verticality / horizontality, collectivism / individualism, polarization / integration.



'There has to be some kind of correspondence between general social structures and the structure of the scientific community, and there also has to be some kind of correspondence between the structure of the scientific community and the structure of the scientific product, that is the mixture of paradigm analysis / proposition production / theory formation / commentary ultimately produced.' (Galtung, 1981, also quoted in Coats, 1993, p49)

It seems indeed legitimate to acknowledge the presence of 'elective affinities' between economic paradigms, theories, and ideologies, and characteristics of the larger social environment, mediated by the structures of scientific and professional organization. In the present work, then, I refer quite frequently to the question of intellectual patterns, and establish connections between the *dominant* 'culture of economics' in different countries, and the social environment of their professional exercise. Yet I would like to offer two words of caution. First, the connection between ideas and social structures is particularly difficult to establish at the theoretical level, without relying on some form of highly generalistic 'reflection' theory. (e.g. Durkheim, 1965; Swanson, 1967) Taking it too literally also creates an unfortunate *a priori* against a serious theoretical attention to international influences.

The second limitation is empirical. Each country hosts a wide variety of intellectual conflicts, organizational niches, and scientific idiosyncrasies, to which the limited scope of this research will be unable to do justice. Many important intellectual episodes will not find their way into the discussion. One should therefore read the present research not as a detailed piece in the history of economic thought, but rather as providing a broad representation of national intellectual panoramas which is tied with, and embedded in, an investigation of the jurisdictional domain of economic experts in each country. It is important to remember that diversity and differentiation at the subnational level (such as the multiplicity of intellectual currents) are not incompatible

with the existence of more 'integrated' aspects of economic knowledge production, under what we may understand as a 'national' trajectory.<sup>11</sup>

## **Economics as Discipline and Science**

As pointed out above, this study challenges traditional understandings of knowledge development, which focus solely on scientific or intellectual evolutions occurring within a fixed disciplinary framework. Economics is a well-traveled subject, both for scholars and for the general public. Throughout its history, it has known many bestsellers and efforts at vulgarization: every year brings its cortege of books, pamphlets, TV and radio shows, by professional authorities or skilled mavericks, which explain economic mechanisms, theories, facts and trends to vast audiences. The discipline and profession of economics themselves also constitute popular and often controversial subjects. For instance, denunciations of the 'dismal science', whose intellectual evolution into abstraction and mathematical sophistication seems to insulate from the real world, are a recurrent discussion topic in intellectual and political circles.<sup>12</sup>

Yet beyond these public statements, the study of economics as 'discipline and science' is also a lively academic subfield, with specialized journals, conferences and associations. It is thus only fair that some of the main contributions in this area be

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<sup>11</sup> Zelizer (1999) for instance, remarked that the integrating effects of national currencies are combined with the persistence of extensive monetary differentiation at the subnational level.

<sup>12</sup> As Krugman argues provocatively, 'economist-bashing has long been a popular past-time among intellectuals right and left' (1996, p13). See for instance John Cassidy, 1996, 'The Decline of Economics', *The New Yorker*, December 16; Robert Kuttner, 1985, 'The Poverty of Economics', *Atlantic Monthly*, February, p74-84. Paul Ormerod, *The Death of Economics*, 1994.

reviewed here. Most of these works situate themselves in the 'history of economic thought' tradition of research, which conceives its object to be the institutionalized discipline of economics, and its mission to scrutinize the latter's written corpus and 'eminent minds' –either through text exegesis, biography, intellectual history, or methodological investigation. Economists have always regarded the history of their specific knowledge as an academic specialty in its own right, independent from (though often closely intertwined with) economic history. From the 'field's' early days as a separate discursive area, it flourished with histories of economic doctrines, textbooks, dictionaries, and encyclopaedias, and constantly re-invented its own foundations (Schumpeter (1954), for instance, went back to Aristotle). It has always been common practice among eminent economists to contribute to the history of economic ideas and theories one way or another.<sup>13</sup> And economics is probably the only social science to bestow upon its 'great men' the same veneration given sometimes to the geniuses of physics. Thus not only are economists granted a Nobel Prize since 1969,<sup>14</sup> but the field possesses a broader pantheon in the form of an international *Who's Who?* (Blaug, 1986 and 1999), which gathers all of its influential minds (dead and alive). In spite of its declining influence on the development of economics as a whole, the history of economic thought has remained a very active research area. It possesses an influential medium in the presence of the review *History of Political Economy (HOPE)* –the principal forum for

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<sup>13</sup> See for instance (in this century) Schumpeter, 1954; Heckscher, *Mercantilism*, 1935; Stigler, *Essays in the History of Economics*, 1965.

<sup>14</sup> See Appendix.

historians of the discipline—, and is organized around a host of national or regional associations.<sup>15</sup>

Another intellectual characteristic of economics, which sets it —once again— apart from the other social sciences, is the preponderance of epistemological concerns and the manifest desire to enhance the discipline’s scientific status. Many prominent economic writers were historically involved in such exercises.<sup>16</sup> Several efforts to reconstruct the history of economics in popperian and lakatosian terms took place after World War II. Witnessing the mathematization of the discipline, Popper himself celebrated its ‘Newtonian revolution’. (1979) And Friedman’s 1953 essay was tremendously influential in setting the field’s methodology in a positivist framework and legitimating abstract theorizing through the assertion of the so-called principle of ‘instrumentalism’. Briefly said, the latter argued that the scientific character of economics depends not on its assumptions, which can be unrealistic or even false, but solely on its ability to make predictions.

All of these methodological endeavors have contributed to institutionalize the view that the discipline formulates positive laws akin to those of the natural sciences, and reject the notion that external factors play a role in the development of the economics research program. Naturally such ‘positivist’ ideology has given rise to a number of

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<sup>15</sup> For instance the *History of Economics Society* in the United States, the *European Society for the History of Economic Thought*, the *Japan Society for the History of Economic Thought*, the *History of Economic Thought Society of Australia* ...

<sup>16</sup> J.S. Mill, 1987; Cairnes, 1875; J.N. Keynes, 1891; Robbins, 1984; Hayek, 1967; Friedman, 1953; Blaug, 1992 are the most prominent in this second group. See Hausman, 1994, for a collection of statements by economists on these issues, and Redman, 1989, and 1991, for an extensive bibliography on the epistemology of economics.

critiques from a variety of standpoints, either within or outside the philosophy of science.<sup>17</sup> One of the most creative attempts in this area has been the emergence of a research agenda centered on the rhetoric and style of argumentation in economics.<sup>18</sup> McCloskey (1985), for instance, dissected leading economic papers and showed how their authors used rhetorical devices (such as appeals to authority, analogies, hypothetical 'toy' economics...) in order to 'persuade' their readers. Mirowski's historical studies of the intellectual development of economics (1989) revealed that it closely followed that of physics, mimicking the latter's rhetoric and representation of the world as it evolved.

The primary goal of these works, however, is an almost literary analysis of a series of disembedded economic 'texts'. As such, they do not really attempt to 'sociologize' economic knowledge by putting intellectual products, let alone the individuals and organizations responsible for them, within the larger social environment. By contrast, a more explicitly sociological approach to economics has emerged from the revolution in science studies following Kuhn's pathbreaking *Structure of Scientific Revolutions*. As is well known, the book, published in 1968, had a considerable impact on the study of science. On the one hand, it provided an alternative framework to positivism for judging the scientific character of a particular research or disciplinary program, by focusing on paradigmatic strength instead of the traditional popperian criterion of falsifiability.<sup>19</sup> On the other hand, it constituted a powerful assessment of the eminently

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<sup>17</sup> See for instance critiques by Blaug, 1980 and Caldwell 1980, 1982.

<sup>18</sup> In addition to the works mentioned in this paragraph, see Klamer et al., 1988.

<sup>19</sup> This aspect is literally put to practice by Canterbury and Burckardt's epistemological assessment of the status of economic knowledge. (1983) They argue that, while economics can be considered a science in the kuhnian sense (it possesses a rather

social character of any scientific practice. In Kuhn's view, 'science' emerges from a complex nexus of social experiences, which are embedded in the routine life of the community of scientists. This line of analysis was then largely expanded by the post-kuhnian 'sociology of scientific knowledge' (or 'SSK').<sup>20</sup> Authors such as McKenzie (1981), Latour (1985), Shapin and Schaffer's (1985), Biagioli (1993), among many examples, produced some very fine historical monographs pointing to the unsettled and socially grounded character of any form of knowledge –including what we now recognize as formal disciplines–, the blurring of boundaries between science and other kinds of knowledge, and the importance of extra-scientific relations in the very making of scientific products.<sup>21</sup>

In this vein, the recent work of the Israeli sociologist Yuval Yonay (1994, 1998) on the competition between the neoclassical and institutionalist schools in the United

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unitary paradigm), it is clearly not one in the popperian sense of being able to make falsifiable propositions.

<sup>20</sup> See Shapin, 1995, for an overview of the field.

<sup>21</sup> MacKenzie's (1981) study of statistics in late nineteenth-early twentieth century Britain establishes a connection between the development of statistical analysis and the eugenics movement. He shows that the adherence of British statisticians to the methodology and concepts of Pearson was 'sustained by interests that had their origins outside science' (such as involvement in biometric applications and concern with eugenic goals) and, more importantly, were rooted in the social interests of the British professional middle-class. Latour (1985) shows how the 'invention' of hygiene involved complex social and economic networks that went way beyond the walls of Pasteur's laboratory, and came to symbolize an entire revolution in European society. Shapin and Schaffer's 1985 study of the conflict between Boyle's and Hobbes' interpretation of what stands for 'scientific truth' in seventeenth century England represents a classic example of a contextualization of an apparently 'positive' subject. The authors relate the success of Boyle's experimental ideology against Hobbes' mathematical proofs to the specific historical circumstances of the time. Similarly, Biagioli's (1993) narrative of Galileo's strategies for establishing the legitimacy for mathematical physics highlights the importance of patronage (Galileo explicitly used his theories to augment the Medici prince's glory) and the court system in general.

States during the interwar, provides a complex account of the relationship between the knowledge produced, its 'scientific' status, and the strategies of the actors sustaining it. While taking published texts as a methodological point of departure,<sup>22</sup> Yonay uses them to interpret and explain a particular historical 'moment' in the development of economic knowledge –the dismissal of institutionalism and the triumph of mathematical economics. Relying on a constructivist perspective, he argues that the ultimate outcome of this episode (i.e. the evolution of American economics towards scientific formalism) did not inevitably follow from the economists' desire to establish the objectivity of economic knowledge, but had to do with a vast array of internal and external factors.

More generally, the study of economics has been slowly moving away from a strict 'scientific' or 'disciplinary' focus to integrate a broader variety of legitimate 'objects'. Recent studies by historians of the discipline, for instance, regard its intellectual development as stemming from the interaction of its practitioners with a variety of social and political contexts, rather than a pure result of the cumulative progress of knowledge occurring in academia only. Another trend is the emergence of an entire generation of studies on the institutionalization of the discipline in various countries, stimulated by Coats' work on Britain and the United States (1993), as well as a series of historical studies on the British case.<sup>23</sup> In 1990, for instance, *History of Political*

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<sup>22</sup> Yonay's data consists of 'all the articles which were classified under the title 'Methodology' in the *Index of Economic Articles 1924-1939*'. (1998, p27)

<sup>23</sup> See notably: Maloney, 1985; Koot, 1987; Kadish, 1982; 1989. A collective effort by distinguished historians of economics also provided us with five volumes on the history of the institutionalization of the discipline in different countries at the end of the nineteenth century. (Barber, 1993 on the United States; Waszek, 1988 on Germany; Kadish and Tribe, 1993 on the United Kingdom; Sugiyama and Mizuta, 1988 on Japan; LeVan-Lemesle, 1991 on France) Also see Guillén, 1989, on Spain. Pioneering works in this area include Schumpeter's magistral *History of Economic Analysis* (1954) which, if

*Economy* started to devote its annual supplements to the institutional development of economics, rather than to its most familiar subject of economic theories and texts.<sup>24</sup>

These developments are welcome indeed. Although economics is well constituted as an academic 'science', one of the principal characteristics of its practitioners remains their constant action on the real world. In contrast with, say, theoretical physicists, economists constitute a very public group, in policy-making, finance, or consulting. Another point is that while theoretical physicists rely on highly specific equipment and skills, the very tools of economists are often contested by non-experts (for instance politicians) or appropriated by other professions (e.g. financial analysts). The section below argues that such characteristics of the production of economic knowledge must be accounted for at the theoretical level. In this respect, the concepts of 'field' (developed in the work of Richard Whitley and Pierre Bourdieu) and 'jurisdiction' (derived from the sociology of the professions) might be helpful in framing the study of economics in the broader social context.

## **Economics as Field and Jurisdiction**

The main insight of the modern histories and sociologies of science, as we have seen, is that the intellectual and institutional development of a field of knowledge is

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centered around the discussion of analytical progress in economics, nonetheless offers detailed insights into the historical (both institutional and intellectual) context of economic discourse. Finally, see Whitley (1984, 1987) and Coats (1993) for efforts to offer a sociological theory of the development of Anglo-Saxon economics.

<sup>24</sup> See in particular, among this series of edited volumes: Morgan and Rutherford, 1999 on the American interwar; Coats, 1997 on the post-1945 internationalization of economics; Goodwin, 1991, on 'economics and national security'; Coats, 1999, on the post-1945 evolution of economics in Western Europe.



embedded in various social or occupational 'spaces' and 'discourses'. This naturally applies particularly well to the scientific production of the past, which did not rely on *specialized* knowledge-producing structures (such as universities and disciplines), but rather on idiosyncratic arrangements by individuals and small groups.<sup>25</sup> However, the systematic organization and 'professionalization' of scientific activities, which followed the university revolution in the nineteenth century (Mendelssohn, 1964), does not mean that disciplinary elites in higher education and/or fixed disciplinary products are solely relevant for the study of the production of knowledge in the modern world. Not only do the institutional settings in which 'formal' scientific and intellectual work is performed remain very varied, but claims to expertise get routinely formulated by many different institutions and groups in society –in academia, administration, politics, the media, industry, interest groups and so on... As pointed out in the previous section, this statement appears to befit the case of economics particularly well.

Whitley, perhaps, engages most explicitly, and at the theoretical level, with the question of the organization of knowledge in the modern world, as well as that of the variations between different scientific fields. For him, sociologists of science should not study 'scientific communities', which are fairly restrictive –and restricted– institutions, but what he calls 'intellectual fields' –that is, 'relatively well-bounded and distinct social organizations which control and direct the conduct of research on particular topics in different ways through the ability of their leaders to allocate rewards according to the merit of intellectual contributions' (1984, p7). This looser concept calls attention to the fact that knowledge discourses are not simply constituted in academic science, but refer

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<sup>25</sup> See for instance Shapin, 1994, about the embeddedness of scientific knowledge

instead to several levels of enunciation by groups of people involved in various sorts of activities, for instance in administrative or industrial settings as well. Different types of organizations (e.g. universities, state agencies, business firms, social movements...) exist that sustain, develop and legitimize these claims.

Whitley argues that 'fields' differ from one another not simply by their substantive focus, but also by their system of work control and organization. Studying those systems enables him to underline the organizational specificity of different 'sciences'. For instance, he defines Anglo-Saxon economics as a 'partitioned bureaucracy', that is, a highly rule-governed field, split between a strong, homogeneous, and theoretical core, and a weak, fragmented, and mostly empirical periphery. American sociology, on the other hand, bears the characteristics of a 'fragmented adhocracy'.

In contrast to the –perhaps– more familiar work of Bourdieu, Whitley's conception of a 'field' is purely organizational –it is mainly concerned with the nature and substance of the tasks performed by scientists.<sup>26</sup> Bourdieu, on the other hand, places social power at the center of his interpretation, and adopts immediately a more directly 'relational' posture.<sup>27</sup> What characterizes a field is the nature of the competition that takes place within it, and the relationship of these internal struggles to external struggles in society as a whole. Competition within the scientific field is determined by the distribution of scientific authority, but naturally authority itself is also a stake in the

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production with gentleman culture in seventeenth century England.

<sup>26</sup> Whitley's analysis is based on a framework derived from Thompson. (1967)

<sup>27</sup> On the concept of field in Bourdieu's work (and its application to scientific work), see notably: 1975, 1977, 1984.

competition (that is, individuals in the field also struggle to impose their own position as 'legitimate').

The field of the social sciences, according to Bourdieu, occupies a very peculiar position among all scientific fields in that external factors play an important part in determining its internal stratification and the structure of authority. Thus in his analysis of French academia (1988), Bourdieu demonstrates that professors in the 'law / political science / economics' colleges and universities are proportionally better endowed with 'economic capital' than those situated in institutions devoted to the 'humanities', whose capital is more heavily 'cultural'. He also argues that, within each disciplinary field, the subjective (i.e. intellectual) and objective (i.e. material) positions of individuals are 'homologous': in other words, the polar opposition between 'economic' and 'cultural' capital is replicated at the field's level, and matches the orthodoxy / heterodoxy divide. (1984) Applying the Bourdieusian framework to French economics, Lebaron (1993, 1996) shows that the splitting of positions between the two dimensions of the volume and structure of capital also characterizes this particular field's internal structure. Thus top civil servants, business executives and certain political leaders rank high on the 'volume of capital' scale (as opposed to professionals in less prestigious positions). The 'structure of capital' variable, on the other hand, opposes researchers (with proportionally more cultural capital) to CEOs of large private enterprises (with proportionally more economic capital), the higher civil servants being in a relatively intermediate position. (1993, p126)

In contrast to Whitley's, Bourdieu's concept presents the advantage of building conflict into the very structure of fields. It associates knowledge-producing groups and organizations with positions relative not only to the distribution of tasks and labor, but

also to the distribution of power and authority, either across disciplines within a larger field (the 'social sciences' for instance), or within each disciplinary tradition. However, unlike Bourdieu's, Whitley's analysis draws better attention to the diversification of the institutional basis of knowledge production and the variability of employment locations for scientists.

These two elements of the distribution of authority and the organizational structure of fields enable us to outline some of the questions raised in a comparative study like the present one. My assumption is that different institutions may sustain authoritative and legitimate positions in different countries. As pointed out earlier, this research focuses more explicitly on the properties of the larger social, political and economic system and how these affect the social organization of knowledge fields, rather than on the properties of individuals within them (e.g. possession of certain forms of capital). Yet I believe that the Bourdieusian question of stratification within the national fields remains central to this project, especially if reframed at a more directly institutional level: which institutions / organizations confer 'capital' / status / authority in different nations? What does it imply for the organization of economic knowledge production and for the substance of the knowledge produced?

The concept of jurisdiction, developed notably by Abbott (1988) in his work on professions, perhaps responds best to the needs of a comparative study of the sort advocated here, for several reasons. At the conceptual level, Abbott in a sense combines Whitley's focus on work and occupational location with Bourdieu's emphasis on competition. A jurisdiction, for Abbott, represents a field of practical occupational involvement, or 'expertise'. Professions, that is, loosely bounded occupational groups,

usually control jurisdictions, but the latter are not fixed: several professions may have a claim on one particular jurisdiction (e.g. lawyers and economists on the jurisdiction of economic policy). Conversely, professions may establish control on several jurisdictions: Abbott points out that professions generally seek expansion, and do so by making claims directed at a large variety of audiences and arenas. Thus both jurisdictions and professions will be constantly redefined and reshaped through these competitive processes.

Now we still need to consider whether such concepts (profession, jurisdiction) are indeed useful to study the field of economic knowledge production. One might find the application of the concept of 'profession' to the loosely organized field of economic expertise questionable. One can indeed legitimately argue that an economist working in academia has more in common with another academic rather than with a bank 'economist', although both bear the same formal job title. The bank economist, on the other hand, might first see him/herself as a member of the financial and banking community. Yet it is also clear that both formulate 'jurisdictional claims' on economic questions and recognize each other as participating in the same broad field of expertise. Another relevant objection is whether a mature 'scientific' or 'disciplinary' field such as economics, yet with no 'legal recognition, strict controls over entry, formal code of ethics, and effective means of disciplining its errant members' (Coats, 1993:434) can be understood with a similar conceptual frame, which also serves to account for traditional or 'status' professions such as law or medicine. Identifying the boundaries of the economics 'profession' through statistical means, for instance, remains much more

complex than in more formally recognized occupational groups. (I review this question in Appendix 1-1)

There are, however, many reasons to consider the 'economics profession' as a legitimate object of study. Clearly the jurisdictional claims of economists in the modern world go well beyond the walls of scientific institutions, and they are also disciplined by a well-organized professional community, which transcends narrow job boundaries. First, there is little doubt that the field of economic expertise represents a quite successful case of professional expansion into new arenas –from macroeconomic forecasting to corporate strategy or legal advice. Second, if 'economist' is not a formal legal title, other powerful elements are still constitutive of distinctive intellectual and occupational identities –the knowledge acquired through education, the occupational position achieved, the type of work accomplished, or various forms of subjective self-identification–, and may articulate a certain idea of specialist capabilities on the subject of economics.<sup>28</sup>

The main difficulty of using the professions literature for understanding the development of economic expertise in comparative perspective comes in fact not from economics, but from that literature itself. By and large, scholarly understandings of processes of professional and disciplinary expansion have been traditionally based on the American model of narrowly constructed and increasingly specialized jurisdictions

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<sup>28</sup> Faced with a similar puzzle, Middleton (1998, p70) adopted the following 'loose' definition, which seeks to capture the complexity and variety of the economist's potential occupational involvement and identification:

**'An economist is defined as fulfilling a minimum of either self-identification as an economist and / or possession of expertise, whether validated within the peer group (academic qualification and / or publication) and / or revealed demand for their knowledge which is recognized as both economic and expert.'**

rooted in the institutional power of 'credentializing' organizations, most prominently universities. This model, however, is far from uniform across countries and often the intellectual categories it implies do not transfer well to other nations. It is for instance still arguable whether 'professions' really exist in France in the sense of organizationally strong orders independent from state authority. Another point is that French understandings of technical competence may be often based not on specialization, but on generalist skills applicable to a large variety of work domains.

Certainly recent studies of individual occupational groups have revealed some of the cross-national discrepancies I want to refer to here, and underlined the importance of political and organizational factors in the constitution and regulation of such institutions.<sup>29</sup> Theoretical works in the sociology of the professions now distinguish explicitly between two different modes of professional constitution: a continental European one, centered around the state as a regulating mechanism, and a liberal one based on decentralized control by practitioners gathered in associations. (Abbott, 1988; Collins, 1990) Such typologies appear especially relevant for the cross-national comparison of 'organized' professions with stable certification mechanisms (like accounting, medicine, or law) requiring the establishment of formal rules on the part of control instances. But it seems equally legitimate to argue that political institutions and the structure of state/society relations shape *all* knowledge enterprises, including more loosely bounded fields such as economics, and have a profound impact on the occupational and intellectual identity of their participants. Indeed, this research

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<sup>29</sup> e.g. on lawyers (Rueschemeyer, 1986, 1973; Heidenheimer, 1989), engineers (Locke, 1984; Meiksins and Smith, 1997), managers (Ahlstrom, 1982), physicians (Heidenheimer, 1989).

demonstrates that liberal countries organize the production of economic knowledge in a decentralized manner, mostly around independent academic institutions, whereas technocratic functions and the necessity to appeal to public constituencies dominate economic expertise in more statist social structures.

### **The Economics Profession in Comparative Perspective.**

The present research has thus been motivated by the need to provide a more sophisticated theory of the factors that shape such cross-national differences in the organization of professional and scientific expertise in general, and economic knowledge production in particular. Recent work on the social sciences by comparative-historical sociologists has contributed to examine the reciprocal influences between scientific institutions, state developments, and patterns of social science research. First, the literature on the 'pre-history' of disciplines (that is, prior to their formal institutionalization within higher education systems) has revealed the contingent character of intellectual categories and disciplinary identities to their local context. (Heilbron, 1995; Schweber, 1996a) More recently, Gieryn's (1999) investigation of the establishment of the National Science Foundation in the United States provided a nice illustration of how disciplinary boundaries (in this case, the demarcation between the natural and social sciences) might be socially constructed by the routine functioning of political institutions. Second, a number of scholars have pointed out the importance of organizational structures (most notably universities and the state) in determining the emergence of modern social-scientific discourses in their national and historical context, and thereby have underlined the unique integrity of certain national research / policy



relationships.<sup>30</sup> Finally, there has been a recent interest, both in Europe and the United States, for the influence of state structures on the relationship between social sciences and policy. In an effort to account for the successful (or failed) institutionalization of particular public policy ideas in different countries, these analyses show how local political institutions shape both the modes of access of social scientists and experts to the political realm and the substantive content of the knowledge they produce. As Skocpol and Rueschemeyer argue, 'the social composition, ideas, and favored modes of research and argument of knowledge-bearing groups are profoundly influenced by the social status arrangements and the political institutions of their respective societies. In turn, these larger contexts influence whether and how policy-oriented intellectuals can have influence within national politics.' (1996, p10)

This literature draws attention not only to the organizational arrangements which are implemented to deal with specific policy issues, but also to the underlying ideas, frameworks and understandings which sustain them, and to the intellectual and 'epistemic communities' which promote those ideas. (Adler and Haas, 1992) In this vein, *economic* ideas and theories have come to be understood as cultural products, which are manipulated or informally relied upon by actors in their strategies for influencing or designing policy. They may operate in a variety of ways --as cognitive frames providing broad cultural understandings, as paradigms supplying sets of policy tools, or as ideologies tied to broader moral and political purposes. Thus Dobbin (1994) observes that political institutions shape the actors' perceptions of rationality in different societies and lead them to give different interpretations as to which industrial policies are most likely

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<sup>30</sup> See notably Wagner et al., 1991; Rueschemeyer and Skocpol, 1996.

to achieve economic growth. Hall (1989, 1992, 1993), Weir and Skocpol (1985), and Weir (1989) have studied extensively the institutional conditions under which economic policy paradigms either gain acceptance or get dismissed and replaced, showing that policy innovation is greatly affected by the way in which economic experts are incorporated in the governmental machinery.<sup>31</sup> Campbell (1998) shows how political and economic interests have helped certain unlikely policy paradigms rise to the fore.

There is, however, an open agenda within this line of research, which has to do with a better discussion of the conditions of production of such ideas. Economic paradigms and discourses (for instance 'Keynesianism', 'monetarism', 'supply-side') are often treated as exogenous to the analysis, that is, as a 'given' of history, whose success or failure to institutionalize is typically understood from its conditions of access to the political sphere or from its articulation with dominant cognitive frames. Why certain types of economic understandings –rather than others– arise in certain societies –rather than others– is often a neglected question.

It is partly to answer such questions that I designed this dissertation as a study of the intermediate levels of the production of economic knowledge, that is, of the mechanisms through which political institutions shape not simply economic ideas, but the ideas' 'producers' themselves –whether individuals, organizations, or entire 'professions'. How are 'economists' and economic experts trained –or 'manufactured'– in different societies? How and where do they work? In other words (to use Abbott's vocabulary), who controls the 'jurisdiction' of economic questions in each national context?

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<sup>31</sup> Also see Steinmo et al., 1992.

Broadly speaking, the present research thus represents a contribution to the sociology of knowledge and professions, from an institutional and comparative perspective. Its principal objective is to explicate how national social structures and institutions shape the production of knowledge as both an intellectual activity and a practical occupational involvement. On the one hand, I examine the social institutions, which make the production of economic knowledge possible in the national context, and also confer it a specific character.<sup>32</sup> On the other hand, since the command of economic knowledge production serves as a basis for the formulation of jurisdictional claims, I analyze how these claims are framed, perceived and received in different societies.

I argue that organizational arrangements defined at the national level play a critical role in determining the 'identity' of both economists and economic knowledge in different societies. The historical conditions under which such arrangements were first conceived and implemented are naturally of paramount importance to understand later patterns of economic knowledge production. This consideration prompted the focus of the present research on long-term organizational traditions, from the end of the nineteenth century up to the present time, which represents the period through which economics has existed as an organized discursive field. Indeed, only after the 1880s-1890s did a distinct occupational practice crystallize around the subject of economics (in advanced industrial societies). with the emergence of university chairs, scholarly reviews, and professional organizations, and the appearance of a demand for economic expertise from various sectors of society.

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<sup>32</sup> See Swidler and Ardit, 1994, for a definition of the 'new' sociology of knowledge.

## The “Global” Transformations of Economics

Naturally the practice and discourse of economics, as general, non-contextual objects of analysis, have changed quite substantially in the course of the last century, and we may identify some of these trends as relatively uniform across nations. I will mention three. Everywhere both have become more specialized, more ‘scientized’ around the use of sophisticated methods and tools, gradually incorporating analytical progress in mathematics and the natural sciences (see for instance Krüger et al., 1987), and technological progress in the form of high speed computers and large databases. (This trend is also part of a broader, world level, movement asserting the increased authority of science in the modern world (Schofer, 1999)). Second, the jurisdictional authority of economics broadened, from relatively narrow bases in academia and learned societies at the turn of the century towards larger audiences in government, business and other professions. From a merely scientific project, economics turned into a large-scale policy-making enterprise, as Western, Eastern and developing governments increasingly assumed the responsibility of ‘national’ economic goals. It then organized into a rather successful corporate activity, as the more recent liberalization of economies along freer market lines opened up jurisdictions in the business world. Finally, parallel to these ‘methodological’ and ‘professional’ trends, relatively global intellectual-political regimes -identified by the names of ‘Keynesianism’, ‘monetarism’, or ‘Washington consensus’<sup>33</sup>- have succeeded one another, albeit under varied forms, in a large number of countries.

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<sup>33</sup> Williamson (1990) coined the term of ‘Washington consensus’ to refer to the main economic priorities actively promoted worldwide via countless reports, missions and training programs, by both the multilateral organizations based in the American capital and the American federal government.

The research presented in the following chapters focuses on how each of these transformations actually came about in three different national contexts, and how national institutions and cultures shaped the joint trajectories of economic science, policy and business practice, and construct what I call the 'economist's identity' in each country. Nonetheless, I want to remind the reader that part of the movements of 'rationalization' examined here represent institutionalized (and institutionalizing) worldwide regimes, which influence one another and diffuse through a large variety of transnational institutions –both formal and informal–, including the many powerful vehicles of the cultural, economic and political hegemony of the United States.<sup>34</sup> Awareness of this fact has prompted a greater analytical focus on intellectual patterns in that country –if only to do justice to their considerable impact on the other two 'national' fields, in the recent period especially. We should therefore not forget that the stories I now attempt to tell, in spite of the many idiosyncrasies, which characterize them, and which I profoundly delight in, still take place within a broader environment –itself partly defined and constituted at the world level.

The next three chapters present, for each country, patterns of economic knowledge production as they have developed since the late nineteenth century, and associate them with the different professional and intellectual 'identities' of economists in the United States, Britain and France. Also, in order to make the comparison more relevant, I briefly discuss, for each case, the development of a specific area of economic expertise (the building of macroeconomic models) in somewhat greater details. Altogether, this project has involved the use of a wide variety of material, ranging from

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<sup>34</sup> See Meyer, Boli and Thomas, 1987, and Meyer et al., 1997 for a development

historical and bibliographical sources to autobiographical memoirs, statistical data, as well as 92 interviews I conducted in these three countries (plus Germany) over the course of the last three years.<sup>35</sup>

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of this argument.

<sup>35</sup> see Appendix.

**Table 1-1: Representation of countries in the population of 'eminent' dead and living economists, 1770-1986**

<b>Country of birth</b>	<b>FRANCE</b>	<b>GERMANY</b>	<b>UK</b>	<b>US</b>
as a % of total living economists	2.3%	3.70%	11.60%	58.70%
as a % of total 'dead' economists	11.20%	12%	36.20%	10.50%
<b>Country of residence</b>	<b>FRANCE</b>	<b>GERMANY</b>	<b>UK</b>	<b>US</b>
as a % of total living economists	3.50%	2%	8.30%	76%
as a % of total 'dead' economists	11.25%	13.25%	25.50%	30%

From: Blaug, M., 1986, *Who's Who in Economics?*

Living economists: record based on citations in economic journals included in SSCI (ISI, 1982)

Dead economists: record based on citation in major histories of economic thought

**Table 1-2: Opinion Surveys of Economists in Different Nations**  
Support for 'Textbook' Propositions by American and European Economists

Selected Statements	US* 1979 n=211	Fr. 1984 n=162	UK** 1990 n=981	Sw. 1984 n=199	W.G. 1984 n=273	Aus. 1984 n=91	Can. 1984
<i>Tariffs and quotas reduce welfare</i>							
Agree	95	70	84	87	94	86	96
Disagree	3	27	15	10	6	13	4
<i>Cash payments are better than in-kind transfers</i>							
Agree	89	70		68	72	78	
Disagree	8	19		22	21	19	
<i>Flexible exchange rates are effective</i>							
Agree	94	49		91	92	84	
Disagree	5	44		8	5	17	
<i>Minimum wage increases unemployment among young and unskilled workers</i>							
Agree	88	38	76	66	69	64	85
Disagree	10	60	24	32	30	35	15
<i>The government should restructure the welfare state along the lines of a negative income tax</i>							
Agree	90	50	69	45	47	48	
Disagree	8	43	15	54	46	43	
<i>A ceiling on rents reduces the quantity and quality of housing available</i>							
Agree	96	52	85	79	93	89	95
Disagree	2	44	14	20	6	11	5
<i>The central bank should be instructed to increase the money supply at a fixed rate.</i>							
Agree	38	61	17	80	36	30	
Disagree	48	27	55	21	62	68	
<i>Reducing the influence of regulatory authorities (e.g. in air traffic) would improve the efficiency of the economy</i>							
Agree	75	37		62	75	56	
Disagree	21	56		36	23	43	

Source: Derived from Frey et al., 1984. Survey of 2,072 economists randomly chosen from a list of members of professional associations in the United States, France, West Germany, Austria, and Switzerland. Return rate: 45.2%.

Also from \*Kearl et al., 1979; \*\* Ricketts and Shoesmith, 1990



## **Chapter 2. The United States and the Rise of a Professional Model.**

'...To be an economist in the United States, you have to believe that the market works most of the time. The situation in which markets don't work, or cannot be made to work, is really quite exceptional, and not all that interesting to study.

*-Would that be your definition?*

*-Well, you need a doctorate, preferably from a first rank university. And to be influential in the profession, you need an appointment at a prestigious university. But the boundaries of who is considered mainstream, and who is not, are enforced quite fiercely.'* (Economic journalist, phone interview, May 1999)

The American economics profession is not only extremely large, but it does also hold considerable power and authority worldwide. From 1969 to 1999, for instance, 28 out of 44 Nobel Prizes have been American and another 6 of the non-American Nobel laureates have taught in the United States for long periods of time.<sup>36</sup> Furthermore, this pattern of international domination is even stronger today than in the Prize's early years – with 20 out of 26 awards since 1980 being given to U.S. professors. This creates naturally a unique situation, where the top American economics departments represent the vast majority of the authoritative work produced by the discipline, and are thus legitimated to exercise a considerable amount of hierarchical control over the rest of the field worldwide. As sociologists of science have shown, individual researchers in these core institutions exhibit a broad consensus about the procedures that are necessary to achieve 'science' in economics. (Whitley, 1984, 1986; Cole, 1992) Students are generally taught

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<sup>36</sup> See Appendix.

very standardized rules for exercising their skills and judging the abilities of others to 'do' economics. Even though important ideological differences might persist on the ultimate goals and effects of economic policies, the boundaries of what constitutes 'serious' work in economics are fairly explicit, widely shared, and clearly enforced.

Economic policy constitutes another area where the United States has exerted an effective influence worldwide, since 1945 especially. American-dominated 'epistemic communities' (Haas, 1992), many of them located in Washington-based institutions, routinely provide powerful models of economic organization, which are implemented internationally.<sup>37</sup> Now, that these communities' international authority derives in great part from 'structural' conditions, in particular the country's cultural, political and economic hegemony worldwide is unquestionable. Yet these broader features seem insufficient to explain the magnitude of this diffusion, as well as its particular shape. As Meyer (1994) has pointed out, what characterizes modern-day processes of international diffusion is the role of powerfully articulated communities of professionals, which provide a *normative* framework for designing economic institutions and 'reconstructing' foreign societies as legitimate economies. In this perspective, American leadership in the international community of actors is related to the strength of its professional communities.

The American economics profession constitutes probably the best example of such a structured community: It is unified around the notion of detailed, technical proficiency, as well as clear conceptions of 'what economics is about'. Basic economic principles and orientations, such as the role of prices, the idea of costs and benefits, the orientation

towards economic efficiency, constitute a common language, which is widely shared not only among the many different institutions of academia, but also among the diverse extra-academic settings where economic expertise is routinely exercised. This coherence and universalism, in turn, serve to support a far-reaching jurisdictional authority within the worlds of business and public policy.

Steven Brint suggests that economists have been among the most politically influential knowledge-based elites in post-World War II America. (1994, p143) There is little questioning that the last few decades have seen the implementation of some of the economists' traditionally most favored programs and ideas (e.g. deregulation (Nelson, 1987), a revival of antitrust policy, widespread institutionalization of microeconomic efficiency as a measure of the success of social policies). In this chapter, I argue that the 'influence' and strength of American economics has come not only from the fact that it produces tools and concepts which legitimate the development of a large amount of applied expertise, but that such expertise, in turn, becomes constitutive of the real world. Although they are by no means confined to this country, both aspects, I argue, have been particularly important in the United States.

## **The Institutional Context of Knowledge Production in the United States**

### **The Rise and Expansion of the American University**

Between the Civil War and World War I the United States underwent an 'educational revolution', which among many changes witnessed the advent of the

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<sup>37</sup> For an analysis of the mechanisms of implementation, see Fourcade-

university system in its modern shape. (Hofstadter, 1963; Veysey, 1965; Shils, 1979) The first transformation had to do with size: between 1870 and 1928, the number of students enrolled in institutions of higher education went from 62,000 to close to 1,200,000. (Burke, 1983, p111) But a second, perhaps more important aspect of the revolution concerned the social purposes and goals of higher education. Until the middle of the nineteenth century, American colleges and universities were relatively modest establishments, often controlled by clerics, who combined classical education with moral and religious instruction in their teaching. After the 1860s, however, two major sets of events profoundly transformed the relationship between education and society in this country. First, the passage of the land grant legislation in 1862 (Morrill Act) allocated federal funds to the different states for the purpose of setting up public institutions of higher education. Second, the emergence of a powerful philanthropic movement among wealthy industrialists supported the establishment of new private institutions. Starting with the foundation of the Johns Hopkins university in 1876, (which drew inspiration from the German research universities)<sup>38</sup>, the system of higher education in the United States was completely recast by the advent of a group of munificently endowed academic institutions established by this new generation of cultural entrepreneurs (among them: John D. Rockefeller for Chicago, Leland Stanford, Ezra Cornell, Jonas Clark, Commodore Vanderbilt...).

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Gourinchas, 1999.

<sup>38</sup> On the influence on the German model on American higher education, see Herbst, (1969) and Ben-David (1960). A large number of American students were trained in Germany during the second half of the nineteenth century, which then provided a model for scientific training worldwide.

Against the old liberal arts model which valued education as a form of generalist 'culture', the 'new' universities became increasingly understood as training institutions transmitting specialized knowledge for the purpose of practical applications. Via the land-grant universities, and their focus on agriculture, the mechanical arts and applied sciences, the federal government sought to advance a model of education geared towards practical uses. On the other hand, institutions supported by private wealth promoted research as the center of the academic vocation, turning it into a full-time occupation, and making it the basis of inter-institutional competition. (Shils, 1979; Herbst, 1983) This commitment triggered a movement towards academic specialization, which was embodied in the expansion and secularization of the curriculum along scientific lines, the institutionalization of the departmental structure (following the University of Chicago's leadership), and the establishment of the Ph.D. as a certificate of training. The adoption of the elective system (inaugurated under the presidency of Charles Eliot at Harvard), whereby all fields of training were recognized equal value, confirmed the vocational orientation of American higher education, and the determination of its leaders to let the system be governed by the demands of society at large.

Bledstein argues that the early institutionalization of a 'consumer' orientation, highly responsive to the clients' interests, and the rather precocious existence of a class of specialized university administrators, represent outstanding characteristics of the American academic context. At the turn of the century, this situation contrasted sharply with other systems of higher education where institutions such as the state (continental Europe), or a national elite (England), retained a considerable influence on the definition of curricula and evaluation of intellectual 'needs'. In the United States, which lacked both

a centralizing state and powerful academic guilds, the market was at the heart of academic culture from the very beginning. It came to govern many aspects of the university's internal economy—from funding sources to the recruitment of students and faculty, or the development of programs of study—as well as its external environment, which is characterized by competition between institutions. (Bledstein, 1976; Trow, 1993, p286)

The graduate school and the professional school became the cornerstones of this culture of specialization directed towards an identifiable audience, and the production of 'useful' and diversified knowledge. The credentializing power of universities supported the rise of 'new' professions (among them the various academic disciplines), the expansion of the old ones (e.g. medicine, law), at the same time that it was legitimated by them. Abbott makes the point that American professions used the universities as allies in internal jurisdictional conflicts over the division of labor, turning the academic scene into an arena of interprofessional competition. (1988, p207-208) For instance, as the main producers of specialized knowledge, the universities often became sites for the development of professional organizations, especially (though not exclusively) in the academic domain. The expansion of the graduate school thus coincided with the proliferation of national associations of specialists, the foundation of specialized journals, which controlled and regulated the new professions. (Oleson and Voss, 1979)

### The Research Economy in the United States

Although initially located in pure teaching institutions with little, if any, other academic function (like in Britain), American graduate schools since their creation in the late nineteenth century have constituted the principal site for academic research. In

particular, the philanthropic foundations' involvement in the higher education sector supported a close association between the activities of teaching and research. As a result, 'the consolidation of research resources (became) linked with doctorate granting activity', and was supported by the rapid expansion of the universities. (Gumport, 1993a, p232) The nature of the American university economy contributed to make research activities an integral part of the academic profession, and turn the latter into a full-fledged 'enterprise' –a model which contrasts with the situation found in other countries. In France, for instance, research activities were merely auxiliary to the main, educational, function of teachers, and attracted only a small web of practitioners. In England, they were less confined to the academic community and involved a larger network of people, including many skilled amateurs. Finally, Germany shared with the American system the centrality of academic institutions, but research there was largely understood as the emanation of a higher moral calling, rather than a professionalized occupation. German academics displayed considerable reluctance to derive outside pecuniary rewards from their work.<sup>39</sup>

In spite of the many transformations affecting the regulation and funding base of the 'research economy', the 'research university' pattern has remained profoundly stable over the course of the twentieth century. During the interwar, philanthropic foundations and (in a lesser measure) private corporations constituted the main external support for research. (Geiger, 1986) The advent of the second world conflict and the cold war, however, initiated the massive financial involvement of federal institutions into the scientific research effort, as successive American governments became convinced of the

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<sup>39</sup> On Germany, see Bledstein, 1976, p314-318.

necessity to sponsor and mobilize the research capabilities of the universities. Yet while the creation of the National Science Foundation (1950) and the National Institute of Health had a profound impact on the sheer magnitude of the research effort, and supported a considerable expansion in this domain, it did not fundamentally alter the organization of research, which continued to rely on the existing institutions of academic science. A limited number of highly visible universities (usually located in the 'top tier') still dominate the allocation of funds for basic research, the granting of Ph.Ds, and the production of academic knowledge.

## **American Political Culture and Institutions**

### **Political Culture and Authority**

As many commentators since Tocqueville (1945) have remarked, the distinctive characteristic of American political history is the absence of a feudal past. In his classic 1955 assessment, Hartz argued that contrary to European countries where modern state structures emerged out of social conflict between competing power holders, American political culture was forged through the experience of self-government and without the need for the organizing and authoritative framework of a central state. In fact, the appearance of the national state succeeded rather than preceded the advent of democracy in local communities. As a result, the federal governing structure, which emerged after the Revolution, continued to preserve the local autonomy of political sub-units, that is, municipalities and states. (Dobbin, 1994, p31) Decision-making authority remained diffused between different governmental institutions, all of which were subject to strong –and legitimate– outside pressures. This dispersion was also famously exemplified in the



processes by which the executive, legislative, and judicial powers both balance and overlap each other. (Huntington, 1968)

Like in Britain, sovereignty in American political culture is vested primarily in the individual. The British version of individualism, however, is also articulated with a strong class system topped by a social elite (or establishment), which traditionally occupies a leading role in politics and administration. By contrast, individual sovereignty in the United States is, at least in theory, more explicitly rooted in the 'people', or the common person. As a very broad generalization, we might point out the cultural differences between the American reverence for the 'self-made man' and the British respect of the 'gentleman'.

The counterpart to this sacralization of the individual and the institutions of civil society is that the development of central government authority in America has always been subject to suspicion, if not the object of outright hostility. For instance, by contrast with Germany and France, the state bureaucracy commands less power and institutional autonomy. Neither is the service of the state endowed with elite status. Being born in a 'democratically mobilized world', the American administrative structure is more permeable and less elitist than its counterparts in Europe, which emerged in more stratified and non-democratized societies. Both the civil service and the political class in general maintain close relations with society, often building complex coalitions in order to support specific policy programs.<sup>40</sup> Such characteristics of the American political structure have persisted in spite and above the expansion of the federal government's capacities and the institutionalization of an American welfare state in the twentieth

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<sup>40</sup> See Birnbaum and Badie, 1983, p128-9.

century. In this perspective, it is quite remarkable that the main theoretical frameworks for analyzing American political institutions (pluralism and Marxism) both lay considerable stress on their permeability by societal interests.<sup>41</sup>

### **Administrative Authority**

Like Britain, the United States was slow to develop a professionalized civil service. Continental European countries, most notably France and Prussia, had already well institutionalized public bureaucracies from the seventeenth century on, which relied on formalized rules of governance, and often enjoyed a separate and superior social status. By contrast, the distribution of public functions in American federal government was dominated by party patronage until the later part of the nineteenth century. Factionalism and instability characterized public service at a time when the state was facing a rapid expansion of capacities. Thus when bureaucratic reform was introduced in the 1880s, its main function was to 'patch up' a state on the brink of unmanageability. (Skowronek, 1982)

The basic structure of a modern civil service in the United States emerged 'between 1883, when the Pendleton Act created the so-called merit system, and 1923, when the passage of the Personnel Classification Act formalized the nature of the role structure'. (Silberman, 1993, p227)<sup>42</sup> The first reform established the principle of

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<sup>41</sup> Skocpol's work has demonstrated, however, that in spite of this 'general' character, which distinguishes the American political system from its European counterparts, the American State may under specific historical circumstances (e.g. the New Deal), and in certain specific policy areas, undertake very 'autonomous' actions. (See notably her recapitulation of these arguments in Skocpol, 1985)

<sup>42</sup> In this entire section, I rely heavily on the account provided by Silberman (1993).

competitive examination as a basis for access to lower level civil service positions, and that of merit evaluations as a basis for promotion, but there were no pre-established career lines or tenure rules. The civil service thus did not emerge as a specialized profession or elite '*corps*' (as in continental Europe) nor did it imply a long-term and rather predictable trajectory (as in Britain). Rather, the administrative structure was organized around 'positions' identified with certain skills. Individuals applied to these 'positions' on the basis of their training and specialization, rather than their seniority or belonging to a particular 'class' of administrators. As such, the structure remained potentially open to outsiders at every level, provided they possessed the required qualifications. The second reform, in 1923, confirmed this orientation by formalizing job classification and hierarchy.

Both in law and in practice, the public administration in the United States therefore does not represent a separate order attached to the persona of the state. Like in Britain, it is not protected by a distinct body of administrative law. (Birnbaum and Badie, 1983, p128) Neither is administrative training specific: bureaucratic functions have not commanded the establishment of particular institutions such as separate university curricula or 'state schools' (even public policy diplomas are not exclusively associated with public careers, but embrace a much larger set of occupational functions). Rather, the administrative system relies on skills that are already recognized through the exercise of a particular 'profession', which typically originates *outside the public realm*.<sup>43</sup> Silberman, for instance, notes that the American public service is 'oriented toward the utilization of

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<sup>43</sup> Like in Britain, the expansion of the American public service was also contemporaneous to the expansion of the universities, which means that the state did not need to rely on specialized institutions. (as in continental Europe)

individual skills, without much regard to whether they were acquired outside or inside the organization.' (1993, p263; also see Hecllo, 1984, p11) This situation means that occupational identification among civil servants is often firmly rooted in their respective professions, as opposed to their 'public' status.

As pointed out earlier, the boundaries of the public bureaucracy in its present form were forged in the progressive period through a struggle against the prevalence of the spoils system, whereby political parties had an institutionalized access to administrative positions. This political impasse was resolved through two fundamental historical developments, both of which prevented the civil service from acquiring a great deal of independence. On the one hand, provisions were made to isolate the regular civil service from politics, which resulted in its de facto close association with executive (rather than legislative) authority. On the other hand, the continuous strength of political parties meant that some political influence was going to be maintained at the center. Thus while the civil service reform succeeded in cutting lower bureaucratic positions off from political influences, patronage continued to operate at the top, and to fill up important policy-making positions (a situation often described as the 'spoils system'). To this day politically controlled appointments still represent about 10% of all senior executive service positions. (Hecllo, 1984, p14)

#### The fragmentation of political and administrative institutions

The tripartite political structure, which was devised by the architects of the American Constitution, explicitly sought to avoid the concentration of power within any one particular office. At the same time, as Huntington points out, the division of power between different institutions balancing each other was not accompanied by a firm

differentiation of functions. Rather, each office ended up mixing the various functions of government: 'All major institutions of the American government –the President, Supreme Court, House, Senate, and their state counterparts—combine in varying degrees (legal and political) functions'. (Huntington, 1968, p114) This institutional situation produced a structure where political authority is diffused not only among the many branches of government, but also within each branch. Responsibilities for policy innovation, initiation, and implementation are thus dispersed among a large number of administrative and political agencies. As we will see, this is especially true in the realm of economic policy where various offices in the Cabinet, or different congressional committees, can perform similar and overlapping tasks.

The expansion of federal bureaucratic capabilities during the twentieth century contributed to reinforce the dispersion of the administrative structure. Executive and independent federal agencies were created in a piecemeal fashion, often as a pragmatic response to emergent problems. For instance, a first wave of institutional innovation took place during the presidency of T. Roosevelt, with the creation of the 'technical bureaus', many of which had jurisdiction on economic affairs. The Department of Commerce, created in 1903, comprised a 'Bureau of Corporations'; other examples include a permanent Bureau of Census (1902), a reformed Interstate Commerce Commission with enlarged powers... Subsequent presidents, notably Wilson and later F. D. Roosevelt, successfully relied on similar organizational arrangements. (Silberman, 1993, p275-276) The 'late' progressive era also saw the creation of the Federal Reserve Board (1913), the Federal Trade Commission (1914) and the Bureau of the Budget (1921). (Nelson, 1987, p53). The New Deal and World War II also witnessed important institutional innovations,

some of which survived until the present day (e.g. the Tennessee Valley Authority, the Securities and Exchange Commission).

Administrative offices work in close connection with economic, political and social groups in civil society. Distinctive features of the American political system –the separation and struggle between the executive and the legislative, the fragmented committee and subcommittee structure in the Congress, the balkanization of the executive bureaucracy, and the importance of political appointments (Smith, 1989, 1991)– have created a pluralistic and permeable institutional structure, which encourages the institutionalized incorporation of outside influences and pressures. As a result, Washington is filled with a large non-governmental policy industry of ‘public careerists’ who alternate between positions within and outside of government. In fact, it is quite striking to remark that such experts (for instance in large public policy organizations such as Brookings) often consider themselves part of the formal structure of government. As Kingdon remarks, ‘the line between the inside and the outside of government is extremely difficult to draw’.<sup>44</sup> The government’s routine reliance on this large stock of ‘in and outers’, who escape the rules of the merit system while not being directly affiliated with political interests, (Heclo, 1988) thus constitutes another important avenue of permeation of the federal bureaucracy by outside influences.

#### Institutions for economic management

Contrary to political traditions in parliamentary systems where the cabinet is typically made up of elected politicians, cabinet members in the United States are

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<sup>44</sup> See 1995, Chapter 3.

'selected by the President to act as department managers and advisers.' (Feldstein, 1992, p1224) Central executive institutions (especially those surrounding the presidency) are the province of what Heclo calls an 'informal political technocracy' (1984, p10), which is usually not drawn from the ranks of the senior public service, but instead from various institutions in civil society. Many commentators have noted the important presence of business people among government officials, especially high-ranking ones. (see for instance Birnbaum and Badie, 1984) Table 2.1., which traces the professional background of American Secretaries of the Treasury since 1921, makes this point particularly clear.

Political authority in the making of economic policy is diffused between the Presidency and Congress, the Federal Reserve conserving its 'relative' autonomy in the determination of monetary policy. Each branch of government possesses its own institutions to articulate policy, yet no particular agency finds itself in a position to monopolize power. In the executive branch, responsibilities in the macroeconomic domain are divided chiefly between the Office of Management and Budget, the Department of the Treasury, and the Council of Economic Advisers (which contrasts with most other countries where such offices are usually subsumed under the authority of a Ministry of Finance). As a result, 'coordination' between these various departments has been a recurring theme in economic policy-making. Successive administrations have thus been lead to establish formal organizations and mechanisms at the interdepartmental level in order to articulate consultation among these three agencies and produce some degree

of consensus.<sup>45</sup> For instance, economic forecasts are produced jointly by the 'troika' (as the trio is commonly referred to), although they are formally released by the Council of Economic Advisers. The legislative branch, on the other hand, possesses a large number of committees with jurisdiction on economic issues,<sup>46</sup> as well as a central economic staff in the form of the Congressional Budget Office (since 1974). The apparatus for economic policy thus reflects the general fragmentation of the American governmental structure.

Historically, the strength and authority of each of the three main executive agencies (plus the Federal Reserve) on policy has been quite variable, and has often depended on the personality of their most senior officials, the latter's' political skills, as well as on the political climate and general condition of the economy. The Council of Economic Advisers, for instance, was a particularly prominent institution under the Kennedy and Johnson administrations, chiefly because of the remarkable ability of its chairman, Walter Heller, to communicate on economic issues, and his close personal relationship to the president. (Schultze, 1996) A similar statement may characterize the tenure of John Connally (1971-72) or, more recently, Robert Rubin (1995-1999), at the Treasury department. On the other hand, political factors –for instance the distribution of

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<sup>45</sup> E.g. the Advisory Board on Economic Growth and Stability under Eisenhower; the Cabinet Committee on Economic Policy under Nixon; the Economic Policy Group under Carter; the Cabinet Council on Economic Affairs under Reagan; the National Economic Council since 1993. (Parallel institutions have also existed for the formulation of foreign economic policy.) (Porter, 1983) The National Economic Council, created by Clinton in 1993, represents a landmark in its attempt to constitute an analog to the National Security Council in the economic domain. In contrast to its predecessors which relied only on the heads of the main departments, the NEC also possesses a distinct staff and chair, is supposed to enjoy a closer access to the President than any of the departmental agencies, as well as to formally coordinate economic advice to him. (Interviews)

<sup>46</sup> The most important of these in the economic domain are the House Ways and Means Committee; the Senate Finance Committee; the Joint Economic Committee.



political power between the executive and legislative branches— have an important effect on the relative influence of various economic policy agencies. A situation of partisan competition between Congress and the Presidency will thus diminish the leverage of executive departments, while a situation of cooperation will enhance it. Finally, the immediate economic situation also participates in the constant redefinition of the role and relative prominence of institutions. Thus the magnitude of budget deficits during the Reagan and Bush years *de facto* placed the OMB in an unusually powerful position regarding economic policy-making. Likewise, the shift of emphasis from full employment to price stability as a policy goal, which took place at the beginning of the 1980s, has contributed to bring monetary policy and hence the Federal Reserve Board to the foreground.

### **Patterns of Economic Organization: Markets and the Law, the Law of Markets**

In *comparative terms*, the United States represents the country where the free-enterprise system seems to rule with the greatest ease. A prominent economist recently said that ‘the American way is arguably the closest thing to textbook capitalism in any major country.’ (Blinder, 1999) The idea of ‘freedom of enterprise’ is not only deeply engrained in American culture, but also bears a truly moral dimension there, legitimated by a Puritan tradition which valorizes individual effort and personal initiative.<sup>47</sup> (Hollingsworth, 1996, p180-181) In addition, because of the failure of socialist movements in American history, intellectual challenges to capitalism have been few compared to other countries.

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<sup>47</sup> See G. Wilson, 1990, p39-66, ‘Business and Politics in the USA’.

Yet as many scholars have noted, the early industrial development of the United States was shaped in important ways by quasi-public corporations, which were formed by local and state governments eager to encourage economic growth in their region. This public pattern was especially common, for instance, in the infrastructure and transportation sectors (e.g. turnpikes, canals, and, albeit to a lesser extent, railroads). By the 1840s and 1850s, however, corruption attacks on these public agencies had lead most American governments to retreat from economic activism and to privatize most public corporations, giving way to the private markets pattern which now still characterizes the country's industrial structure. In this policy reversal, emergent private firms, especially large ones, received considerable privileges in order to fulfill their role as 'engines of growth'.

**'No other country in the modern world ever granted such princely favors to private business to foster the rapid growth of industry as did the United States in the nineteenth century. Witness the general land policy, grants to railroad and bounties to other private enterprises, special favors in taxation, corporate privileges conferring public rights and functions upon banks and other undertakings, and the most general and generous eleemosynary tariff ever known. This complex system of public favors to private industry was in full force by 1870 before there was any considerable body of economic doctrine developed on our soil.'** (Fetter, 1925, p18)

At the same time, the advantageous conditions enjoyed by large businesses raised fears of concentration of power in the hands of the 'winners' of the free market game. Under public pressure, late-nineteenth century governments established a series of regulatory institutions (e.g. the Interstate Commerce Commission, the Federal Trade Commission) and a legal apparatus (the anti-trust legislation) designed to enforce competition and prevent unfair trade practices. (Dobbin, 1994, 1995; Roy, 1997) This public philosophy, from the landmark decision to break-up the Standard Oil Company in

1911 to the recent case against Microsoft, has inspired governmental action towards business throughout the twentieth century.

The remarks above lead us to emphasize an important point about the nature of the role of the American State in the economy. This role, in Shonfield's words, is that of a 'referee', an arbiter and 'protector' of the market, rather than that of an active manager. (1965, p330) As Dobbin has shown, the industrial culture which developed around the turn of the century, and which has remained the dominant paradigm to the present day, came to regard markets and private business as the best mechanism for promoting economic growth and efficiency –provided that the rules of the game were not thwarted by abusive trade practices. In order to prevent the emergence of the latter, the state may actually go at great lengths in defining detailed regulatory policies. Campbell and Lindberg, for instance, point out that the American State has had a powerful influence on economic governance and industrial structure through its manipulation of property rights. (1990)

This is not to say that the United States has only known 'regulatory' as opposed to more authoritarian forms of political control over the economy. After all, the United States was one of the first countries to experience with price controls and rationing during the New Deal.<sup>48</sup> National economic planning was explicitly embraced during the war,<sup>49</sup> and 'industrial policy' was seriously debated during the late 1970s-early 1980s as a valid means of governance, at a time when public trust in corporate America was at an all-time

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<sup>48</sup> Office of Price Administration, set up in 1933.

<sup>49</sup> National Resources Planning Board, est. 1939.

low.<sup>50</sup> Also, the United States *does* have quasi-corporatist arrangements in certain key areas (agriculture, housing, defense, space). (Vogel, 1996a) It remains true, however, that such aspects of economic management have taken very peculiar forms, which place the United States apart from most other industrialized countries. As Dobbin (1992, 1994) has shown, American agencies have generally rejected state oversight of management as a means to promote the development of specific sectors, in favor of other mechanisms, such as the systematic encouragement of competition and market entry. Utilities such as water, electricity, for instance, have indeed long been private in the United States, in contrast to Europe. Social security has always remained partly private. And health care, as well as parts of the educational sector, has been privatized, which has not occurred elsewhere.<sup>51</sup>

## **Economic Knowledge Production in the United States**

### **“Professional scientism” in American Economics**

The United States has been generally recognized as a country, whose decentralized and democratic polity structure encourages a great deal of formal organizing (Tocqueville, 1945), including in the professional domain. And indeed American economics, though extremely large as a community, is also bound by well-established mechanisms of professional recognition and identification. Also, because the control of jurisdictions in the United States typically results from market processes.

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<sup>50</sup> See Vogel, 1996b. See for instance Sidney Blumenthal, ‘Drafting a Democratic Industrial Plan’, *New York Times*, August 28, 1983.

<sup>51</sup> Blinder, 1999.

(rather than from centralized certification, by the state for instance), there is a tendency for academic knowledge to specialize around narrowly defined niches and serve legitimating purposes for the establishment and expansion of jurisdictional claims in a competitive environment. (Abbott, 1988) This feature is especially striking when we consider the more 'generalist' orientation of, for instance, French University economics.

### **The American University and the Rise of Economics**

In the United States, academic economics emerged, like in Britain, out of moral philosophy and history. Yet much more than in England, curricula in pre-Civil War America were 'still dominated by theology' and economics was merely regarded as a minor branch of moral philosophy. (Dorfman, 1946b, p512) Teaching in political economy had been introduced starting in 1817<sup>52</sup> in the Northeastern colleges, but it was controlled by clergymen until almost the end of the nineteenth century. The first economics textbooks published in America were also written by clerics,<sup>53</sup> and as such they were deeply reflective of these religious ties. Capitalist activities and the laws of political economy were thought to be in harmony with the laws of God and to enter the larger purpose of moral elevation. (Coats, 1993b, p349; O'Connor, 1944, p106; Barber, 1993)

American economic discourse in the middle of the nineteenth century was fragmented and certainly not united around a fairly homogeneous intellectual scheme.

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<sup>52</sup> 1817: Harvard; 1818: Columbia; 1819: Princeton... (O'Connor, 1944, p100)

<sup>53</sup>E.g. Reverend John McVickar, 1825, *Outlines of Political Economy*; Reverend Francis Weyland, 1837, *Elements of Political Economy*. (principal economics textbook used in the Northeast from 1837 to the 1860s) (O'Connor, 1944, p214)

like the British one was starting to be. Homegrown theory was virtually non-existent. The small size and geographical dispersion of American colleges was certainly the major factor in this localism and 'sectionalism' of American academic culture, in economics as in every other field. (Barber, 1993, p9) The absence of local advanced training led many Americans in the 1850s-1880s to get a doctoral education in Germany, where they were exposed to both the historicist stream thought prevalent in German economics then, and a model of academic training centered around the research seminar. Upon their return to the United States, these 'economists' became actively involved in the reform of the higher education context and in the organization of the field of political economy. The incorporation of the 'new' discipline of economics into the recently created universities and graduate schools (like that of the other 'modern' subjects that were to become the social sciences) thus became a quite natural move.

A second feature of this early nineteenth century model was the absence of specialization in the practice of economics. Until the 1880s, discourse on economic issues was understood to be the domain of on the one hand, traditional professional specialties in search for modernization, such as lawyers, doctors, and educators, and, on the other hand, businessmen looking for social prestige and recognition. (Haskell, 1977, p109) Organized social-scientific thought in America was dominated by the American Social Science Association (ASSA), formed in 1865 'by a group of New England gentlemen educators and men of affairs who wished to study and find solutions to various social problems'. (Coats, 1993b, p353)

With the rise of the research-oriented university in the last quarter of the century, this model of knowledge organization came to face the growing challenge of the younger

generations of practitioners who were operating from purely academic bases, and it began to decay rapidly. In contrast to their European counterparts whose elite situation was a 'given', grounded in history, class, and (for continental Europe) state patronage, American university professors had to conquer their own legitimacy and social standing in a culture that had never been strongly deferential to intellectual authority (Hofstadter, 1963), and they relied on professionalization in order to accomplish that goal. The specialization of disciplines and fields took place earlier than in Europe, and was pushed to a greater extent.

The number of specialized teaching posts in political economy expanded rapidly, from three chairs in 1880 to fifty-one in 1900. (Coats, 1993b, p345) The creation of specialized disciplinary associations such as the American Historical Association (1884) and the American Economic Association (1885), from a split of the ASSA, marked the growing influence of a new 'professorial' elite based in the occupational framework of the universities and the advent of a different, more scholarly, approach to the nature and role of the social sciences. While still retaining the reform orientation of the ASSA (a point which I discuss at some length later), these new organizations were also strongly committed to 'giving institutional structure to a community of inquiry that was rooted deeply in the academic world.' (Haskell, 1977, p183) The yearly meetings of the American Economic Association soon provided a forum for the discussion of academic papers. Professional publications, often linked to particular universities, followed almost immediately: in 1886, Charles Dunbar at Harvard launched the *Quarterly Journal of Economics* and in 1892, John Laughlin at Chicago founded the *Journal of Political*

*Economy*. In 1911, the American Economic Association started an in-house journal, the *American Economic Review*.

### **Economics and the Higher Education Context: Trends and Structure**

The expansion of the university system thus created an opening for the rapid institutionalization of economics in the United States and its transformation into a full blown scholarly enterprise. A similar situation played out in Britain with the establishment of the London School of Economics and the commercial faculties at Birmingham and Manchester. Yet in England, the existence of an already entrenched institutional hierarchy dominated by Oxbridge, and the narrow character of the higher educational niche altogether, meant that the discipline still had to fight its way against established academic guilds and colleges in order to win its position. By contrast, in the American context the social sciences were at the vanguard of the higher educational revolution, and were thought to embody the highest moral purpose on which the new institutions claimed to be built. University leaders (both presidents and boards) often favored the social scientific disciplines as ‘secular substitutes for religion’, and saw in them a form of continuation from the old courses in moral philosophy.<sup>54</sup> They regarded social scientists as the agents of moral progress, who would provide leadership for the solution of social problems and serve to establish the reputation of their institution.<sup>55</sup>

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<sup>54</sup> Reuben, 1996, p176; also see Smith, 1994, Chapter 1 ‘American Social Science: Moralism and Scientific Method’.

<sup>55</sup> Reuber, 1996, p157-167.



The close identification, in the American case, between university expansion and the social sciences constitutes a somewhat unique situation, which differs markedly from other countries, most prominently France. There, academic economics remained somewhat marginal to the core of the higher education system until well into the twentieth century and economists still do not hold particularly powerful positions, either within the *grandes écoles* or at the university. In the United States by contrast, social-scientific fields have constituted a substantial portion of the material basis of the university throughout the twentieth century, and represent large concentrations of students, especially within elite institutions.

Recent data provide an assessment about the persistence of such trends in the current period. Figure 2-1 reports the evolution of the number of bachelor's degrees in economics granted by American universities since World War II, in comparison with the same statistics for the neighboring fields of sociology and political science. These data show that economics represents an important field of concentration and has grown at a rapid rate since the mid-1960s –except during the 1970s when the outbreak of college radicalism and anti-war activism seems to have drawn students' interests away from a topic regarded as 'an apologia of *status quo* capitalism' and Third World oppression. (Barber, 1998, p109)<sup>56</sup> Furthermore, its presence in modern higher education remains more pervasive than these statistics suggest, due to the general incorporation of economic

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<sup>56</sup> As a result, the expansion of economics after 1945 does not match the general rate of expansion of higher education: among the social sciences, politics is the only one to have done so.

courses in the core curriculum of vocationally-oriented degrees (e.g. business, social science, public policy).<sup>57</sup>

A second noteworthy point is that the place of economics has tended to be much greater at elite institutions throughout the century. In 1926, the economics department represented the largest group of majors at Stanford, the second largest at Harvard and Berkeley, and the third largest at Yale. (Reuben, 1996, p209) A rapid survey of several major universities confirms this pattern for the current period. For instance, at Harvard, the number of economics concentrators tops that of political science ones, and represents over 11% of undergraduate degrees awarded each year. Recent evolutions at Princeton are similar.<sup>58</sup>

### **Credentialism, Gate-keeping, and the Identity of the American Economics Profession**

Elite establishments occupy a central place in the regulation and the reproduction of the academic field in economics. Historically, the level of involvement of American

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<sup>57</sup> A Brookings report from 1951 for instance already stated that:

'roughly 25% of the students in American universities, colleges, and professional schools take one or more courses in economics.' (McKee and Moulton, 1951, p15-16)

<sup>58</sup> These numbers contrast with national percentages of less than 2%. (Source: National Science Foundation) There seems to have been an especially rapid expansion of the percentage of economics majors at Harvard and Princeton during the second part of the 1990s, fueled by the performance of the stock market and the attraction exerted by Wall Street. At Harvard, for instance, the percentage of economics concentrators oscillates between 9.5 and 12.5% of each year's class since 1982. (data could not be obtained for prior dates) At Princeton, the number of undergraduates obtaining a degree in economics went from 7% in 1995 (a proportion which had remained relatively stable since the late 1960s) to over 11% in 1991. (Sources: Harvard University and Princeton University, Office of the Registrar)

economists with such institutions has always been high. As we have seen earlier, economists were at the vanguard of the transformation of American universities at the end of the nineteenth century, and often actively sponsored the establishment of graduate schools. They were also at the forefront of the movement to establish the American Association of University Professors in the early part of the twentieth century. (Coats, 1985) Today, economists constitute one of the professions best integrated into the general framework of the university, having successfully institutionalized their presence outside the boundaries of economics departments (e.g. in business schools, law schools, schools of public policy) as well as among the population of university administrators (presidents and deans).

The close association between the identity of the economics profession and the credentializing power of elite universities is also evident in the central role played by the Ph.D.<sup>59</sup> Lacking formal gate-keeping criteria, or the possibility, natural in a small academic context such as the British one, to rely effectively on a more informally constructed sense of worth, American economists started early on to use the Ph.D. as a marker of professional identity. The Ph.D. has traditionally played an important role in American professionalism, due to the fact that access to lower degrees is much greater than in other countries (and thus insufficient to express boundaries between the 'real' experts and 'lay' persons). But even with that structural feature of the higher education system in mind, economics departments still deliver a greater proportion of Ph.Ds than any other social scientific field -and this feature has remained consistent through the

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<sup>59</sup> During the 1930s, there were a number of proposals to restrict AEA membership to 'properly qualified' members (Ph.Ds). Coats, 1985, p1709.

after-war. (Figure 2-2)<sup>60</sup> Naturally, the place of the doctorate at the center of professional definitions and identifications is also part of the mechanisms, which concentrate institutional power among the narrow group of elite institutions.<sup>61</sup> The top 20 universities do half the Ph.D. production in this field (out of 120 Ph.D.-granting institutions). (Gumport, 1993b, p273)

Not only statistics, but also narratives (both written and oral) by actors confirm the centrality of the economics doctorate to the professional identity of the 'economist'.<sup>62</sup> Below is an interesting and rather bitter statement by the second chairman of the Council of Economic Advisers, Leon Keyserling, whose 'legendary' war with academia has been often narrated. (Collins, 1990, p159) He attributed his unhappy relationship with academic economists to his lack of doctoral credentials:

'Prior to 1933, I had majored in economics as an undergraduate at Columbia, returned there for two years of graduate economics study after graduating from law school, served in the Economics Department there, and participated in the writing of an economics text. From 1933 to 1946, I had been more creatively and actively engaged in the forging and administration of important national economic policies and programs than any other economist, in addition to speaking and writing very widely on these subjects. Despite all this, the general viewpoint among the so-called professional economists was that I was unqualified for CEA membership because I had not completed the essay requirements for a Ph.D.! If, instead of coming to Washington in 1933, I had completed these requirements, taught a course or two during these years, and written a few of the entirely useless (for practical purposes) types of econometric articles which

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<sup>60</sup> National Science Foundations figures for the Master's (not included here) show, correspondingly, a very limited role for this type of degree in economics (it constitutes, by contrast, the 'professional trademark' of political scientists).

<sup>61</sup> The long institutional dominance of Harvard, for instance, was partly related to the strength of its graduate program, which at times has been turning over 50 Ph.D. graduates a year. (Bowen, 1953) Between 1920 and 1961, only 10 departments in the United States produced 56% of all doctorates in economics. (Whitley, 1986; Coats, 1992)

<sup>62</sup> See for instance the quote at the onset of the present chapter.

usually appear in the *American Economic Review*, the so-called professionals would have deemed me entirely qualified.' (Keyserling, letter to H. Norton, 1971, cited in Norton, 1977, p115)<sup>63</sup>

On the other side of this debate, the professional elite rooted in the top universities plays an important gate-keeping role in order to maintain the centrality of credentials. In contrast to England where the Ph.D. has historically been a rather weak marker of professional abilities -both inside and outside of academia-, and to France where the clear boundaries between academic, public sector and private sector career tracks are well defined, doctoral credentials in the United States perform an explicit function in the regulation of the general labor market for economists. Thus the annual convention of the *American Economics Association*, where new generations of Ph.D. graduates annually 'sell' their skills to potential buyers, constitutes an intricate job fair, which attracts a large variety of employers from the public and the private sectors.

On the other hand, the preeminence of narrowly specialized notions of intellectual competence in American society, which deny 'laymen' the ability to produce authoritative economic discourse, also reinforce the importance of such educational markers. Naturally such boundaries are not natural, and are perpetually under construction. The early years of the Reagan administration, for instance, witnessed a reinforcement of liminal activity on the part of academics, as economic discourse and issues became heavily politicized. For the past ten years, the public activism of Paul Krugman (holder of the Clark medal -one of the highest distinctions in the field- but also one of a few academics to write for a general audience) has provided an influential

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<sup>63</sup> Keyserling was a student of Rexford Tugwell, the prominent institutionalist economist and New Deal adviser, at Columbia, and remained throughout his life suspicious of orthodox economic theory. (ibid.)

example of such gate-keeping work. In successive articles, books, and opinion pieces, he has repeatedly denounced the legitimacy of people without academic credentials and more precisely, of 'political entrepreneurs' and 'pseudo-economists' who are not conversant with advanced mathematics, to speak seriously on economic issues (in his case, trade policy).<sup>64</sup>

'On one side there are those, whose views are informed by academic economics, the kind of stuff that is taught in textbooks. On the other there are people like Kuttner, Jeff Faux of the Economic Policy Institute<sup>65</sup> and Labor Secretary Robert Reich. Some members of this faction have held university appointments. But most of them lack academic credentials, and, more importantly, they are basically hostile to the kind of economics on which such credentials are based. (...)

There are important ideas in (economics) that can be expressed in plain English, and there are plenty of fools doing fancy mathematical models. But there are other important ideas that are crystal clear if you can stand algebra, and very difficult to grasp if you can't.' (Krugman, 1996)

### The Research Economy in American Economics

In comparative terms, the material and funding basis for social and economic research in the United States appears both very large and inherently fragmented between organizations and agencies with a wide variety of purposes and institutional statuses. While the university constitutes the 'core' of the research system, a significant amount of activity also takes place in government departments (most prominently among the banks of the Federal Reserve System), in public policy research institutes, in commercial ventures or in private financial institutions. Second, support for academic research, even

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<sup>64</sup> See for instance Krugman, 1994, 1998. Also see the debate with James Kenneth Galbraith, started with the article 'Economic Culture Wars' (Krugman, October 24, 1996) on the electronic magazine *Slate* ([www.slate.com](http://www.slate.com)); the debate with Robert Kuttner after the article 'Peddling Krugman' (Kuttner, *The American Prospect*, No 28, September-October 1996).

<sup>65</sup> A left-wing think tank, created in 1986. (see Figure 2-6.)

that performed in the universities, is also dispersed across a wide variety of funding sources.

### **Structure and general trends**

As pointed out earlier, the research economy has undergone tremendous changes in the course of the twentieth century, most prominently due to the post-1945 involvement of the federal government. Before World War I, research in American economics was almost exclusively a by-product of the professorial function, confined essentially to the realm of the university. Specialized research organizations, independent from the universities, emerged during the 1920s, and as an institutional form were closely associated with private philanthropic foundations. Much of what we would regard today as research activities geared toward the production of factual economic knowledge, associating closely economic and statistical activities, and often providing a linkage between academic 'science' and public audiences, constitutes an innovation of the inter-war years. Many institutions created during this period still survive to this day in a vastly expanded form. For the most part, they originated in the frustrations of the academic community, the 'enlightened' public (e.g. philanthropic foundations) and potential users (in government and business) in the face of the deficiencies of official statistical systems, in the positivist belief that the knowledge of economic and social facts was a precondition to societal progress, and in the growing assertion of economics in scientific terms.

The greatest support for applied research ventures in the social sciences during the inter-war came from capitalist foundations. The Carnegie Corporation and the Laura

Spelman Rockefeller Memorial<sup>66</sup> played an especially critical role in the launching of research programs and organizations concerned with the production of social-scientific knowledge. In 1916 William Willoughby, a Princeton Professor, started the Institute for Government Research –one of three organizations that were later consolidated into the Brookings Institution–<sup>67</sup> with the aim to bring to Washington economic studies and data relevant for the government. (Saunders, 1966; Lyons, 1969) In 1920, Columbia professor W.C. Mitchell presided over the founding of the National Bureau of Economic Research (hereafter NBER), a fact-finding body whose attention was concentrated on the study of the business cycle. (Fabricant, *no date*)

Philanthropic patrons, including a number of newcomers in economics (the Ford foundation and the Sloan foundation for instance) continued to operate in the post-World War II period. (Leonard, 1991) However, their contribution to social scientific research support was rapidly dwarfed by the massive entry of the federal government into the research economy, notably after the National Science Foundation started providing for the social sciences in 1958. Furthermore, the diffusion of the practice of research contracts with individual departments and agencies at the local and federal levels of government also created an expanded public market for social scientific work. (Lyons, 1969) (see table 2-3)

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<sup>66</sup> The Laura Spelman Rockefeller Memorial was absorbed into the Rockefeller foundation in 1929. Its main characteristic was its involvement in the field of the social sciences (with, in particular, the support of the Social Science Research Council from 1924), which built up under the direction of Beardsley Ruml from 1922 to 1929.

<sup>67</sup> With the Institute of Economics (established in 1922 and directed by Harold Moulton, a Chicago Professor) and the Brookings Institute. All three institutions were promoted by the steel magnate Robert Brookings, a businessman who had served in economic agencies during World War I, and financially supported by various foundations (Carnegie, especially). The Brookings Institution *per se* emerged in 1928.



This relationship between the federal government and the social sciences reached its peak during the 1960s and 1970s, in the wake of the post-Sputnik shock and the social programs of the Great Society. It weakened substantially during the 1980s, however, as the new conservative administration, as part of its cost-cutting crusade, launched a general attack against what was perceived as the 'soft' sciences. (Larsen, 1992) Thus while Figure 2-3 shows the continuing importance of federal funds in the financing of social sciences and economics, it also makes their relative decline as a proportion of social scientific research outlays since the 1980s, and the increased involvement of non-federal sources, quite clear.<sup>68</sup>

### **The special position of economics**

In spite of this recent, and relative, contraction of available funds, however, economics was always treated better than other social sciences by its successive patrons. Robinson's data (1983) show that both philanthropic foundations and federal agencies (including the National Science Foundation) have historically lend a stronger support to economic research than other types of social scientific work. (see Table 2-4)

An analysis of recent developments also confirms the relative success of economists to generate and retain support, even in the face of the adverse political climate of the 1980s. Figure 2-4 details the evolution of the financing of economic research by the federal government since 1970 –relative both to all science and engineering fields and to sociology and anthropology–, and shows that the latter has been much more stable over time than that of neighboring social scientific disciplines. The

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<sup>68</sup> Unfortunately, more detailed information about such sources could not be obtained.

general decline in resources after 1980, already mentioned,<sup>69</sup> appears much less pronounced in economics than in, for instance, sociology, (whose share of all federal social-scientific research expenses drops from about 33% during the first half of the 1970s to less than 4% in 1997). By and large this relative difference in treatment is attributable to important changes in the political situation, such as the retreat from the social programs and commitments which had brought these disciplines to the fore in the first place, and their replacement by more strictly economic concerns. It is also likely, however, that the rhetorical style and unified methodology of economics have made it less vulnerable to political whims than that of neighboring social scientific disciplines. Below I examine the processes whereby such a style and methodology institutionalized historically in the American context.

### **Institutions of Economic Knowledge Production and the Shaping of Intellectual Boundaries**

My discussion about the intellectual nature of American economics during the twentieth century is articulated around the analysis of two main sets of events: (1) the rise and fall of the institutionalist 'approach', and (2) the establishment of mathematical methods at the core of academic production in the field. The second of these historical developments has been widely commented upon and is probably best known. The production of scientific discourse in post-World War II American economics, indeed, has mainly taken the form of mathematical sophistication (in both applied and theoretical

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<sup>69</sup> In real terms: In constant dollars outlays for economic research actually increase throughout the period, except for the years 1981-1986.

domains), and established a methodological orthodoxy around the accepted routine of model building and empirical test.

These modern day considerations, however, should not obliterate the fact that American economic knowledge in the nineteenth century and up until World War II was rather eclectic, and also quite different from the current concentration on mathematical virtuosity. It suffices to glance at the leading textbooks of the 1920s and 1930s, for instance Ely's *Outlines of Economics* or Slichter's *Modern Economic Society*<sup>70</sup>, to be struck by their strongly descriptive tone, their avoidance of theory and mathematical formulations –and hence to measure the distance which separates these works from Samuelson's *Economics*, published shortly after the war. (Yet even Samuelson's textbook appears amazingly 'literary' compared to its modern-day descendents)

The long survival (compared to England, in particular) and ultimate demise of an 'institutionalist' approach to the study of the economy constitutes certainly the second major intellectual fact in American economics in the twentieth century, and is certainly worth reflecting upon at length. Most commentators interpret this historical episode in purely intellectual terms and attribute the replacement of institutionalism by the neo-classical synthesis as the result of an inexorable movement towards abstraction and scientific formulation, which started with the widespread diffusion of marginalism in the 1890s.<sup>71</sup> Such explanations in terms of 'cumulative progress' of science attribute the

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<sup>70</sup> Both were among the major undergraduate textbooks of the period. Ely's book was first edited in 1893 and reedited continuously throughout the interwar. Sumner's text first came out in 1928, and was very successful in the 1930s. For instance, Solow (1998) attests of its use at Harvard in the early 1940s.

<sup>71</sup> Goodwin dates the widespread acceptance of marginalism in the United States from the publication of Irving Fisher's *Mathematical Investigations in the Theory of Value and Prices* in 1892. (1972, p469)

failure of institutionalism to its lack of theoretical strength, and its inability to provide a unifying paradigm (at least to the same extent that marginalism precisely did that).

There is much reason to think, however, that when considering these two intellectual developments, we should pay attention to institutional factors along with intellectual ones. We must put the substantive nature of American disciplinary economics in relation to major features of academic organization in this country, which I have tried to describe in the preceding pages. Of particular relevance are the relative susceptibility of academic communities to pressures from external constituencies (both in the research economy and in the larger society), and the competitive nature of the academic environment.

### **The 'Positive' Character of American Institutionalism**

American economics at the turn of the century was a very diverse intellectual field, shaped by a variety of European influences, and by a decentralized university system. A regional pattern of thought was obvious, with the West being the stronghold of German influence, here labeled 'institutionalism' because of its interest in economic 'institutions', and the Northeast being closer to the British, Marshallian, tradition of neoclassical economics. I have already discussed the entrenchment of an 'institutionalist' tradition in American economics as a direct consequence of mid- to late-nineteenth century flows of American students into German universities. (Herbst, 1965) During the first part of the twentieth century, these intellectual divisions were explicitly entrenched in specific establishments, with institutionalist centers at Wisconsin (around John R.

Commons, Edwin Witte and Selig Perlman) and later Columbia (around Wesley C. Mitchell and Arthur Burns), and neoclassical power bases at Harvard and Chicago.<sup>72</sup>

American institutionalist thought brought together a fairly diverse crowd of practitioners. For many commentators, institutionalism was more an 'attitude' towards economic research than an actual 'paradigm',<sup>73</sup> its principal intellectual characteristic being an a-theoretical approach to the study of the economy and a faith in government policy and institutional reform as a way to engineer social transformation. (Biddle, 1998, p113-114, Witte, 1957)

In comparative perspective, however, it is interesting to discuss two other intellectual characteristics of institutionalism as it established itself in the United States in the first part of the twentieth century. First, while the American movement shared with its German precursor a taste for induction and the close observation of facts, it differed quite substantially from it (and to a certain extent from the English historical school as well) in the importance it came to give to history. As Ross remarked, by the 1920s, one of the school's 'striking features was that, for the most part it did not study institutions and thus did not fully engage with history'. (1979, p417) Rather, American institutionalism (especially in its later versions at the National Bureau of Economic Research) remains more closely associated with quantification and statistical research than with historical work. One of the movement's main figures during the inter-war, W. C. Mitchell, sought first and foremost to identify empirical regularities through the close observation of facts.

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<sup>72</sup> This, however, does not mean that there was not a certain amount of overlap between all of these departments. Each of them exhibited a degree of internal diversity and included members of the other 'camp'. See Reder, 1982, on the presence of an important institutionalist contingent at the University of Chicago during the inter-war.

<sup>73</sup> See Yonay, 1998, p196-222 for an assessment.

(Smith, 1994) Among the nine 'institutionalist' presidents of the American Economic Association named by Yonay, several are famous for their contribution to issues of measurement and quantitative economics (Mitchell, Kuznets, Copeland, Burns).<sup>74</sup>

Another notable trait is that the boundaries between institutionalism and neoclassicism were far from clear-cut, especially during the inter-war. For instance, in an attempt to reconcile their scientific aspirations with their awareness of social change, a fair number of people found themselves in a position of intellectual compromise between both approaches: of the earlier generations, many 'liberal historicists' (such as Seligman) also embraced marginalism.<sup>75</sup> Later periods saw some spectacular conversions of 'institutionalists' to neoclassical orthodoxy (such as that of J.B. Clark), not to mention the latter's son's –J.M. Clark– public acknowledgement of the necessity to compromise between both approaches.<sup>76</sup> And Yonay has shown that in their exchange with neoclassical economics during the interwar, many American 'institutionalists' were careful to use a scientific rhetoric and to present themselves as the true heirs of... Alfred Marshall. (1994)

Pluralism, or the coexistence, if not subtle articulation, between institutionalist and more orthodox analytical frameworks, rather than their irreconcilable opposition, thus seems to have characterized the intellectual realm of American economics during the

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<sup>74</sup> Yonay's list includes: Wesley Clair Mitchell (1925), John Maurice Clark (1936), Simon Kuznets (1955), C.B. Hoover (1954), Morris Copeland (1957), George Stocking (1959), Arthur Burns (1958), Joseph Spengler (1966), John Kenneth Galbraith (1973) and Robert Aaron Gordon (1976). (1998, p57-58) He could also have included Edwin Witte (1956)

<sup>75</sup> See Ross, 1979, p186-195 on the 'liberal historicists'.

<sup>76</sup> In 1927. Ross, 1990, p417.

inter-war. To the extent that an 'institutionalist school' ever existed as a relatively organized body of thought, then, one of its principal intellectual features was a highly empirical and statistical orientation, whose positivist aspirations were certainly not second to those of neoclassical economics.<sup>77</sup> Both stemmed from the strong belief in the usefulness of economic knowledge for human and societal betterment, and have continued to inform the development of American economics to the present day.

It is perhaps worth pausing a little and reflecting on how this 'positivist' character of American economics came about in the first part of the twentieth century, and on its relationship to the broader social institutions, which then organized the production of economic knowledge. The work of Furer (1975) and Ross (1990) constitutes a convincing demonstration that peculiar social and cultural factors might help explain intellectual evolutions in American social science. They both show how the complex and polarized political context of the late nineteenth century shaped social scientists' intellectual orientations, in particular their progressive distanciation from historical analysis and their evolution towards the acceptance of the neoclassical framework.

In fact, the earlier generations of American economists in the 1880s were a fairly politicized group whose members sought to reform society by mobilizing popular support for their views. Rapid economic growth had brought irreversible changes to American society, most notably the emergence of a large population of impoverished industrial laborers, whose radical actions attracted the sympathy of a number of young historical economists. Under the leadership of Richard T. Ely, the *American Economic Association*

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<sup>77</sup> Yonay (1994), for instance, showed that both approaches tried to draw

adopted at its inaugural meeting a progressive platform whose ambitions were not without resembling the role that its German counterpart, the *Verein für Sozialpolitik*, had meant to play for social policy in its own country –that of an enlightened ‘think tank’ of experts with an avowed social purpose. This reformist philosophy was embodied in the original AEA platform, which read:

1. We regard the state as an agency whose positive assistance is one of the indispensable conditions of human progress
2. We believe that political economy as a science is still in an early stage of development. While we appreciate the work of former economists, we look not so much to speculation as to historical and statistical study of actual conditions of economic life for the satisfactory accomplishment of that development.
3. We hold that the conflict of labor and capital has brought into prominence a vast number of social problems whose solution requires the united effort, each in its own sphere, of the church, of the state, and of science.
4. In the study of the industrial and commercial policy of governments we take no partisan attitude. We believe in a progressive development of economic conditions, which must be met by a corresponding development of legislative policy.<sup>78</sup>

This avowed reformist orientation of the American Economic Association, however, was quite short-lived. By 1888 already, ‘controversial references’ (notably about the role of the state in the economy) had been expounded from its platform, which from then on defined itself in exclusively scientific terms –through a positivist stance rooted in the authority of scholarly activity.<sup>79</sup>

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legitimacy from an analogy of their method with that of successful ‘natural sciences’.

<sup>78</sup> cited in Seligman, 1925, p148-149. Interestingly, one of the major differences is the reference to the role of the church, which was absent from the *Verein*’s platform.

<sup>79</sup> Haskell (1977) argues that the *AEA*’s commitment to reform was always quite superficial and in any case ought to be attributed more to the activism of the



Much has been said about this rapid and comprehensive switch of American economists from 'advocacy' to 'objectivity' (Furner, 1975), or towards a more narrowly professional model.<sup>80</sup> Let us mention some of its main reasons here. First, in contrast to the German *Verein für Sozialpolitik* and even more the French *Société d'Economie Politique*, which represented currents that were dominant, if not hegemonic, in their respective countries (historicism on the one hand, 'libéralisme' on the other), the AEA towards the end of the nineteenth century already regarded itself as an umbrella organization for a diverse and fragmented economics field. In this context, it became rapidly clear that popular education as a strategy to influence public policy confused rather than convinced the ultimate targets of such agitation and that their own internal disagreements publicly exposed appeared quite damaging to the credibility of economists. The scientific and professional stance thus represented a more promising strategy to influence policy (Church, 1975), at the same time that it allowed the AEA to conciliate the variety of opinions of its members.

A second, notable structural feature of academic knowledge production in the United States is its responsibility vis-à-vis a class of administrators, who are themselves accountable to 'external' funders, benefactors, or control instances (e.g. university boards of directors). In her important analysis of the turn-of-the-century 'academic freedom' cases, which saw the dismissal of a number of university professors (and several

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organization's principal architects (e.g. Richard T. Ely) than to a general consensus among the members.

<sup>80</sup> On the role of social scientists in the institutionalization of the authority of the learned, academic, expert, see notably, among many valuable references: Furner, 1975; Ross, 1979; Haskell, 1977; Bledstein, 1976; Manicas, 1991; Bender, 1993.

economists)<sup>81</sup> for their political (i.e. pro-labor) views, Furner (1975) examined the process whereby political activism in the United States came to be represented as incompatible with the academic vocation. Political persecutions against academic social scientists, she argues, drove them to learn the limits of acceptable behavior, that is, to confine their scholarship to 'safe' intellectual ground, and restrict their attitude in society to the 'objective' role of the professional expert. In the case of economics, these pressures encouraged a retreat towards a more narrowly 'scientific' discourse, which protected scholarship from easy vindication. In a context of political incertitude, marginal analysis and technical prowess looked like safe and attractive research strategies to American economists –especially to the younger generations who had to create a position for themselves–.

Pressures *against political involvement and partisanship* constitute one element. Ross (1990), who analyzed the role of funding agencies and institutions in the 1920s, emphasizes a second, but no less important point: institutional pressures *in favor of scientism*, especially after World War I. The vitality of the research economy in the United States has historically relied on a strong cultural assumption, widely shared in society and politics, about the effectiveness of rational knowledge and its potential use for societal betterment.<sup>82</sup> (Bulmer, 1987) During the inter-war, the premise that the objective, impartial knowledge of facts was necessary to the resolution of the social and

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<sup>81</sup> Among them: E. Ross (dismissed from Stanford), J. Commons (who had to temporarily retire from academic life), and H.C. Adams (dismissed from Cornell), Richard Ely (tried at Wisconsin for favoring strikes). (Furner, 1975; Bledstein, 1976, p328)

<sup>82</sup> The roots of this assumption might be traced to the religious spirit, which informed early social scientific enterprises in this country. See Skocpol, 1987, p1-2; Bateman, 1998.

economic problems of an advanced industrial society, was articulated powerfully by philanthropic foundations and their appendices, which also provided it with a broad material base. This research economy sustained an interest in applied, quantitative studies, and fostered a problem-solving, purposive orientation among American social scientists. This imperative of 'relevance' was also reinforced by the close relationship between such organizations and potential users, (in government and business) a point I develop more fully below.<sup>83</sup>

The peculiar nature of the material base of the higher education system and the research economy in the United States has thus had quite important effects on substantive orientations in the field of economics, leading social scientists to tailor their research to fit the interests and methodology that appealed to these external constituencies. Because both systems depended on private money, the external control of funders in search for 'objective', 'relevant', and 'useful' knowledge constituted a puissant incentive for the adoption of quantitative empiricism and the avoidance of political and moral positions. As Smith remarks,

'When the executive committee of the Laura Spellman Rockefeller fund established the official funding policy in 1924, (...) (it) refused to fund organizations concerned with legislation, to become involved in any social or economic reform, to try to influence findings or ever deal directly with researchers, or to fund non-empirical studies. The fund retained this approach throughout its history and in its final report identified its commitment to value neutrality as its greatest legacy.' (1994, p26-27)

Throughout the course of the twentieth century, such external constituencies and audiences have had a profound impact in making political involvement illegitimate, in orienting social and economic knowledge towards scientism, and in rooting the social

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<sup>83</sup> Ross, 1979, p400-401; also see Fisher, 1993; Richardson and Fisher, 1999.

scientists' moral authority and position in society in neutral expertise. Intellectually, an important consequence was the loss of interest in history by those economists who would have seemed most likely to give it serious attention, the institutionalists. As we will see later, the scientific stance also served as a basis for professional assertion in a context of relative lack of autonomy of the intellectual sphere (in contrast to Europe where academic guilds were better established, having been formed in the Middle Ages).

Comparisons with other countries show that without this very particular constellation of arrangements, it is unlikely that the program of a-theoretical, quantitative empiricism would have established itself so gloriously during the inter-war. While its international diffusion was also promoted in many countries through intellectual networks and the foreign activism of U.S. foundations, its relative strength in each national field remained highly dependent on local institutional support. In France, for instance, the quasi-absence of provisions from both private and public sponsors, as well as the lack of empirical skills and interest on the part of university economists, meant that business cycle analysis remained much less conspicuous and sophisticated (except for the isolated work of Simiand).<sup>84</sup> In Germany, by contrast, where an *Institut für Konjunkturforschung* was created in 1925 with subventions from the federal government, important public administrations, and the leading associations of German business, such concerns were at the core of the field.<sup>85</sup>

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<sup>84</sup> See Sauvy, 1984, Vol 2, p369 about the lack of French participation in the production of business cycle analysis.

<sup>85</sup> The *Institut für Konjunkturforschung* (est. 1925) was chaired by Ernest Wagemann, who was not only a respected Professor at the University of Berlin, but also the President of the Federal Statistical Office. A similar pattern could be found in Austria, where an *Österreichsches Institut für Konjunkturforschung* was created in 1926 in Vienna with the support of banks and interest groups. Like its German counterpart, it was

## The Institutionalization of Mathematical Economics

If the institutionalist research program was quite successful during the inter-war, what might explain its progressive loss of ground from the 1930s, and rapid demise after 1945? Yonay's (1998) interpretation emphasizes intellectual factors in the disciplinary development of economics. Institutionalism (as well as traditional neo-classicism), he argues, were both made obsolete by the combined rise of mathematical economics and econometrics, which associated empiricism with the explicit formulation and testing of economic theories.<sup>86</sup> How this transformation came about, however, remains to be explained.

### Enter Econometrics

In the 1930s, the use of mathematics for the advancement of economic analysis was certainly not new to American economists, yet by and large pioneering work in this area had failed to leave an imprint. Among these forerunners, Simon Newcomb was a mathematician whose interest in economics was almost accidental. And Schumpeter notes that the publication of Irving Fisher's *Mathematical Investigations* (1892) 'passed practically unnoticed'. (1954, p873) As noted earlier, while American economics was often quantitative and empirical, it was rarely mathematical. The most important pioneers in this area were all European, notably from France (Léon Walras), England (e.g. Francis

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also directed by eminent professorial figures (F. von Hayek first, then O. Morgenstern, with L. von Mises as President). (Laufenberger, 1937)

<sup>86</sup> In this respect, it is interesting that only a few years earlier, in 1925, Mitchell had foreseen a future where deductive theory and statistical analysis would remain durably disconnected from one another. ('Quantitative Analysis in Economic Theory', Presidential address to the American Economic Association, 1925, *American Economic Review*, Vol. 15(1), p1-12)

Edgeworth, Roy Allen and J.R. Hicks), and Austria. The U.S. academia, however, rapidly filled the gap with Europe. By the 1940s, the 'econometric approach', which identified itself with the use of mathematics as an analytical and theoretical tool, constituted a considerable challenge to the mechanical, descriptive statistical research program of the NBER.<sup>87</sup> This divide was exemplified by the famous 'Measurement without Theory' debate, whereby one of the leaders of the new approach (Koopmans) violently attacked Mitchell and Burns' 1946 volume, *Measuring Business Cycles*, for its failure to provide theoretical grounding to its statistical analyses.<sup>88</sup> (Morgan, 1990)

Broadly speaking, the emergence of the mathematical method for the purpose of economic analysis, and the strengthening of linkages between economists and statisticians took place between the early 1930s (date of the creation of the *Econometric Society* and the Cowles Commission), and the late 1940s. It is quite significant that important organizational innovations and developments in the research economy supported this intellectual evolution.

The econometric revolution itself is largely attributable to the work of the Cowles Commission (later Foundation) for Economic Research. Set up as a private initiative, by a Colorado banker interested in the 'scientific' production of economic forecasts,<sup>89</sup> the Cowles Commission was originally designed to be the financial backer of the newly born

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<sup>87</sup> Originally, the term 'econometric' had a much broader acceptance than its current narrow meaning of statistical testing of data. 'Econometrics' referred to any type of economic analysis involving numbers and/or mathematical figures. After all, Mitchell was elected president of the Econometric Society. (see for instance Fisher, 1941)

<sup>88</sup> Tjalling Koopmans, 'Measurement without theory', *The Review of Economics and Statistics*, Vol 29-3, August 1947.

<sup>89</sup> But significantly, Alfred Cowles had also been a student of the mathematical economist Irving Fisher at Yale (Divisia, 1953)

(in 1930) *Econometric Society*, a quantitatively oriented association of mathematicians, statisticians, and mathematical economists. From the 1930s, the organization progressively made its way into the core of the American academic system, being housed at the University of Chicago (1939-1955), and later at Yale (1955-1982), and played an important 'international' role in the incorporation of mathematically-inclined refugee scholars from continental Europe.<sup>90</sup> During and after the war, it was also incorporated as one of the beneficiaries of foundations' money, (Gilchrist, 1952) and became the main center for the development of large-scale macroeconomic models, as well as programming and general equilibrium theory. (Arrow, 1991)

The importance of the Cowles commission for the mathematical evolution of American economics, and for the nature of the post-war economics profession, cannot be overestimated. As a brief indication, one needs only to mention the fact that one-third of the recipients of the Nobel Prize in economics between 1969 and 1990 had been formally associated with the organization.<sup>91</sup> More importantly, perhaps, the 'econometric' approach provided the basis for a profound restructuring of the research economy, and the entire reconstruction of the 'empirical' industry.

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<sup>90</sup> For instance Austria (Wald, Karl Menger -the mathematician son of the great Austrian economist-, Lange).

<sup>91</sup> Ragnar Frisch (1969), Kenneth Arrow (1972), Tjalling Koopmans (1975), Herbert Simon (1978), Lawrence Klein (1980), James Tobin (1981), Gérard Debreu (1983), Franco Modigliani (1985), Robert Solow (1987), Trygve Haavelmo (1980), Harry Markowitz (1990). Source: Christ, 1952.

**War and Cold War**

In the path towards mathematization, however, a number of other factors deserve mention. The first one is the coincidental occurrence of the Keynesian revolution, which as an analytical framework focused on 'aggregate variables', lent itself quite naturally to mathematical formulation, and served as a natural framework for applying the emergent skills of national income accounting. 'The heyday of Keynesian economics', Solow writes, 'provides a wonderful example of the interplay among theory, the availability of data, and the econometric method.' (1998, p65) The second important event is the advent of the Second World War, and its effect in legitimating the development of economic measurement techniques -as opposed to other aspects of economic expertise and knowledge. The massive government appeal to economists during the war was largely presupposed on the existence of such quantitative abilities, and during the conflict federal agencies were often the site of a pathbreaking developments in input-output analysis, statistical estimation, national accounts, resource allocation and linear programming techniques. If anything, the episode further encouraged a focus on scientific reliability – and also created a 'vested interest' among economists proficient in such techniques, and mathematical methods more generally. Finally, the outbreak of the cold war created a larger market for those skills, such as game theory, allocative programming and operations research, which seemed most attractive to the federal government in a highly uncertain international context. Bernstein's work, for instance, has amply shown that the Department of Defense, notably the U.S. Navy and the Air Force, actively supported those lines of analysis, which 'seemed to have potential value for the missions of the national defense and security establishment'. (Bernstein, 1994, p369)



The technical demands of the 'war economy' under its various forms (declared or 'latent') from the 1940s to the 1960s, were thus among the principal factors explaining the reorientation of the research interests of American economists. The context of the cold war, however, contributed to strengthen the mathematical and technical core in another powerful, yet less direct way –through its effects on the national political climate. During McCarthyism, widespread suspicion against potentially subversive intellectual enterprises was articulated with powerful formal and informal mechanisms of witch-hunting. Due to their involvement with the early policy experiments of the New Deal in government intervention and economic planning,<sup>92</sup> many economists of the pre-war generations (including a large number of 'institutionalists') appeared suspect of political partiality and liberalism, if not outright radicalism.

Public and private patrons became nervous about the ideological implications of the research they supported. Two successive congressional committees (1952 and 1954) launched investigations into the activities of the major foundations. (Lyons, 1969, p278-279) In the early congressional debates which led to the creation of a National Science Foundation, the social sciences were first excluded from the original institution in 1950 on the grounds that their messy politics might 'compromise the perceived ethical neutrality and taken-for-granted disengagement of natural scientists'.(Gieryn, 1999, p97) When the social science program was finally born a few years later, its administrators were extremely careful to legitimate its acceptability by emphasizing the similarity of methods with the natural sciences, and by supporting highly technical research (including pure mathematical theory). (Riecken, 1983, p40-41) A review of funding patterns by the

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<sup>92</sup> Weir, 1989 develops this point. Also see below.

National Science Foundation over the 1958-1979 period shows its heavy involvement in quantitative research and econometrics, in the areas of productivity and large scale modeling (for instance at the Cowles Foundation during the 1960s and 1970s). Hence the single 'most funded' scholar over this period, Mordecai Kurz, was supported as head of the Institute for Mathematical Studies at Stanford for his role in animating an international network of mathematical economists. (Newlon, 1989)

The political controversies of the 1950s had also more direct and immediate effects on the shape of scholarly communities. Although the history of these persecutions remains to be written, there are many accounts of victimization of economists, some of whom were continuously harassed by their university's administration and trustees (e.g. Paul Baran at Stanford),<sup>93</sup> prosecuted (e.g. Paul M. Sweezy at the University of New Hampshire),<sup>94</sup> even dismissed (e.g. Bowen at the University of Illinois)<sup>95</sup> for their association with Marxist or, sometimes, as in the latter case, progressive Keynesian views. Faced with this situation, the profession kept a low profile and avoided direct involvement: the American Economic Association created an 'Exploratory Committee on the Status of the Profession' in 1952, but it did not empower it to investigate specific academic freedom cases.

In this context, mathematization was often regarded as a safe intellectual strategy. (Johnson, 1977, p25; Morgan and Rutherford, 1998b, p17) On the economists' side,

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<sup>93</sup> See Jacoby, 1987, p175-177. Howard and King argue that Baran was then the only *avowedly* Marxist professor of economics in the entire United States. (1989, Vol. 2, p114)

<sup>94</sup> 'Report of the Exploratory Committee on the Status of the Profession', *American Economic Review*, Vol. 45(2), May 1955.

<sup>95</sup> Solberg and Tomlinson, 1997.

sophisticated mathematical frameworks erected protective boundaries with laymen and allowed economic ideas to be framed in less controversial ways. Indeed U.S. academic Keynesianism as it developed through the intellectual medium of what Samuelson called the 'neo-classical synthesis'<sup>96</sup> (which relegated Keynesianism to the status of special case of general equilibrium theory) was much less challenging in its policy implications than earlier 'stagnationist' forms, which assumed that the economy was subject to chronic underemployment of capacities, and thereby justified a much more active spending policy.<sup>97</sup> On the other hand, support from institutions in the research economy was motivated politically and concentrated on those aspects of economics that were not antagonistic to the interests of the United States, neither to those of American capitalism.<sup>98</sup> It is quite remarkable that the only study of Marxian theory ever supported by the National Science Foundation was entrusted to the father of post-war orthodoxy, Paul Samuelson.<sup>99</sup>

### Mathematics as a way of (academic) life

The rise of mathematical methods has contributed two considerably important features of modern American (and world) economics. The first of these concerns the relative liberation of academic economic discourse from empirical material and data,

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<sup>96</sup> The term is from Samuelson, *Economics*, 1955 (third edition), McGraw Hill (p. vi).

<sup>97</sup> See for instance Arrow, 1967, p735.

<sup>98</sup> Goodwin (1998), citing Leonard (1991) makes this point about the Ford foundation.

<sup>99</sup> Samuelson, however, certainly had credentials to undertake such a project, having written extensively (albeit quite critically) on the subject.

which resulted in the crowning of 'theory' as the mother of all economics after the 1960s. The second, more recent, development is the imperialistic application of economics' analytical framework to a vast array of questions outside the traditional boundaries of the subject.

### **The centrality of theory**

In many respects, the publication of Paul Samuelson's *Foundations of Economic Analysis* symbolically signaled the rise of theory, prompting its author to immodestly (yet perhaps quite appropriately) remark: 'I can claim that in talking about modern economics, I am talking about me'.<sup>100</sup> It is certainly not inaccurate to argue that economics underwent a rebirth in the two decades following World War II. A Ph.D. student at Harvard with a background in mathematics, Samuelson has indeed contributed fundamental insights to modern economic analysis and methodology as it emerged in the post-war period, which warranted his obtaining the Nobel Prize in Economics in 1970. While his personal achievements came about largely disconnected from those, already discussed, of the 'econometricians', they have been no less important in launching American (and world) economics on the path of mathematization. The *Foundations*, published in 1947, was immediately recognized a landmark in the analytical progress of the field by the professional elite, which awarded its author the first John Bates Clark medal (for scholarly achievements before the age of forty). His textbook (*Economics*, first published in 1948) popularized the intellectual categories with which modern economics thinks about itself and about the world (e.g. the opposition between

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<sup>100</sup> Interview in Breit and Spencer, 1986.

microeconomics and macroeconomics, the maximization methodology, and, naturally, the main themes of Keynesian macroeconomic policy). Currently in its sixteenth edition, and still going, it was a considerable editorial success, both at home and abroad.<sup>101</sup>

These two books' most lasting contribution, however, is their assessment, with great force and considerable self-confidence, of the idea that the economist's expertise should be judged by his/her ability to turn economic relations into a system of equations. (Figure 2-5 below presents an excerpt from the *Foundations*, which plainly states this goal.) This focus on abstract modeling and mathematical foundations, which Samuelson exemplifies in his own way, but came to characterize other parallel developments (general equilibrium economics is probably another good example), brought about a considerable revolution in the practice of economics. On the one hand, it freed economic science from the empirical and inductive imperative (and hence of the dependence on the patrons of the research economy who could fund expensive access to data and work-intensive research procedures). Now, economics in its most highly prestigious form could be confined to the blackboard and occupy itself almost exclusively with the formulation of theoretical models.<sup>102</sup> In this respect, it is quite interesting that the next 'revolution' in analytical economics, that of rational expectations at the University of Chicago, relied on similar factors of success: the provision of a new methodology requiring considerable

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<sup>101</sup> William Nordhaus has joined Samuelson as a co-author since the thirteenth edition of *Economics*. (1989)

<sup>102</sup> Backhouse's calculations show that by 1960, nearly 80% of *theory* articles in the three main economics 'journals' used algebra, up from about 20% in 1930. (The journals are: *American Economic Review*, *Quarterly Journal of Economics*, and *Journal of Political Economy*. This is of course, without counting *Econometrica*, which was throughout the period the most representative publication for the mathematical approach.) Another notable trend is the rise in the proportion of theory articles themselves. (1998)

mathematical skills, and an almost total absence of preoccupation with empirical data and relevance, which was expressed in a deep rejection, on *scientific* grounds, of standard econometrics. (Johnson, 1971, p6-9) The interview below, for instance, comments on this ongoing post-war reconstruction of the field of American economics around the production of theory:

'(The training I received in the 1960s was) much less technical (than what the students receive today), though at the time we were all thrilled by how Very Technical our own training was. The biggest difference is that theoretical dissertations were rare. Now they are the norm. We were all encouraged to examine a piece of the economic world, empirically and theoretically with a view to some definite empirical conclusion.'  
(Professor, University of Iowa, January 1997)

This evolution has led sociologist of science Richard Whitley to argue that empirical investigations have been pushed to the periphery of the field, creating a de facto partition between the theoretical work carried out at elite institutions, and the empirical 'applications' confined to less prestigious settings. (1984, p160) Nearly twenty years after the publication of Whitley's work, however, this interpretation needs to be qualified. For one thing, an empirical 'backlash' (in the 1980s-1990s) has followed the strong, nearly exclusive, theoretical program of the 1960s-1970s. This pendulum swing has been very obvious in the field of labor economics –traditionally more empirically-oriented- but also in finance, and more generally 'applied microeconomics' subfields (such as education and health,...), all of which have benefited from an abundance of data and the advent of high-speed computers.<sup>103</sup>

'In the last 10-15 years, people moved to a much more scientific approach which, when you have these huge data sets, what you now do is go out and look for a natural experiment, a pseudo experiment. (...) Then we've had

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<sup>103</sup> Louis Uchitelle, 'A Real-World Economist: Krueger and the Empiricists Challenge Theorists', *The New York Times*, April 20, 1999.

in the United States, less the United Kingdom and France, we've managed to convince the government that to understand how politics affects anything they should do random precise, controlled experiments. Some workers should get the training and some should not. We can see whether the training has any effect. That's tough for governments to do that obviously. Partly because the US is so big with lots of states, we managed to do that. And that has culminated in this intellectual trend so that nowadays I think the field is about as healthy as it has ever been. It may be too empirical. Very much a certain attitude among a lot of our younger labor economists, it's kind of like one of these cowboy shootouts. "Show me your data. Don't give me any baloney. I don't want to hear you say any words. Just show me the data." But for economics that's incredibly positive because it just stops in the track the baloney of people who have theories and theories and theories and this just forces the field back. That's been very striking in the US.' (Professor, Harvard University, May 1999)

Empiricism, as we saw earlier in the discussion of the inter-war, has been naturally attractive within the American context, as it essentially defines the relationship of economics to its external constituencies. Thus in spite of the fact that theory came to occupy a position of intellectual leadership, empirical work has remained an essential source of legitimization for economists, not only vis-à-vis outside audiences, but in the broader academic context as well.

### **Economic Imperialism**

I want to point out, since I have not yet presented the two other cases in this study, that the reliance on mathematics in American economics is by no means unique, especially in comparison with Britain. There is little doubt, as we will see in the following chapters, that British economists, as well as a large segment of the French economics profession, are also very comfortable with mathematics as a theory-building tool. On the other hand, it is fair to say that the institutionalization of the mathematical method has certainly been more complete and extensive in the post-war United States

than elsewhere. Thus the different sub-fields of economics –which prior to World War II were organized around ‘local’ and rather independent intellectual cultures– have been unified by the common language of mathematics, and the development of the language itself has motivated its application to new and increasingly remote fields.<sup>104</sup> On the one hand, formalism and abstraction have enabled modern economics to evolve into a really ‘universal science’, by legitimating its discursive access to all sorts of practical and intellectual domains. On the other, the greater availability of ever more detailed data, as well as technological revolutions in computer power have increased its ability to ‘universalize’ its empirical investigations into the real world.

This ‘imperialist’ expansion of modern economics has been largely an American development. There has been less eagerness on the part of the European mainstream to apply economic methods and procedures to a large variety of research domains, although imitation of the American mainstream now plays its part. It is for instance relevant for our discussion that the economic approach to human and social behavior was developed in the United States (by Gary Becker especially), as was the school of public choice for the analysis of political behavior. Another striking example is the revival of economic history along ‘cliometrics’ lines, –that is, by scholars ‘interested in using economic theory and statistical techniques to study economic history’.<sup>105</sup> After a long journey at

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<sup>104</sup> Kreps (1998), citing Romer, calls this an ‘hourglass’ model of intellectual development.

<sup>105</sup> Self-definition of the ‘Cliometric Society’ (created in 1983). Source: [www.eh.net/ehnet/Clio/](http://www.eh.net/ehnet/Clio/). The high respectability and legitimacy of economic history under this intellectual form was acknowledged by the attribution (in 1993) of the Nobel Prize to two of the movement’s founders, Douglas North and Robert Fogel. For a retrospective, see ‘Cliometrics After 40 Years’, *American Economic Review*, Vol. 87(2), p396–414. (contributions by Claudia Goldin, Avner Greif, James Heckman, John R. Meyer, and Douglas North).



the margins of economics, history is now part of the mainstream again, yet only under this very peculiar form.

As pointed out earlier, part of the centrality of mathematics in economics is grounded in a historically evolved professional culture, which identifies such methods with 'objectivity', the place of the expert in society, and the practice of science. But it is important to acknowledge that it does also fulfill an important role in the institutional context peculiar to the American academic field. In a highly competitive and flexible academic market, nonetheless strongly regulated by firmly entrenched standards of work and career advancement, 'distinction' and professional visibility may come from little else than the use of increasingly sophisticated tools, or the creative manipulation or application of established ones. By contrast, we may suspect that the lesser exposure of European academies to market mechanisms makes them less prone to such intellectual dynamics. One interesting instance of this phenomenon is the general professionalization, especially strong in the United States, of traditionally unorthodox approaches in accordance with prevailing academic standards. (Attewell, 1984, p26) Influential currents in American Marxist thought, for instance the work of John Roemer, use the tools of rational choice theory and the analytical methodology of neoclassical economics to investigate classic Marxist questions.<sup>106</sup> One interviewee, who witnessed this transformation with a critical eye, remarked:

'The radicals saved their jobs by making deals with the devil: 'we'll be more neoclassical than you but we'll consider ourselves Marxists.' That

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<sup>106</sup> In fact, I was struck to find in my own interviews that even officially 'dissenting' economists still agree quite widely on the virtues of neoclassical economics as a pedagogical tool. This contrasts quite markedly with France, where Marxists generally rejected the neoclassical framework en bloc.

way, they were allowed to stay. They tried to speak to the neoclassicals in their own language.' (Professor, University of Iowa, January 1997)

### **Universities and the Intellectual Structure of the Academic Field**

The institutional structure of the American academic field has historically been an important factor shaping the profession's understanding of its societal role, as well as its intellectual identity. The combination of decentralization, competition, and mobility in the academic environment, the reliance on market mechanisms to determine the 'value' of work, have fostered a large degree of intellectual and methodological homogeneity among elite institutions. In addition, the latter also exert a strong control over the mechanisms of organizational and intellectual reproduction (i.e. over training programs, textbook writing<sup>107</sup>, and research output), and thus are in a position to informally and indirectly enforce consensus on a much larger scale. (Whitley, 1984)

In 1953, Milton Friedman defined the accepted way to 'do science' around the notion of 'positivism', which focused on the correct use of models, independently of the 'realism' of hypotheses.<sup>108</sup> Thus while original 'assumptions' and the specific techniques used to solve models may constitute a matter of dispute, there is still widespread agreement on how to practice economics, and especially on what counts as 'serious' work in the field.

'I think of all the other social sciences as far I know, there is a remarkable consensus on quality rankings in economics. Like this is the best, this is

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<sup>107</sup> Baron and Hannan note that popular economic textbooks are generally written by prominent scholars, which, 'with only a few exceptions', is not the case in other social sciences such as sociology. (1994:1118)

<sup>108</sup> 'The Methodology of Positive Economics', in his *Essays in Positive Economics*, Chicago, Ill.: Chicago University Press.

the middle, this is the worst. I don't believe any of the other social sciences agree so much on what the best work is. Within that there are tastes. Someone might say "Yes, that's really excellent work, but I don't find it very interesting, or it's not what we need here, or something like that." And I don't want to exaggerate. It's not like everybody will agree on every ranking. But I think there's a remarkable degree of consensus on quality. And the result of that is the competition for the top people is ferocious in terms of thinking of this as a job market. It's as if, well, this is not such a bad analogy, right? It's as if in the stock market everybody just wants to own Microsoft and Intel. It's not so far from true, right? So when that happens, in the manifestation of the stock market, the stock prices go way up. So in economics, the salaries go up and people move and so on.' (Professor, Princeton University, November 1999)

In the absence of strong institutional differentiation between different centers of economic knowledge production (as in France for instance), it is the university which in the United States –much like in England– constitutes the main structuring element of economics as an intellectual field. In spite of the general fluidity of the American academic milieu, institutions and departments often embody distinctive intellectual orientations for somewhat long periods of time. Such characteristics are often due to the presence of a closely knit group which reproduces itself by means of its own students –or students recruited among a network of institutions with similar outlooks–, and exerts control over the instruments of intellectual leadership (such as academic journals and reviews).<sup>109</sup> The economic style of the University of Chicago, as a matter of fact, occupies a fairly singular place in American economics, at least since the 1940s, and represents an archetypal case of a strong intellectual 'tradition' that is being transmitted to students through a particularly painful training process. (Reder, 1982) And Klamer and Colander's survey of economics Ph.Ds (1990) also underlined the strong intellectual distinctiveness of Chicago students, who identified themselves more strongly with the

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<sup>109</sup> With the *Quarterly Journal of Economics* at Harvard, for instance, and the *Journal of Political Economy* at Chicago.

positive status of economics as a science, and generally disagreed with most of their contemporaries in other universities on basic economic propositions.

Harry Johnson has argued that such inter-institutional divisions have frequently recouped enduring divergences in political and intellectual orientation. Reflecting on the structure of American academia in the 1940s, he showed that the economics department at Harvard and Yale counted less published output than its Chicago counterpart, but had a strong policy orientation and close links with the Democratic Party. Chicago economists, by contrast, exhibited a better publication record and were more theoretically oriented. But they were also 'social outsiders' - 'representing the lesser role of the academic in the Republican Party's approach to government.' (1978, p87) After the 1960s, these divisions between Chicago (and a constellation of institutions associated with it)<sup>110</sup>, and Cambridge/Yale (and their own emulators), crystallized as a politico-scientific conflict between the epicenter of Keynesianism and the epicenter of monetarism. Yet in more recent years, they have focused on the nature of the relationship between theory and data, with, on the one hand, the resurgence of empirical pragmatism around Harvard and the NBER, and the development of a structuralist research program around Chicago and other Midwestern schools. While these divisions should not be exaggerated (indeed, Chicago may have been throughout its history more the exception to the rule than the illustration of the rule itself), they have played a certain role in the structuration of the intellectual and political space.

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<sup>110</sup> Those peripheral institutions were sometimes referred to as 'the little Chicagos'. UCLA, for instance, used to be nicknamed by unsympathetic economists 'the University of Chicago at Los Angeles'.

**American Economists and Government: Expertise and the Political Context**

In the preceding sections I have shown how the identity of American academic economics, through complex mechanisms having to do with the structure of the research economy and the academic system, historically evolved towards a positivist stance. In the post-war period, the latter has been strongly identified with the use of mathematical methods and the establishment of a consensus around the neoclassical paradigm. I also suggested that this attitude, which was forged in a context of 'relative' (in comparative terms) lack of autonomy and societal recognition of academic institutions, first and foremost sought to remove the production of 'science' from the realm of political contention.

To attribute the shaping of the professional identity of American economists to these sole factors, however, would be quite inaccurate. Rather, it is important to acknowledge that they fit within a larger societal ecology in the political and economic realms. In particular, the modes of interaction between 'economic experts' and institutions in the administrative, political and business arenas are among the processes, which have shaped and constructed these identities.

The next section points towards the role of political structures in establishing professional competence (defined in technical terms) at the center of these understandings of what 'being an economist' means in the American context. Since the end of the nineteenth century, the relationship between economic specialists and government has relied explicitly on the authority conferred by the specialized skills acquired through education and research. This is true not only at the bottom levels of the

civil service, but also at the top ones where economists recruited from academia on a temporary basis usually occupy specific positions in a wide range of agencies.

State structures and state actions, I argue, routinely enter the process whereby norms about the nature of economic expertise and the role of economic experts (not only within the political and policy-making processes, but also within society in general) are formed. One may distinguish here between two levels of analysis: the first one has to do with the way in which economic expertise has been historically incorporated as a 'permanent', or routine, element of the exercise of public power, in the regular civil service for instance. The other element concerns the more general impact of the structure of political institutions, and the relationship they entertain with groups and actors in society, on the shaping of the economics profession (in particular, its emphasis upon narrowly conceived conceptions of 'expertise'). Naturally both aspects are closely intertwined in the real world, although they refer to two different theoretical points.

### **The Uneasy Relationship between Economics and Politics**

I suggested earlier that the exercise of science (and in particular social science) was historically constructed as incompatible with political advocacy. In the United States, and by contrast with continental Europe, political partisanship has played an ambiguous role in shaping the identity of the economics profession. There is little doubt that American economists, one might say like everyone else, hold political views and sometimes have explicit political agendas they seek to further. For instance, they routinely advise politicians in both parties, get involved in political campaigns –as consultants or even members on political staffs. Yet their discourse is rarely cast in an explicitly political frame, and they usually refrain from holding political offices. Few

eminent American economists have ever achieved high-level *political* positions<sup>111</sup>, whereas political careers are common among French, and even more German, Dutch, or Swedish economists. (Frey and Eichenberger, 1993) By contrast, the many economists who have held top government jobs in the United States have done so largely on the basis of their professional qualifications, with political orientation often playing a necessary, but not sufficient, role. (See Tables 2-1 and 2-2)

This philosophy of arm's length attitude with politics has inspired the relationship between academic economists and political institutions throughout the twentieth century. The American Economics Association is remarkably inconspicuous as a public body and plays a very limited role, mostly confined to the 'coordination' of its members. More generally, individual economists have continued to manifest a strong reluctance to enter political debates on a partisan stance, and often see political involvement as incompatible with the standards of professionalism. Organizations such as the NBER have remained throughout their history strongly opposed to the formulation of specific policy recommendations. Finally, public actions by economists are rare (though certainly not unheard of), generally focused on specific policies rather than the endorsement of individual candidates or parties, and they are not all that welcome. When a group of economists signed a petition against the Smoot-Hawley Tariff in 1930, the majority of the profession, including the AEA's officers, viewed their action with aversion –in spite of the widespread opinion among academic experts that the policy would have disastrous economic implications. (M. Smith, 1994, p28)

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<sup>111</sup> Paul Douglas is one very notable exception to this 'rule'. A distinguished economist (and past president of the American Economic Association), he also pursued an important political career in the U.S. Senate.

It is quite interesting to see this debate in light of the very 'ideological' decade of the 1980s, whereby a number of maverick economists got heavily involved with the right wing of the Republican Party around Ronald Reagan. These so called 'supply siders', however, who defended a policy the majority of the profession considered scientifically dubious and politically irresponsible,<sup>112</sup> came from the 'fringes of economics: from journalism, from congressional staff positions, from consulting firms; (and from) conservative think tanks'. (Krugman, 1994, p85) They did not -with the very notable exception of Robert Mundell- involve prominent academic economists.<sup>113</sup> By and large, the latter have tended to shy away from such institutions, except for the most 'scientifically respectable' of them (which include, for the think tanks, AEI, Brookings, and Hoover).

Naturally this sharp separation between academic work and partisanship reflects, more generally, the 'private' orientation of American politics, and the fact that teachers and academics play a much lesser role in this domain than lawyers and businessmen (in contrast, for instance, to France, where the former tend to fill the ranks of the Parliament). But it also corresponds to a particular vision about the nature of science, where the possibility for a 'positive' type of social and economic knowledge is much more easily recognized than in countries with stronger traditions of ideological (or class) conflict. By and large, then, the American economics profession rationalizes politics (like business, for that matter) as a terrain for the exercise of economic 'expertise', rather than

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<sup>112</sup> One then candidate to the nomination for the Republican Party, George Bush, qualified it of 'voodoo economics'. Also see Feldstein (1986) for a distinction between 'old' (i.e. scientifically respectable) supply side economists and 'new' ones.

<sup>113</sup> Fourcade-Gourinchas, 1993. See Krugman, 1994, p87-89 about the career of Robert Mundell, who since then earned the 1999 Nobel Prize in economics.



as a place to pursue a long-term career. The political space appears potentially ‘polluting’ to reputations, both intellectually (politically involved economists stop doing ‘serious’ academic work) and professionally (their scientific impartiality becomes questionable). This view is, naturally, especially well articulated at the top of the academic hierarchy – and it was acknowledged on many occasions in the interviews I conducted. The quote below is just one example among others.

‘The good economists do not run for office. There’s a couple of Republicans with Ph.Ds in economics. There’s one very good guy, C., who represents the Stanford University area. But there are some other ones who are totally... I don’t like them. But in no case were they distinguished economists... It’s like Newt Gingrich. Newt Gingrich was not a distinguished college professor! That’s not belittling their mind or anything else, but it was clear that early on they made a decision to go a different way. But the economists who come with distinction to government jobs, tend in general to be more—honest may not be the right word—but they have been trained all these years and they see things in more than political terms. So that probably makes them less important than they otherwise might be because these other politicians, I think you know, feel like “I don’t really care much about anything I want to get re-elected.” (...) I think it’s just part of being a politician. And economists would have a different view in general. Plus we all know you have to hold your professional education, you have to be able...your conservative or liberal colleagues, you don’t want them to look at you and say “Well you’re just a hack from a party!” That would be very harmful to someone’s... then you also lose a certain amount of what you are bringing to the party. You’re bringing your professionalism, you’re someone who is going to make professional judgements. Not someone who will sit there and say “Gee, how can the President get elected on one story?”’ (Professor, Harvard University, May 1999)<sup>114</sup>

One good illustration of the importance of boundaries in definitions of professional identity in American economics is the ambivalent position of John Kenneth

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<sup>114</sup> It is interesting that the existence of powerful academic norms against open involvement in partisan politics also extends to the economist’s role in the business sector, with a persistent fear of ‘pollution’ by corporate interests. For instance, Franklin Fisher, a MIT economist who was a pioneer in fighting a legal case for IBM in the 1970s, faced bitter hostility on the part of his colleagues, who perceived his involvement to be purely financially motivated. (Warsh, 1993, p190)

Galbraith in the economics pantheon. A Harvard professor from 1948 to his retirement in 1975, with a long career in the public service (including two years as ambassador to India) and Democratic politics, a tireless writer of best-sellers and prolific contributor in such magazines and newspapers as *Fortune* and the *New York Times*, Galbraith has remained a contentious personality among his professional colleagues –partly because of his political involvement, and partly because of the unorthodox character of his contributions.<sup>115</sup>

### The Making of the Academic Expert

In a famous paper on the role of economists in American policy-making, which echoes the quote above, Nelson identified a distinctive set of intellectual and professional attitudes (in Bourdieu's terminology, an '*habitus*') as characteristic of the role of economic experts in this country.

'The proper role for an economist is typically regarded as that of a professional expert who advises government in technical and scientific matters and takes social values and political preferences as given. Once these values and preferences have been expressed by political leaders, economic expertise can be applied to make the governing process work as efficiently and as effectively as possible.' (1987)

Whether Nelson's characterization represents a reliable 'analysis' of the relationship between economists and the political realm, or whether it should be read as an instance of the ideology that underlines it, does not really matter for our purpose, since we have to assume that both are closely intertwined anyway. What is more interesting, perhaps, is that Nelson also argues that this attitude of American academics towards government was

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<sup>115</sup> See for instance Krugman's severe statement: 'Although Galbraith is a Harvard economics professor, however, he has never been taken seriously by his academic colleagues, who regard him more as a "media personality"'. (1994, p13)

forged during the Progressive era. How and when the 'professional' ideal came to characterize the relationship of American economists to different audiences in society appears indeed central to our understanding of its specific meaning.

I already suggested that such a 'separation' between science and politics was not 'natural' in any way, but resulted from a set of events, some of which took place in universities during the last decades of the nineteenth and the first quarter of the twentieth century. Yet the same period also saw important transformations taking place in the political realm, whereby economic and other social scientific experts came to be drawn into a rationalizing bureaucracy.

During the Progressive era (roughly, from the mid-1880s to 1914), the American federal government (as well as a number of state ones) sought to assert its own autonomy by creating a class of public administrators that would be immune to political patronage. In this major political transformation, members of the then emerging professions were incorporated into various public bodies as governments engaged in a deliberate attempt to 'remove various economic and social problems from the political arena'. (Silberman, 1993, p276) For instance, the creation of a set of independent regulatory commissions, and of a coherent ensemble of federal institutions for the organization of data collection, relied extensively on the new professional associations (American Economic Association, American Statistical Association) for expertise and guidance. A large number of academic economists took up temporary positions in such institutions, which also served as important training grounds for the younger generations of researchers.

The professionalizing drive in American economics thus took shape in the peculiar context of a search for insulation from political controversy, combined with an

emerging institutional niche for economic expertise among governmental and business audiences sensitive to the issue of politicization.

'Direct appeal to the public on controversial social questions was retained as a theoretical right, but economists were expected to channel most of their efforts through government agencies or private organizations where scholars could serve inconspicuously as technical experts, after the political decisions had been made, rather than as reformers with a new vision of society'. (Furner, 1975, p257-259) <sup>116</sup>

One of the most notable characteristics of the American economics profession in comparative perspective is the early nature of its engagement in multifaceted professional uses. In contrast to Europe, where economists remained at the periphery of the state until the post World War II period, the movement of administrative rationalization of the Progressive era relied extensively on the young professional communities rooted in the universities. Lacking a strong and autonomous civil service, successive American governments used the channels of professional organizations and institutions (which, in this period, were almost exclusively academic) to build up their own capacities in the economic domain.

The early emergence of a technocratic 'niche' for economists within the public administration resulted in two important transformations, for the nature of the state and for that of the economics profession. First, as already discussed, Progressive governments

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<sup>116</sup> Quite characteristic of this attitude was the institutionalist economist John R. Commons, who worked for the Bureau of Labor Statistics and the independent U.S. Industrial Commission before taking up a position at the University of Wisconsin. During the term of the Progressive Party in Wisconsin (1900-1914), he—as well as other academics involved in the same 'university-state alliance'—then had a prominent role as an expert for the local government. According to Dorfman, his career helped legitimate the economists' association with such 'non-partisan, but progressive' enterprises. (1959, p288; see also Henderson, 1993) Wisconsin economists played an important role in the design and implementation of social-welfare policies throughout the 1920s, (Schweber, 1996b; McNutty, 1980) a form of activity which prefigured their (and other institutionalists') involvement in the early New Deal. (Brinkley, 1995)

institutionalized a conception of civil service as the provision, to the state, of an expertise socially defined and validated *outside* the political system (not *by* it as in France or Germany). Through the formal involvement of academic institutions and actors, the state implicitly recognized the economic expert as an academic whose value lied in his/her highly specific competence. As I will show below, such understandings have continued to shape the relationship between economists and the state throughout the twentieth century -the institutionalization of the Council of Economic Advisers and other public advisory bodies (for instance the Congressional Budget Office) being probably the most conspicuous aspect of this regime.

Naturally, we must also recognize that this early and formal acknowledgement, by political institutions, of the 'usefulness' and technocratic capability of academic economists, is itself part of the process, which has shaped the historical development of the economics profession. It encouraged academic institutions to 'professionalize' along technocratic lines, and embrace the attitudes, which are usually required of the regular civil service. Through the 'demands for expertise' placed upon the academic sector, American state administrations had thus a powerful effect on the structuration of the research field, on its substantive orientation, and on the construction of particular professional roles and attitudes among American economists.

### **Economists and Government: Forms of Incorporation**

Although the practice of associating economists to the political and policy-making processes in the United States was fairly habitual from the Progressive era, only few government agencies made use of 'permanent' economic experts before the New Deal. The Department of Agriculture, where a long practice of associating economic research

to policy had lead to the formation of a specialized research unit in 1921, was the only organization to possess an established tradition of in-house economic expertise that was, furthermore, closely connected with the network of land-grant academic institutions.<sup>117</sup>

The 1920s, however, represent an interesting transitional period between the progressive drive towards efficiency and faith in rational knowledge, on the one hand, and the activism of the New Deal on the other. First, the experience of World War I had changed both the practice of economic policy-making and the government's willingness to 'intervene' in the economy. Emergency government during the conflict had a considerable impact in legitimating activist approaches to economic policy, in bringing economic experts in contact with government, and in developing awareness among public sector officials and businessmen alike of the necessity to improve economic and statistical information. Second, as Barber's (1985) detailed study of the 'Hooverites' demonstrates, the 1920s witnessed a number of important technocratic experiences in economic management and laid more ground for the New Deal than is usually acknowledged. It is during Herbert Hoover's terms (as Department of Commerce Secretary (from 1921 to 1927), then President (from 1929 to 1933)), that the belief that economic performance could be engineered through informed governmental action first emerged in a programmatic manner. Although much of the activism of the period in the domain of economic policy remained partial and was hampered by considerable institutional and political reluctance, the Hooverites' technocratic posture embodied the premises of a grounded pragmatism, which would later come to characterize the New Deal. (Skowronek, 1993)

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<sup>117</sup> The Bureau of Agricultural Economics. See Lyons, 1969; Barber, 1981.

Similarly, Hoover's attitude towards expert knowledge was anticipatory of Roosevelt's later reliance on teams of experts drawn from universities. One of his first acts as President was to sponsor the establishment of a *Committee on Recent Economic Changes* and another one (financed by the Rockefeller Foundation and administered by the SSRC) on *Recent Social Trends*, both of which were intended to identify areas of reform and help set the agenda for future policy.<sup>118</sup> Imbued with the vision of a 'new economic order', Hoover believed that only the knowledge of facts was able to guide public policy. He routinely commissioned work to academicians, 'sponsored scholarly studies, called conferences, enlarged statistical services, and assembled and used a large battery of expert advisers'. (Lyons, 1969, p50) Hoover's approach to economic management thus contributed greatly to the development of institutionalized relationships between government departments, and the extra-governmental research economy that was then developing among philanthropic foundations and research organizations. During the 1920s, Mitchell's National Bureau of Economic Research, for instance, worked almost exclusively on projects commissioned by the Secretariat of Commerce, and financed by philanthropic money. (Grossman, 1982; Alchon, 1985)

Under Roosevelt, social scientists in general, and economists in particular, established their place in government on a more secure foothold than in any previous administration. The entry of large contingents of economists into government relied on two complementary trends, on the supply and demand sides of the market for economists. First, on the supply side, there were simply no academic jobs to absorb the flow of young

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<sup>118</sup> Barber, 1985; also see Cook, 1982.

economics graduates who were coming fresh out of academia in those years. Government employment thus largely fulfilled the function of a security valve in an academic labor market devastated by the Great Depression. (Kindleberger, 1991, p43; Stein, 1986; Interviews) In addition, the motivation of exercising their knowledge in the shocking context of the Depression was strong among the cohorts of 'young Turks'.<sup>119</sup>

On the demand side, the unprecedented activism of the new administration in the face of the slump was embodied in the creation of numerous agencies in the economic and social domains, all of which immediately sought to enlist large numbers of specialists drawn from academia.<sup>120</sup> An official from the Department of Labor, writing in 1937, thus remarked:

'During the early days of the present administration virtually every university in the country was combed by the various federal agencies for competent economists' (Lubin, 1937, p 216)

The war further pulled large contingents of economists into public service. Shortly before the outbreak of the conflict, the federal government sought the cooperation of the American Economic Association for identifying detailed expert capabilities among its members, as part of its manpower planning activities.<sup>121</sup> (Bernstein, 1990) In these recruitment processes, economists were to be classified and 'matched' to administrative positions according to their specialized skills.

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<sup>119</sup> See for instance the interview with Paul Samuelson in Breit and Spencer (1986).

<sup>120</sup> Among others: the Agriculture Adjustment Administration, National Recovery Administration, Tennessee Valley Authority, National Labor Relations Board, Social Security Administration, Committee on Economic Security, Securities and Exchange Commission...

<sup>121</sup> This practice was inaugurated during World War I, albeit to a much smaller extent. (Bernstein, 1990)



In comparative perspective, the involvement of academic economists with the federal government during the Depression and War appears especially remarkable. Stigler, for instance, shows that the proportion of authors of economic articles in the main academic journals<sup>122</sup> who held government occupations jumped from 2.7% in 1932-33 to 16.8% in 1942-43. (1965, p45) By contrast, in the United Kingdom the incorporation of economists in the government machine during the same period, while unprecedented at the time, appears much more modest in quantitative terms. The British war government relied on a small number of elite professors -the traditional, generalist civil service continuing to provide for the main positions. In France, top-level technocrats essentially ran the war and collaboration governments (although many of them developed some form of economic expertise during the 1930s).

### **The 'Keynesian' Revolution in America**

The period of the 1930s-1940s appears in retrospect a double watershed, both an institutional and an intellectual one. On the one hand, Roosevelt's massive resort to the manpower resources of the universities secured the rise of experts in the administrative machinery. It also established the principle of the 'academic in government' on a strong foothold, in a movement that would later lead to the creation of permanent and academically grounded economic advice institutions -the Council of Economic Advisers most prominently. On the other hand, the violence of economic policy debates during that era, and the ultimate failure of the most radical economic ideas and policy schemes, also signaled the limits of the academics' influence in the political domain. In both respects,

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<sup>122</sup> *Quarterly Journal of Economics, American Economic Review, Review of Economics and Statistics, Econometrica.*

then, the New Deal may be considered a defining moment in the formation of the identity of American economists in the public and political sphere.

It is certainly worth here discussing what the 'Keynesian revolution' meant in the context of New Deal America, as well as for the relationship between economists and government. Earliest measures of active government involvement, such as the public works programs and the attempt at industrial planning, were framed as a series of pragmatic responses and emergency measures, rather than on a comprehensive, 'paradigmatic', policy strategy inspired by a brand new theory<sup>123</sup> (Weir and Skocpol, 1985; Davis, 1971). In fact, the 'Keynesian' 'rationale' per se, which is based on the idea of the counter-cyclical effects of budget deficits, was not accepted until the late 1930s – when the first explicitly expansionist budgets were adopted. Even then, it took considerable lobbying by a few high-ranking officials in key positions, and the public activism of a small network of academic converts, to turn it into a full-blown policy strategy.

The early 'New Deal' measures, then, drew on indigenous ideas in vogue since the 1920s. In particular, ideas about labor and agricultural legislation, social security, public utility regulation, or corporatism, were influenced by local policy experiences and institutionalist economic thinking. (Most prominent among both of these were John R.

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<sup>123</sup> See for instance Tugwell, 1957. Leon Keyserling, who was at the National Planning Board during the 1930s and later became chairman of the Council of Economic Advisers, commented:

**'With all due respect to Keynes, I have been unable to discover much reasonable evidence that the New Deal would have been greatly different if he had never lived, and if a so-called school of economics had not taken on his name.'** (1972, p135)

Commons' activities in Wisconsin<sup>124</sup>). As many students of institutionalism were recruited by the newly set up agencies and organizations, they started to promote strategies of interventionism and industrial planning as a solution to the Depression. (Biddle, 1998)

Roosevelt's braintrusts were the object of relentless attacks on the grounds that they exercised a power way beyond their attributions. Columbia institutionalist economist Rexford Tugwell,<sup>125</sup> who was one of the chief proponents of planning, became a 'favorite target for conservative critics of the New Deal'. (Hoftstadter, 1963, p215) Business and political interests also heavily contested the brain-trusters' approach to policy. In fact, some of the most prominent institutional innovations of the New Deal, which took the opposite course to traditional economic strategies, failed to secure a durable impact on governmental policy. (Dobbin, 1993) Hence the comprehensive industrial planning experiment (in the form of the National Industrial Recovery Act) was short-lived, struck down by the Supreme Court in 1935 in the midst of widespread dissatisfaction. And Stryker's work on the New Deal has shown convincingly that another 'radical' institution –the economics research section of the National Labor Relations Board– did not succeed in creating a niche, and was ultimately dismantled by Congress in 1940. The National Resources Planning Board, a research organization acting as a White House think tank for long-term issues (and, in particular, post-war planning) survived longer but suffered the same fate in 1943. On the other hand, agencies whose economists defended a more

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<sup>124</sup> Yonay, 1998, p63.

<sup>125</sup> Nominated Under Secretary of Agriculture in June 1934.

orthodox approach based on competition-enhancing mechanisms (e.g. the Social Security Administration, the Treasury), flourished.<sup>126</sup>

The second element of economic policy innovation during the New Deal, which the economists helped provide a rationale for, was 'pump-priming', or the use of budget deficits for macroeconomic stabilization. While (as we just saw) planning as a strategy to restore growth failed to mobilize a wider constituency, the case for unbalanced budgets gradually gained support through the 1930s, not only among economists, but also among wider societal constituencies. One should not forget that Roosevelt in 1932 campaigned against Hoover's failure to balance the budget. Yet the persistence of the depression, and the administration's difficulty to keep the budget in balance,<sup>127</sup> provided a market for the promoters of a different approach to macroeconomic management. First, the idea of a 'compensatory spending' by the government during recessions was not unfamiliar and had been advocated by Chicago economists since the beginning of the slump.<sup>128</sup> Second, the sudden conversion of a number of academics and high-ranking officials to the Keynesian analytical framework around the time the *General Theory* was published (in 1936) legitimated deficit spending within a new, comprehensive, intellectual paradigm. By the end of the 1930s, the rationale for this strategy was advocated forcefully by a small network of personalities in key positions, including at the Federal Reserve Board.

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<sup>126</sup> Merriam, 1944; Stryker, 1989, 1990; Sweezy, 1972; Barber, 1996, p68.

<sup>127</sup> Roosevelt's 1934 budget was unbalanced.

<sup>128</sup> J. Viner, F. Knight, P. Douglas, H. Simons. See Davis (1971), Laidler (1993), Tavlas (1998) for a discussion of the 'pre-Keynesian' Chicago economists' ideas.

the National Resources Planning Board, and the Department of Commerce.<sup>129</sup> (Stein, 1969; Weir and Skocpol, 1985) In academia, a clique of Keynesian converts around Alvin Hansen, first at Harvard, then in Washington, carried the message.<sup>130</sup> It is ultimately this disparate constellation of people, who popularized the 'Keynesian' policy remedy through their incessant activism, and helped win the budget battle in 1938.

### The Institutionalization of the Economist's Role in Government

The mobilization of the national economy into the war effort reinforced the trend towards the institutionalization of economic expertise, and brought to the fore those institutions where the economists' influence was concentrated, such as the National Resources Planning Board and the Office of Price Administration (headed by John Kenneth Galbraith). As pointed out earlier, for one thing, economists, especially the younger generations, which had had more technical exposure, possessed skills that were not available elsewhere. Their contribution (e.g. in the development of quantitative instruments) thus appeared in many ways critical in planning for the military effort.<sup>131</sup> As

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<sup>129</sup> These personalities include, among many others: Laughlin Currie, advisor to the governor of the Federal Reserve Board (and later at the White House); Richard Gilbert at the Industrial Economics Division at the Department of Commerce (and director of research at the Office of Price Administration during the war); Robert Nathan, at the National Income Division (and chairman of the Planning Committee of the War Production Board after 1942).

<sup>130</sup> In spite of Galbraith's often quoted claim that 'Harvard was the main avenue by which Keynes' ideas passed to the United States' (1971, p48), the 'new' policy approach institutionalized itself in Washington before it did so in academia. As Barber recalls, 'none of the junior economists who [together with their colleagues at Tufts University] participated in drafting one of the pioneering American statements of Keynesian doctrine –*An Economic Programme for Recovery*, published in 1938—achieved tenured status at Harvard'. (1997, p14)

<sup>131</sup> See for instance the role of Robert Nathan.

one interviewee, who worked in the Bureau of Labor Statistics during the conflict, told me: 'In the entire Bureau I was the only one to know how to use a slide rule'.<sup>132</sup> These developments systematized the identification of the economist's role in government with that of a reliable technician.<sup>133</sup> Also, the bankruptcy of the pre-war economic order (both national and international) had made politicians and high government officials unusually receptive to the message of these new experts about the necessity to reform profoundly the institutional bases of capitalist economies, and the war presented an opportunity to conduct a thorough reflection on what the future might look like. (Hirschman (1989) refers to this historical moment as the "suspension and reshaping of expectations".) The exceptional nature of the situation –a worldwide military conflict-, combined with Roosevelt's openness to academics in general, thus created the conditions of a unique level of expert autonomy in shaping future orientations. As Ikenberry (1992) has shown, the political mainstream of the post-war period, with its unique combination of interventionism and social welfare in domestic economic matters, and liberal multilateralism in international ones, was largely forged by a 'transgovernmental alliance' of economists, both American (Viner, Hansen) and British (Keynes, Meade, Robbins).<sup>134</sup>

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<sup>132</sup> Interview, Professor Emeritus, Harvard University, April 1997.

<sup>133</sup> See Carson, 1975, on this point.

<sup>134</sup> These personalities, in particular, dominated the discussions surrounding post-war monetary planning, which led to the Bretton-Woods agreement and the institutionalization of what J. G. Ruggie (1983) has termed a regime of "embedded liberalism".

### **The Council of Economic Advisers and the Making of Macroeconomic Policy**

The legitimacy gained by economists during the conflict provided a strong argument for acknowledging formally their specific role in government. This transformation was effectively accomplished with the 1946 Employment Act, and the combined creation of the Council of Economic Advisers (in the White House) and the Joint Economic Committee (in Congress). In contrast to Britain, where the wartime 'Economic Section' rapidly lost its authority to Treasury mandarins as soon as the conflict was over, there existed little institutionalized obstacle to the constitution of a separate expert organization in the United States, as long as it seemed relevant to the operation of government. Also, the CEA, created as a small and purely advisory structure with no practical authority, offered only limited challenge to the large and powerful economic agencies (such as the Treasury and the Bureau of Budget). (Weir, 1989)

The Council of Economic Advisers consists of three principal members and relies on a small (12 to 20) staff of professional economists, all of them generally drawn from academia on temporary rotations. (see Table 2-2)<sup>135</sup> Although the very 'academic' staffing patterns of the CEA were less characteristic of the early councils under the Truman administration, they became routine under the chairmanship of A. Burns (1953-56) and even more W. Heller. (1961-1964) The very fact of this transformation has led some commentators (for instance De Long (1995)) to describe the institutionalization of a strong academic core in American economic policy-making as a historical 'accident'. Yet such an explanation does, I believe, obliterate an important fact about the structure of

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<sup>135</sup> Table 5.1. reports the educational and professional background of CEA chairmen and women.

American political institutions. As pointed out in the analysis of the New Deal earlier in this chapter, reliance on academic institutions has long appeared a 'normal' course in a country, which both lacks a highly exclusive administrative class, and has traditionally filled its top civil service positions with outsiders. As a matter of fact, 'academic' economic expertise has not been confined to the CEA but has gained prominence in other administrations since the war –with, among other trends, the institutionalization of 'chief economists' positions at the top of each federal department and agency.

The existence of a central institution for the provision of economic advice, which formally recognizes the special role of *academic economists* in assisting the President in his task as the primary authority responsible for the conduct of the economic policy, certainly constitutes the most decisive originality in American economic policy-making. While other countries today possess similar institutions, often modeled on the American example -from the 'older' and respectable German *Sachverständigenrat* ('Wise men council', established in 1963) to the more recent *Conseil d'Analyse Économique* in France-,<sup>136</sup> none of them is as well established. Thus the German council, although staffed with professors, remains entirely outside of the machinery of government and does not have regular input into the policy making process itself. The French council, on the other hand, might be considered less effective than the CEA because of its size and internal diversity (although it is somewhat early to pass a judgement on such a novel institution).

As many observers have noted, the sheer existence of the CEA has de facto created an 'advocacy group for mainstream economics' within government, and thereby a



powerful agent for the routine incorporation of economic arguments into policy discourse. (Schultze, 1996; Porter, 1983, p405) On the other hand, this situation does not, by itself, guarantee the institution a strong influence on policy. Rather, the latter depends almost exclusively on how seriously the President (who has many other sources of advice, none the least a personal assistant for economic affairs) takes its recommendations. (Tobin and Weidenbaum, 1988, p. ix) This weakness was plainly exposed during the first Reagan administration (generally a low point in the relationship between academics and government), when the Council Chairman, Harvard professor Martin Feldstein, publicly exposed his disagreement with the President on the economic implications of massive federal budget deficits. At the time, the White House fired him – even considered abolishing the institution altogether.

The 1960s, which are often regarded as the Golden Age of economists' influence on American policy, constitute a strong counterexample. First, the CEA then disposed of a relative monopoly on economic expertise, which gave it a great edge and visibility within an administration otherwise not very literate in modern economic analysis. Walter Heller, Chairman of the Council of Economic Advisers between 1961 and 1964, gathered a team of highly skilled 'technicians' around him, who pioneered the systematic use of sophisticated economic tools for government decision-making.<sup>137</sup> Two of the authors of the 1962 *Economic Report to the President* (the annual publication by the Council of Economic Advisers) were future Nobel Prize winners (Robert Solow and James Tobin).

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<sup>136</sup> See Wyplosz, 1998, for a recapitulation of existing organizations in various European countries.

<sup>137</sup> See for instance interviews in Allen, 1977 (p73 especially).

and another upcoming Nobel laureate, Paul Samuelson, was a close adviser to Kennedy himself.<sup>138</sup>

Second, the natural openness of Kennedy to academics (whom he met frequently, both as inside economic advisers and outside consultants) and interest for economic matters, as well as the strength of his relationship with Heller, meant that modern economic analysis had a powerful voice in the administration. The CEA's commitment to full employment, encapsulated in the 1962 *Economic Report*, and implemented with the Johnson-Kennedy tax-cut of 1964 (which Heller forcefully lobbied for), appear in many respects emblematic of a confident, technocratic, 'Keynesianism' in macroeconomics, which was enthusiastically supported by the vast majority of the profession.<sup>139</sup> The latter's success contributed to integrate the CEA more closely with the rest of the administration throughout the 1960s -and to raise the profile of the economics profession altogether. Not until the 1982 *Economic Report* (which was inspired by very different ideas about the best way to achieve economic recovery) would the CEA endorse its role with such a missionary spirit.

Since the 1960s, the CEA has lost part of its leadership to other government departments –the Treasury, but also the Federal Reserve, both of which have substantially increased their own capacities in the domain of economic analysis, and the recently established National Economic Council. As a profession, economists have thus been remarkably successful in establishing a high profile position, which gives them

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<sup>138</sup> Other prominent advisers included J.K. Galbraith, S. Harris, C. Kaysen, and A. Okun.

<sup>139</sup> See Tobin, 1966. Silk (1964) who reports that a survey of more than 500 university economists conducted in 1963 found that 84 percent favored an immediate tax cut, despite imbalance in the federal budget. (p595)

immediate and legitimate access to the realm of policy-making. Yet at the same time, the fragmentation of political and administrative power, and the overlapping of jurisdictional authority between departments, downplays the latter's significance. The quote below, from a government official in 1970, expresses this ambiguity quite plainly:

'CEA cannot blow people out of the water with the depth of its analysis like it could do it in the 1960s. Few people understood what the term 'multiplier' meant in the 1960s, much less were able to argue with the CEA's argument about a tax policy to stimulate the economy. When CEA said that the effect of a specific tax action on investment was such-and-such there wasn't any other agency doing its own empirical work to argue with it. But now, Treasury may say: "No, it's Y." And Labor, "It's Z.'" (quoted in Porter, 1982, p357)

Ultimately, then, it is the power interplay between the various agencies with jurisdiction over the economic domain, and, above all, a complex and competitive political process between the Presidency and Congress, which define policy orientations in the macroeconomic domain. These equivocal effects of institutional fragmentation are far from trivial when one seeks to understand the processes whereby economic ideas gain access to the political agenda in the United States. On the one hand, new ideas, disposing of legitimate and numerous points of entry into the policy-making process, will penetrate the administrative apparatus of the state quite easily -especially when traditional policy paradigms are being challenged by an economic crisis, and expert consensus is low. On the other hand, the same balkanization will affect their institutionalization in the long run as political actors, administrative departments, and interest groups compete with one another for influence. (Weir, 1989; Weir and Skocpol, 1985) Both the 'Keynesian revolution' and the 'supply-side' one, carried by Ronald Reagan, exemplified this ambivalence and competition between different policy paradigms established in different institutions. Thus successive administrations during the New Deal were divided between

the institutionalist / pro-planning agencies, the 'Keynesian' agencies (e.g. the Federal Reserve Board, the Department of Commerce), and traditional neoclassical agencies (e.g. the Treasury, or the State Department). Similarly, during the first Reagan administration, departments were notoriously split along ideological lines, with a 'traditional neoclassical' Council of Economic Advisers, a 'monetarist' Federal Reserve, and a 'supply-side' Treasury. (Martin, 1991:111-112)

### **Economists as Promoters of Efficiency**

The second aspect of the institutionalization of the economists' role in government has concerned their routine incorporation within the larger administrative apparatus. While many of the 'economic experts' recruited into government during the 1930s and the war had been temporary appointees, the post-war period, saw the consolidation of a new professional role: the 'government economist', recognized as a separate occupational specialization. Since the late 1940s, economists are one among more than 300 specialist groups listed by the Federal Government's Office of Personnel Management, and are further classified into narrower subfields according to their specific area of competence.<sup>140</sup>

Between the late 1920s and the current day, government's in-house capacities in the economic domain expanded considerably, from about 700<sup>141</sup> to a little over 5,000 'economists' positions listed by the Office of Personnel Management of the U.S. Federal

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<sup>140</sup> Under the 1964 status, these classifications are: economist, financial economist, labor economist, regional economist, industry economist, international economist, agricultural economist. Source: Office of Personnel Management, United States Government.

<sup>141</sup> This figure is from White, 1937.

Government in 1997, with a peak towards the end of the 1970s. (Figure 2-6a) This development was a direct consequence of the broader expansion of state capacities and involvement in the economy, first associated with the social programs of the Great Society, and with the institutionalization of the cost-benefit approach from the 1960s onwards. (Schultze, 1982) In this respect, the role of economists was closely identified with micro- (as opposed to macro-) economic expertise.

'In the area of social and microeconomic matters, probably the late 1960s and early 1970s were almost a peak for at least what people expected out of economists. Now there was a view, at that time, during the initiation of the "War on Poverty" that with enough research you could solve almost any problem. That view no longer exists. So that while economic advice, economists, continue to play an important role in giving advice, people don't expect as much. Correctly. (...) It wasn't so much Kennedy. It was even more under Johnson. But then it extended into the Nixon years in terms of what people expected from research. Not just economics but important economic research. There were, for example, a large number of social experiments inaugurated on the effect of welfare payments on work behavior; in the health care area, a number of literally social experiments that were mainly planned by economists. Some still go on, but that was the heyday of that also.' (Interview, Senior Fellow, Brookings Institution, August 1999)

The Department of Defense was one of the earliest systematic users of the cost-benefit approach. The work of Porter has shown that cost-benefit analysis in the United States was primarily a jurisdiction controlled by military engineers, only 'taken over' by economists after the war.<sup>142</sup> The technique of program budgeting (institutionalized as Program Planning and Budgeting System (PPBS)), originally conceived for national defense policy formulation, thus grew out of a combination of bureaucratic experiences

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<sup>142</sup> See in particular his chapter "U.S. Army Engineers and the Rise of Cost-Benefit Analysis" in Porter, 1995.

with wartime controls, planning, later the management of an ever-expanding welfare economy, and the emergence of new academic specialties among economists.<sup>143</sup>

From the Department of Defense, cost-benefit analyses 'spread to all kinds of government expenditures, and later even to regulatory activities', as well as public goods such as education or health. (Porter, 1995, p188) In 1965, the vogue of these ideas was encapsulated in President Johnson's decision to establish a 'special staff of experts who, using the most modern methods of program analysis, will define the goals of their department for the coming year. And once these goals are established this system will permit us to find the most effective and the least costly alternative to achieving American goals.' (quoted in Novick and Alesh, 1970, p11)<sup>144</sup> In Figure 2-6a, this built-up of capacities in the economic domain from the early 1960s to the late 1970s appears quite explicit. Figure 2-6b complements these general trends by looking at more detailed data, which show both the consolidation of economic expertise in younger and smaller agencies (e.g. EPA, Department of Energy, but also (not included in the graph) Transportation, Education, Justice...), and its reinforcement in traditional centers, most prominently the Treasury and the Department of Labor.

Although PPBS did not survive very long as a management technique, it did have important long term effects in securing a large and organized presence of economists in government service and public policy research more generally, both at the rank-and-file and management levels. In particular, it established the principle of a core staff of

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<sup>143</sup> The Rand Corporation, a private organization working almost exclusively from contracts with the Department of Defense, also played a pioneering role in the formulation and diffusion of PPBS. See B. Smith, 1966; J. A. Smith, 1991, Chapter 5.

<sup>144</sup> My thanks to Cynthia Cook at Rand for providing me with this documentation.

economic experts within each government agency, which could systematically evaluate departmental proposals from an economic point of view. Thus whereas the 'influence' of economists on macroeconomic orientations has sometimes been difficult to assess, this is much less the case of their role in microeconomic issues, which have been generally less controversial. In this process, the role of the economist has become increasingly identified with the promotion of, and advocacy for, the guiding principle of microeconomics, which is the search for the most 'efficient' solution to any particular problem –and thus away from the earlier (macroeconomic) association with full employment and 'growthmanship'.<sup>145</sup>

### The 'Washington Economics Industry'

As pointed out earlier, economic policy making in the United States is not the exclusive realm of the bureaucracy, but involves a vast array of societal and political actors outside the boundaries of the state itself. The 'economics industry'<sup>146</sup> which emerged during the 1940s, thus came to be located not only among federal government agencies, but also within this larger Washingtonian community -interest groups, lobbies, public policy organizations, and private corporations.

At a first level, the growing demands for expertise on the part of expanding federal and state governments served to feed an active outside market for economic specialists in public policy research organizations. Heclo (1980), for instance, has shown that the expansion of government bureaucracy after the war proceeded at a much slower

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<sup>145</sup> Schultze, 1982, 1996. Also see Abbott, 1988, p193-194 on the general diffusion of efficiency as a legitimating value for American professions.

<sup>146</sup> The term if from Stein, 1986.

pace than that of government spending. The structure of American political institutions, the traditional distrust of big government, and organizational patterns in the larger society, are among the distinctive factors, which explain the tendency for expertise to be routinely 'externalized'. The sheer size, variety, and institutionalized role of private and non-profit research organizations in the policy process in this country are indeed quite remarkable in comparative perspective.<sup>147</sup>

During the 1960s and 1970s, private companies specializing in economic research came to run most of the major government-sponsored (both state and federal) social experiments. For instance, the twelve years research effort around the negative income tax was in great part led by Mathematica, a company set up in the late 1950s by a group of Princeton University economists interested in the development of mathematical models for marketing decision making.<sup>148</sup> Similarly, 'external' organizations in the public policy industry came to articulate technical debates at the early stages of the policy-making process. The Brookings Institution played a pioneering role in this domain, with an influential annual publication, which investigated systematically, on the basis of budget proposals, the government's policy options and their potential alternatives.<sup>149</sup> In spite of its 'liberal' orientation during the 1960s, for instance,

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<sup>147</sup> Smith (1991), for instance, identifies over 1,000 private think tanks in the United States, with a little more than 100 in Washington alone.

<sup>148</sup> With the dwindling of government funds for public policy research under the Reagan administration, however, the company developed into a successful technical software business. (Karen W. Anderson, 'Mathematica's shift into the software field', *New York Times*, February 22, 1983)

<sup>149</sup> *Setting National Priorities, 1971-1984*. The Congressional Budget Office, after its creation in 1974, took over most of this role.



Brookings has also been a relentless advocate of microeconomic efficiency as a criterion for evaluating social programs. (Crichtlow, 1993, p287-289)

'The research orientation (in government) is pretty low. When you have to address daily policy needs you cannot do research. At CBO, for instance, demands from Congress come constantly, either from Congress people directly, or from their staff members. (...) On the other hand, it's very easy to get money for contracts. You see, having more staff positions in government does not get you more votes. It gets you less. Voters do not like to have more people on the payrolls. So Congress is extremely reluctant to create such positions. Spending money on contracts, on the other hand, looks like government is doing something for the people. So we end up paying money on consultants for research that would have been much cheaper if done by the staff. There are many private firms and non-profit organizations that specialize in government contracts, and they often subcontract those to academics.' (Senior Economist, Congressional Budget Office, August 1999)

### **Think Tanks and the Politicization of Economics**

Until World War II, 'outside' public policy research organizations rarely sought to play an active part in the processes whereby specific policy proposals enter the agenda. Most of their activity was centered on the evaluation and analysis of existing governmental decisions. Brookings famous criticisms of the New deal budgets in the 1930s, for instance, were presented as an exercise of expertise from the point of view of mainstream economics.

The instrumentalization of economics towards more explicit political ends is a more recent phenomenon, which evolved gradually and took many different forms. By demonstrating the importance of economic skills in public management, and installing the Keynesian rationale as a valid alternative to previous policy paradigms, World War II profoundly changed the context within which societal groups could 'legitimately' enter

the policy process. In particular, it prompted them to articulate their own policy views around explicitly 'scientific' rationales supported by economic research.

The Committee on Economic Development (CED), created in 1942, was one of the first organizations to act on the basis of a substantial staff of economists (recruited among young Chicago-trained Ph.Ds), and in accordance with the interests of a certain fraction of the business community. The work of R.M. Collins (1981) and Weir and Skocpol (1985) has amply demonstrated the role of the CED (as well as other business organizations) in shaping the American post-war economic order in the direction of 'commercial Keynesianism', and producing a vision of macroeconomic management that would be acceptable to business and the parties. They also showed that the CED continued to influence that consensus as it evolved towards the acceptance of a more discretionary rule in the 1960s.<sup>150</sup>

With the 'technification' of societal influence, economic knowledge came to be regarded as a means towards political ends, a movement illustrated by the creation of the American Enterprise Institute in 1943, and later by the emergence of a new generation of ideological research organizations (the Heritage Foundation, the Cato Institute).<sup>151</sup> The revival of corporate class-consciousness during the post-Civil Rights 'conservative backlash' gave rise to a massive increase in financial support for congenial bases of technical expertise. By the 1980s, an abundance of 'ideological' institutes sought to

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<sup>150</sup> For instance Herbert Stein, who worked as an economist at the CED between 1945 and 1967 (and was later appointed chairman of Nixon's Council of Economic Advisers) is often seen as the architect of the CED's growing receptivity to discretionary fiscal policy in the 1960s. (Collins, 1981; also see Stein's obituary in the *New York Times*, September 9, 1999)

<sup>151</sup> Of the 112 Washington-based 'think tanks' existing in 1986, two-thirds (74) had been created since 1970 (McGann, 1995).

produce 'relatively sophisticated and well-documented analyses of the economic effects of specific government policies on business, and criticisms of the scientific basis of health and safety regulations'.(Vogel, 1989:226)<sup>152</sup> These organizations served to launch a number of public campaigns in favor of specific economic reforms, which were later popularized by candidate, subsequently President, Ronald Reagan (e.g. on tax cuts, deregulation).<sup>153</sup>

The quote below, from an economist at the American Enterprise Institute, represents well the ambiguities of the technico-political philosophy, which inspires these organizations (in this case, one of the most academically respectable of them):

'The American Enterprise Institute (AEI) is really one of the focal points, of connecting academic work to the press in a way that the press can understand. So I'm on television a lot, I write for popular journals a lot now, and popular magazines. And that stuff is, I guess, the core responsibility of the Institute. That makes it, I think, sort of an important component of the mechanism that makes the economy work. We talked earlier about how MBAs learned economics from Economics professors and then start running their companies better. Well, I think that places like AEI teach people true lessons so that the lessons stick – propaganda doesn't stick; propaganda can win an election for a candidate but it doesn't change things fundamentally, at the low frequency, it's not going to last forever. Spreading the truth does. And I think that one of the functions that AEI tries to have is take the things that the frontier economists are teaching us, and make them digestible for the masses. And yeah, I'd have to say that for me, I take that responsibility with almost religious zeal, that I think it's one of THE most important things I could do, as an economist, that I could help people – if people just understood supply and demand, if voters understood supply and demand, the world would be a much better place. So the challenge is daunting but the game is potentially, in terms of really making a difference in how the world works for the good of

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<sup>152</sup> Vogel, 1983, 1989. See Figure 2.6., which details the budgets of a number of public policy organizations.

<sup>153</sup> The literature on think tanks, especially regarding the rise of a strongly ideological public policy research sector during the 1970s and 1980s, is quite large. See notably: McGann, 1995; Ricci, 1993; Crichtlow, 1993; Weiss, 1992; Smith, 1991; Blumenthal, 1988.

everybody. I think that it's one of those places where you can have a very big effect if you can succeed at getting the lessons across. So that's what AEI's about, really.' (Senior Fellow, American Enterprise Institute, August 1999)

The sheer existence and institutionalized position of 'ideological' think tanks ought to be discussed in light of my earlier commentaries about the boundaries between 'science' and 'politics' in the American context. A first point is that it should be not so surprising that economic expertise has tended to get institutionalized in institutions, which claim their commitment to the idea of the free market.<sup>154</sup> Indeed, the nature of neoclassical economics and the focus on the concept of economic efficiency (against that of equity) often have policy implications, which, admittedly, 'generally favor the interests of the haves over the have-nots' (Blinder, 1999).<sup>155</sup> In light of this fact, it is quite understandable that economics as it institutionalized in the United States would find a sympathetic constituency among the business community, as the quote above demonstrates.

Second, the importance of gate-keeping work becomes clearer once we take the permeable and fragmented nature of American political institutions into account. It is never as necessary to assert the existence and proper character of the boundary as when it is fuzzy and highly permeable. Evolving in an 'open' polity where the provision of advice and ideas is organized on a market basis rather than on a form of hierarchical

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<sup>154</sup> In a survey based on Day's *Directory of American Think Tanks* (1993), I found that among the organizations dealing specifically (though rarely exclusively) with economic matters, a large majority (more than 80%) proclaimed their commitment to the promotion and defense of free-market ideas.

<sup>155</sup> The economics community, for instance, mobilized in favor of deregulation during the 1970s. (Kingdon, 1995; Nelson, 1987)

elitism (as in Europe), American economists are routinely confronted to the competition of laymen and would-be experts, and have to continually evaluate their (and others') claims to legitimacy.

### **The Economic Jurisdiction in the Business World**

Like with the government, economists in the United States have been historically closely involved with the business world on the basis of their expertise. This is true at many different levels: first, the profession of 'business economist' institutionalized quite early, in the industrial world especially. Second, economic experts from academia and government have been particularly prone to turn their knowledge into a marketable asset. There is widespread evidence of a comparatively early and massive establishment of the economic consulting market in this country, and its application to a large variety of areas, from pollution control to crime. Third, the business world as well as other interest groups makes a large use of economic research in its routine lobbying and ideological activities, as the preceding section on think tanks demonstrates.

According to *National Science Foundation* surveys, which are based on individual self-identifications as 'economists' regardless of qualifications, business constitutes the primary sector of 'economists' employment in the United States. (See table 2-5) While this statistic should not be considered too important as such, it does nonetheless point towards a remarkable fact, which is the general 'professional relevance' of economics to the business world in this country, and the fact that a large population recognizes itself in it. A second indicator is the significant level of organization of the 'business economics' profession: the *National Association of Business Economists* (est.

1959) currently lists about 4,500 members,<sup>156</sup> and the last available survey from the National Science Foundation states that the population of doctoral economists employed in the business sector amounts to 3,360 (16.8% of the total). Other indicators might include the large proportion of CEOs with a degree in economics,<sup>157</sup> or the 'economicization' of business education since the 1960s –with the systematic introduction of economics into business schools curricula.<sup>158</sup> One interviewee expressed this embeddedness of economics in the business world with considerable assurance (which contrasts remarkably with the angry disillusion I encountered among the few French academics who have been trying to make their expertise available to the private sector):

'Lately I've been doing some consulting that has had me speaking with corporate executives, and the thing that's astonishing to me is that everybody out there running a company really knows their economics. I mean, Jorgensen's "User Cost of Capital", for example. It's a formula that describes what the opportunity cost of funds a firm should use when deciding whether to invest. That formula etched in the skull of CFOs at all the top companies now. And I think one of the reasons why we've had the economic success that we've had is that the business schools have taught the people who are running their companies good sound economics. And I think there's been a feedback into the profession in the sense that there's been almost a clinical trial of economics by having people out there using economic principles to run their companies, and then succeeding, and then teaching us that we were right, and sort of reinforcing research in a specific area.' (Senior Fellow, American Enterprise Institute, August 1999)

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<sup>156</sup> This figures includes the members of the local chapters of the NABE. Source: [www.nabe.com](http://www.nabe.com).

<sup>157</sup> *Business Week* thus reports that economics is the second most popular college subject (after engineering) among America's 'corporate elite'. ('The Corporate Elite', October 11, 1993, p64)

<sup>158</sup> American foundations, notably Ford and Carnegie, played an important role in this transformation. (Guillen, 1994, p87; Goodwin, 1998) The history of the relationship between economics and business schools remains to be written, however.

## The Business of Economics

Statistical and econometric techniques provided one of the first areas of commercial involvement of economists, and academics often led the way in the commercialization of research to outside constituencies. During the inter-war, in the absence of strong government involvement, the marketing of statistical indices, as well as analyses and forecasts of the current economic situation, was associated primarily with prominent academic and research institutions. In 1917, for instance, a group of Harvard economists and statisticians established a commercial venture for the collection of statistical data and the production of the first barometers of business activity. Throughout the 1920s, the *Harvard Economic Service* offered forecasts based on its analysis of three indexes of economic activity<sup>159</sup>, a methodology that was widely imitated around the world. Another prominent inter-war example was Irving Fisher, an eminent economics professor at Yale, who organized his own consulting and advisory business in the form of a competitor forecasting service. Both organizations were quite successful in their activities, at least until their failure to predict the 1929 stock market crash and the subsequent deepening of the Depression seriously damaged their credibility. (Samuelson, 1987; Dominguez, Fair and Shapiro, 1988)

The list of academic economists who have set up shop in the private sector is very long, and there is no point being exhaustive here. Suffice to say that market mechanisms, the reluctance, already mentioned, of government to internalize research, and the decentralization of political, administrative, and corporate decision-making in the United States provided a niche for the widespread commercialization of academic skills. I

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<sup>159</sup> The 'ABC curves': A -curve: 'speculation'; B -curve: 'business'; C -curve: 'money'.

develop these points below, through an analysis of two particularly interesting examples of such activities: econometric forecasting and legal advice.

### **An Example: Econometric models**

The econometric model industry provides a good example of the processes whereby economic knowledge gets easily 'commodified' for private uses in the United States. As pointed out earlier, the first econometric models originally emerged as pure academic innovations, built within the framework of academic research institutions. The Cowles Commission, as well as several universities (the University of Michigan and the University of Pennsylvania), where Klein's earlier efforts took place, played an important role in supporting these early efforts. The first large-scale model of the American economy was then developed at Brookings after 1959 (in association with the Social Science Research Council). Involving large teams of researchers, it played a pivotal role in shaping applied econometric practice throughout the world.

Government agencies in the United States have been much less conspicuous in the history of macro-econometric model building than in France, or even Britain where the Treasury still runs the most advanced enterprise in this area. For the most part, models were developed *outside* government departments, and then bought and used by bureaucratic administrations. Prevention against the political underpinnings of models, and the competition between Congress and the Presidency over the budget have prompted this avoidance of direct government involvement into the making of the tools that enter the forecasting and policy evaluation processes.<sup>160</sup> A former senior official at the

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<sup>160</sup> The notable exception to this is the Federal Reserve, which has been historically quite active in macro-econometric model-building. The Federal Reserve of



Congressional Budget Office thus saw in the agency's lack of an internally produced model 'a defense against criticisms that the model is biased.'<sup>161</sup>

The emergence of a demand (notably from the public sector) and the diminishing returns of macro-econometrics from a scientific point of view (after the first pioneering efforts, it became increasingly difficult for academics to legitimate their involvement in an intellectual activity, which was not 'at the frontier' anymore) encouraged the commercialization of models.<sup>162</sup> Over the course of a history, which spans from the early 1940s to the late 1970s, the practice of macroeconomic model-building evolved from a traditional research enterprise sponsored by academic institutions into a purely commercial venture, exemplified by the emergence of three large private economic forecasting firms, all of them started by academics (WEFA, DRI, and Chase Econometrics). (Bodkin, Klein and Marwah, 1991) *Wharton Econometric Forecasting Associates* (WEFA) was formed by L. Klein and others to support the building of a

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Saint Louis built one of the first 'monetarist' models in the 1970s, and the Federal Reserve Board developed FRBUS, a large computer model, for forecasting and policy simulation.

<sup>161</sup> Economic Consultant, Washington, August 1999.

<sup>162</sup> Not only was macro-econometric modeling not at the scientific frontier anymore, but its scientific credibility had been seriously damaged by the Lucas critique (1976), which showed that under the rational expectations hypothesis, econometric models could not serve to formulate forecasts on the future behavior of the economy:

'The progressive intellectual agenda was doing the heavy lifting for the development of ever better macro-econometric models. Academia stopped contributing to that effort around the time of Lucas Critique. But in the practical world they needed these models and so there was essentially no academic input to that endeavor for a very long time. (...) It just stopped after the Lucas critique and migrated into the for-profit sector. Models became ad-hoc and opportunistic except for the Fed's, which, having

business application of the Wharton model. *Data Resources Inc. (DRI)*, and *Chase Econometrics*, also the children of academics (Harvard Professor Otto Eckstein for the first one and Michael Evans for the second) were created in late 1960s as forecasting and consulting firms more explicitly geared towards business uses.<sup>163</sup>

#### **Another Example: The Legal Jurisdiction<sup>164</sup>**

Another interesting illustration of the economic jurisdiction in the business world concerns the relationship between economics and law. As we will see, such a relationship is almost 'natural' in continental Europe, where economics was generally institutionalized as an element in the (primarily legal) training of civil servants. Part of the history of economics in these countries (and this is especially obvious in France) has to do with the latter's slow dissociation and autonomization from the legal realm.

The dynamics in the United States, however, has been almost opposite to this trajectory. As we have seen, economics there had different intellectual origins (in moral philosophy), and by the 1890s was already constituted as a strong and independent disciplinary project. In contrast to France, where law was constitutive of the economics profession as it institutionalized in the early part of the twentieth century, in this country law was a separate realm that could potentially become an object of professional investment. In addition, the courts took early on an interest in economic questions, and

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academics, continued that agenda.' (Interview, Professor, Princeton University, November 1999)

<sup>163</sup> See Faulhaber and Baumol, 1988. On Otto Eckstein, see Wilson, 1984.

<sup>164</sup> See the symposium on this question in the *Journal of Economic Perspectives*, Vol. 13 (2), p 91-99, Spring 1999. Also Posner, 1987.

occupied themselves with the regulation of the market –at a time when economists were either ignorant or openly hostile to it. (Mayhew, 1998)

The law, thus, has been constitutive of the ‘market’ as it emerged in early twentieth century America, and has played a considerable role in shaping the universe within which firms (public or private) operate since then. Not only ‘rules’, but also firms’ efforts to cope and influence those rules, have determined the nature of economic governance in this country. Indeed, because of the fragmentation and inherently evolving character of the legal system in the United States, ‘laws’ and ‘rules’ constitute a constant object of negotiation, which develops and changes through the accumulation of jurisprudence. In this respect, corporations are faced with a constantly evolving and ambiguous regulatory environment where their economic actions, while set within a ‘defined’ legal framework, may nonetheless be ‘interpreted’ or ‘argued’ in widely different ways. In this situation of high uncertainty, it is not surprising that both firms, courts and governments offices resort to economic professionals to provide clear, quantifiable standards to evaluate the impact of regulations, the realm of possible actions, and eventually argue, prosecute or defend their behavior in court.<sup>165</sup>

The cases of antitrust and other regulatory laws (e.g. environment, health and safety) provide a nice example of how the extent, complexities and ambiguities of the regulatory framework may create a de facto niche for economists in the legal arena. Over

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<sup>165</sup> This discussion refers to a more general argument about how the ‘weak’ nature of the American state (and in particular the forms of legal governance) encourages the development of professionalism. (See for instance Jepperson and Meyer, 1991; Dobbin and Sutton, 1998).

the 1960-1980 period, federal and state government agencies<sup>166</sup> were led to routinely use in-house economic expertise to support their legal investigations. Economic concepts became part of the legal arsenal of antitrust cases, and the judicial processes were increasingly subject to the imperatives identified by economic theory.<sup>167</sup> Eisner reports that by the end of the 1970s, 'economists at the Antitrust Division of the Department of Justice had come to exercise an influence equal to that of attorneys'. (1991, p115) On the other hand, a substantial market developed for economic consultants to the legal sector, both as 'inside' expert divisions within law firms, and as 'outside' providers of professional economic testimony (e.g. Charles River Associates, which fought a famous antitrust case against IBM). (Hurdle, 1992) In the preliminary case of the Federal Government against the Microsoft Corporation (1999), for instance, both parties relied on heavily on the expertise of teams of economists, each of them led by a well-known MIT professor.<sup>168</sup>

The rise of economics in the legal arena thus reflects a successful movement of jurisdictional expansion in Abbott's sense, and redefinition of professional boundaries. We may understand this tendency of American academic discourses and professions to enter new jurisdictional domains as a structural consequence of the fragmented, competitive and ambiguous status of societal institutions (in this case, the legal and

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<sup>166</sup> for instance the Department of Justice, the Federal Trade Commission, and State Attorneys General offices.

<sup>167</sup> Eisner, 1991 argues that due to the general influence of the Chicago school in the field of economics (and especially law and economics) during this period, the policy and enforcement processes came to reflect 'Chicago school' concerns.

<sup>168</sup> Richard Schmalensee for Microsoft, and Franklin Fisher for the Federal Government. Fisher had been previously one of the main experts involved in the IBM case. (on the defense side)

political systems), which produces a tendency to rely on formal rationalization and expertise. On the other hand, such 'structural' conditions are only necessary, not sufficient. In fact, the invasion of the legal domain by economic science has relied on a vast scholarly movement around 'law and economics', which has roots in the inter-war period but organized as an academic force in the 1960s. Therefore, we must also understand the massive development of analytical tools making economic expertise relevant to the legal jurisdiction in relation to the specific conflicts and dynamics that are internal to the academic field.

**'Many economists saw the application of economic tools to legal theory as a natural extension of the economic paradigm, a precedent for which already existed in public choice analysis.'** (Medema, 1998, p217)

Abbott argues that professional communities routinely use academic knowledge to enhance their professional status and legitimate their entry into new jurisdictions, and understands the former as a functional element in the making of American professionalism. (1988) Yet the case of 'law and economics' (as well as a number of other liminal sub-fields, such as finance,<sup>169</sup> or auction theory) also suggests a complementary dynamics, whereby academics' entry into 'private' jurisdictions serves to establish their status within the scientific community. We may thus have to look at the professional world as a functional element in the making of academic discourse and the identity of the scientific community itself. It is through this two-way relationship, in the constant interaction between academic discourse, its uses among audiences outside the academic arena, and the real world, that the dynamics of professional evolution is being shaped and the economist's identity reconstructed.

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<sup>169</sup> The rise of finance as a profession is a subject to itself, which goes beyond the scope of this subject. But see Whitley, 1987b.

## **American Economists from Professional Scientism to Scientific Professionalism.**

The relation to the political context has been central to the formation of economics in this country, as well as other social sciences. During the early part of the twentieth century, as well as other periods that were highly charged ideologically, such as the New Deal and the immediate post-World War II period, the various 'patrons' of economic science expressed considerable concern about the ideological underpinnings of social scientific knowledge, and actively encouraged approaches they saw as 'scientific' and less prone to arbitrariness in their dealings with academic communities. From the turn of the century, economists and other social scientists were thus led to emphasize, among their distinctive skills, those that could not be perceived as offensive or subversive by external constituencies (marginalism, empirical quantitativism). The emergence of mathematical economics and econometrics after the 1930s, reinterpreted the agenda of scientism in a new intellectual direction, by articulating its role within the realm of 'basic' science. As such, it could rely on the positivist ideal, already well established in economics for the reasons stated above, as well as a claim to usefulness, also highly legitimate in the broader societal culture. With the disappearance of institutionalism in the early decades of the post-war, such intellectual commitments became a second nature in which new generations of scholars were 'socialized', and the construction of a highly organized intellectual edifice took a life of its own. Porter summarized the situation nicely:

**'It is no accident that the move towards the almost universal quantification of social and applied disciplines was led by the United States, and succeeded most fully there. The push for rigor in the disciplines derived in part from the same distrust of unarticulated expert knowledge and the same suspicion of arbitrariness and discretion that shaped political culture**

so profoundly in the same period. Some of this suspicion came from within the disciplines it affected, but in every case it was at least reinforced by vulnerability to the suspicions of outsiders, often expressed in an explicitly political arena. It was felt most intensely in fields treating matters of public interest, and in many cases quantitative methods were initially worked out by applied sub-disciplines, migrating only later to the more 'basic' ones.' (1995, p199)

In other words, the rapid entrenchment of mathematical methods in American economics academia, and in particular the historical importance of a-theoretical, quantitative empiricism (which, as pointed out earlier, is resurfacing today with vigorous force), cannot be dissociated from broader aspects of the country's political culture, mode of economic organization, and particular historical trajectory (the importance of 'war' for the development of economics remains to be studied at greater length). We may understand this character of American economics with a first metaphor –what I call 'professional scientism' at the onset of this chapter. In other words, scientism came to be identified with a 'professional outlook', in the sense of a distance from partisanship and a focus on analytical capabilities, and a high degree of 'professional organization'. The latter refers for instance, to the strong jurisdictional control maintained through the role of educational criteria, the Ph.D. in particular, as well as the field's intellectual regulation around the authority of a well-shared, and well established, paradigm.

The second metaphor, which may help us articulate our presentation of the nature and identity of the economist's role in American society, is that of 'scientific professionalism'. As pointed out earlier, the intervention of economists in public and private arenas has been shaped not only by their own 'scientific' capabilities, but also by particular expectations emanating among the institutions, which requested such expertise in the first place. Certainly all states have requested essentially technical skills from the economists they incorporated into the policy-making apparatus. Yet not all states have

relied on academia to the same extent as the U.S. government. In this country, the lack of an established 'class' of top administrators, has brought academia closer to the world of 'technical' public expertise (by contrast with France and Britain, which have relied on the civil service to a greater extent). It is thus on the basis of their ability to fulfill this role that academic economists have been incorporated at the highest levels of the state apparatus. Also, the institutionalized competition within government, and between government and societal groups has created a strong institutional basis for an economic expertise that is rooted in the unassailable realm of 'science'.

We may make a similar point about the formation of the economists' jurisdiction in the corporate world. The occupational niche filled by economists there relies essentially on their technical capabilities –which, as in finance, might be extremely sophisticated. Here again, this is not specific to the United States. Yet I have argued that the nature of economic organization –the greater reliance on market mechanisms–, the permanently unsettled nature of the law, as well as the structure of the inter-professional ecology whereby professions appear 'relevant' to one another, also favors a high degree of incorporation of economic knowledge as part of the rationalization of society itself. In this movement, indeed, economic concepts and tools have become an integral part of the processes whereby social objects are routinely defined for the purpose of (for instance) legal assessment. Not only what a 'monopoly', or a 'market', is, have come to be defined in economic terms –but also what 'discrimination', 'pollution'<sup>170</sup>, or 'welfare'<sup>171</sup>, are and

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<sup>170</sup> Following economic analyses, the United States, for instance, has been the champion of the idea of an international market of the 'rights to pollute' (already implemented on the national territory for sulfure dioxide emissions).

<sup>171</sup> For instance, Ashenfelter and Oaxaca argue that Gary Becker's 1957 *The Economics of Discrimination* (which provides an 'economic' definition of



mean. It is in this greater 'colonization of the lifeworld', to use Habermas' (1984) phrase, that we may better understand the 'influence' of economists in modern America.

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discrimination), coupled with simple, modern econometric methods, has become the standard from which the litigation of disputes over allegations of race and sex discrimination proceeds.' (1987, p325)

## Tables and Figures for Chapter 2.

**Table 2-1: United States Government, Main Positions in Economic Policy: Secretary of the Treasury and Chairman, Board of Governors of the Federal Reserve System.**

<b>Secretaries, Department of the Treasury, 1921-2000</b>			
<b>Name</b>	<b>Dates and President</b>	<b>Academic economist Yes/No</b>	<b>Function / career prior to nomination</b>
Andrew W. Mellon	1921-1932 Harding, Coolidge, Hoover	N	Industry / Government
Ogden L. Mills	1932-1933 Hoover	N (law)	Under Secretary of the Treasury / Politics
William H. Hoodin	1933 FD Roosevelt	N	Business
Henry Morgenthau Jr	1933-1945 FD Roosevelt, Truman	N	Under Secretary of the Treasury / Government
Fred M. Vinson	1945-1946 Truman	N (law)	Government / Politics
John W. Snyder	1946-1953 Truman	N	Business (banking)
George M. Humphrey	1953-1957 Eisenhower	N (law)	Business
Robert B. Anderson	1957-1961 Eisenhower	N (law)	Government / Business (CED)
C. Douglas Dillon	1961-1965 Kennedy, Johnson	N	Under Secretary of State / Government
Henry F. Fowler	1965-1968 Johnson	N (law)	Under Secretary of the Treasury / Government
Joseph W. Barr	1968-1969 (1 month) Johnson	N (econ)	Under Secretary of the Treasury / Business
David M. Kennedy	1969-1971 Nixon	N (law)	Business (Banking)
John B. Connally	1971-1972 Nixon	N (law)	Government / Politics
George P. Schulz	1972-1974 Nixon	Y	Director, OMB / Academia
William E. Simon	1974-1977 Nixon, Ford	N	Deputy Secretary. Treasury / Finance
W. Michael Blumenthal	1977-1979 Carter	Y	Business
G. William Miller	1979-1981 Carter	N (law)	Chairman, Federal Reserve Board / Industry

Donald T. Regan	1971-1985	Reagan	N	Business (Banking)
James A. Baker III	1985-1988	Reagan	N (law)	White House Chief of Staff / lawyer
Nicholas F. Brady	1988-1993	Reagan, Bush	N	Business (Banking)
Lloyd M. Bentsen	1993-1994	Clinton	N (law)	US Senator
Robert E. Rubin	1995-1999	Clinton	N (law)	National Economic Council; Finance
Lawrence H. Summers	1999-	Clinton	Y	Deputy Secretary, Treasury / Academia

Source: Department of the Treasury.

<b>Chairmen, Board of Governors of the Federal Reserve System, 1936-present</b>			
<b>Name</b>	<b>Dates in post</b>	<b>Education</b>	<b>Functions prior to nomination</b>
Marriner S. Eccles	1936-1948	High school	Governor, Fed / business
Thomas McCabe	1949-1950	Swarthmore College, economics	Federal Reserve board Member
William McChestney Martin	1951-1970	Yale, Columbia law	Asst Secretary of Treasury for International Affairs / Finance
Arthur Burns	1970-1978	Ph.D., economics, Columbia '34	President, National Bureau of Economic Research
G. William Miller	1978-1979	Engineering (U.S. Army)	Industry
Paul Volcker	1979-1987	MA, public policy, Harvard '51	President, New York Fed / banking and government
Alan Greenspan	1987-	MA, economics, NYU '50	CEA / Business

Source: Bernard S. Katz, ed., *Biographical Dictionary of the Board of Governors of the Federal Reserve*, New York: Greenwood Press, 1992.

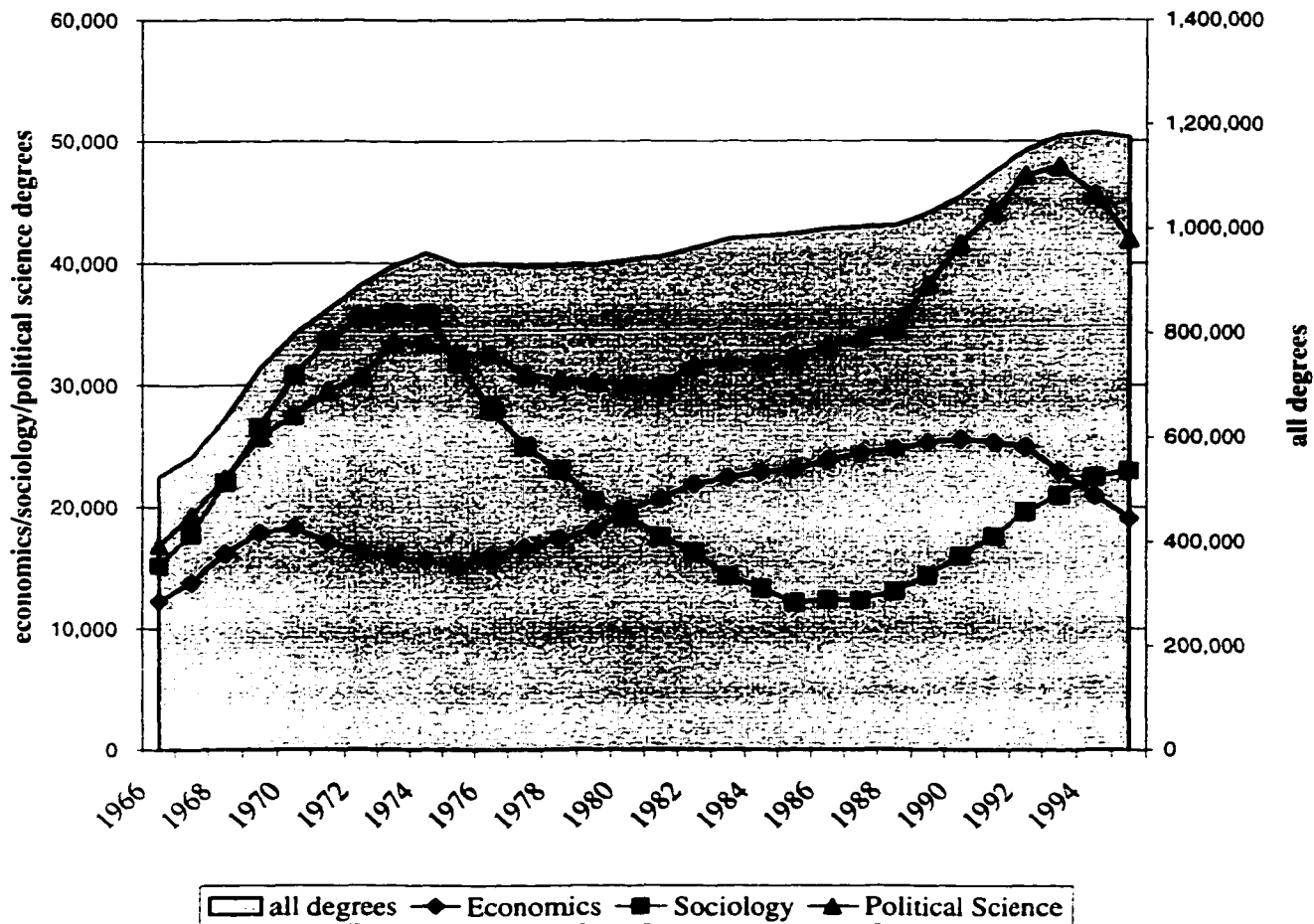
**Table 2-2: United States Government: Chairs of the Council of Economic Advisers, 1946-2000, and National Economic Council, 1993-2000**

<b>Council of Economic Advisers</b>			
<b>Name</b>	<b>Dates in post</b>	<b>Education</b>	<b>Functions prior to nomination</b>
Edwin G. Nourse (1883-74)	1946-49	Ph.D. Chicago '35	Vice-President, Brookings Institution; Prof. University of Arkansas
Leon H. Keyserling (b. 1908)	1950-53	LLB Harvard	Prof. (economics) Columbia; Various posts in government; Member, CEA
Arthur F. Burns (b. 1904)	1953-56	Ph.D. Columbia '34	Chairman, NBER; Prof., Columbia.
Raymond J. Saulnier (b. 1908)	1956-61	Ph.D. Columbia '38	Prof., Barnard College; Member, CEA
Walter W. Heller (b. 1915)	1961-64	Ph.D. Wisconsin '41	Prof. University of Minnesota; Various posts in government; Consultant.
Gardner Ackley (b. 1915)	1964-68	Ph.D. Michigan '40	Prof. Michigan; Member, CEA
Arthur M. Okun (1928-1980)	1968-69	Ph.D. Columbia '56	Prof. Yale; Member, CEA
Paul W. McCracken (b. 1915)	1969-71	Ph.D. Harvard '48	Prof. Michigan
Herbert Stein (b. 1916)	1972-74	Ph.D. Chicago '58	CED / Brookings; Member, CEA.
Alan Greenspan (b. 1926)	1974-77	MA, NYU, '50	Business (economic consulting firm)
Charles Schultze (b. 1924)	1977-81	Ph.D. Maryland '60	Prof. University of Maryland; Director, Bureau of Budget; Brookings.
Murray L. Weidenbaum (b. 1927)	1981-82	Ph.D. Princeton '58	Prof. Washington University in St Louis.
Martin Feldstein (b. 1939)	1982-84	Dphil Oxford '67	Prof. Harvard; President, NBER.
Beryl W. Sprinkel (b. 1923)	1985-89	Ph.D. Chicago '52	Business; Undersecretary of the Treasury for Monetary Affairs.
Michael J. Boskin (b. 1945)	1989-93	Ph.D. Berkeley '71	Prof. Stanford.
Laura d'Andrea Tyson (b. 1948)	1993-95	Ph.D. MIT '74	Prof. Berkeley.
Joseph E. Stiglitz (b. 1943)	1995-97	Ph.D. MIT '66	Prof. Stanford.
Janet L. Yellen (b. 1946)	1997-99	Ph.D. Yale '71	Board Member, Federal Reserve Board; Prof. Berkeley.
Martin N. Baily (b. 1945)	1999-	Ph.D. MIT '72	McKinsey Global Institute; Senior Fellow, Brookings; Prof. Maryland.

Note: except where indicated, all Ph.D. degrees are in economics

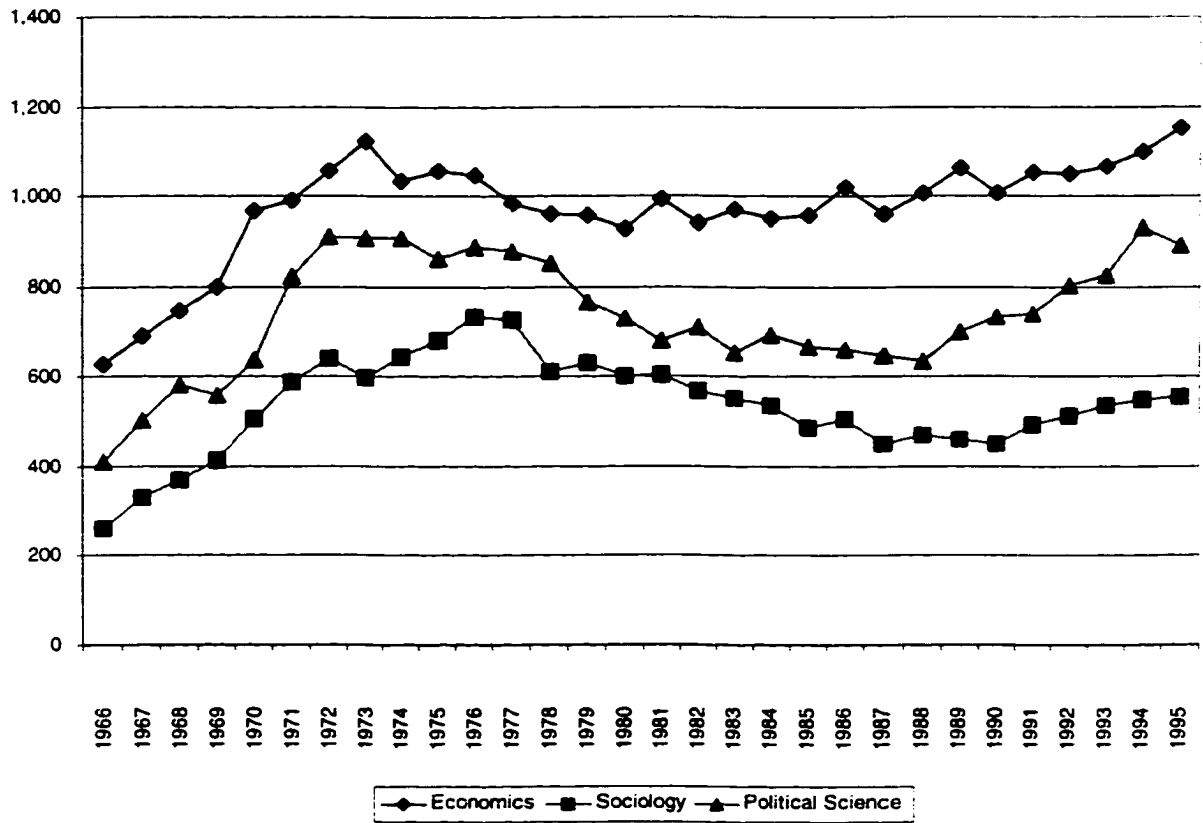
<b>National Economic Council</b>			
<b>Name</b>	<b>Dates in post</b>	<b>Academic economist</b>	<b>Functions prior to nomination</b>
Robert E. Rubin	1993-1995	N (law)	Business (Finance)
Laura d'Andrea Tyson	1995-1996	Y	Prof. Berkeley
Gene Sperling	1996-	N (law)	Deputy Director, National Economic Council

**Figure 2-1: Bachelor's degrees: economics and related fields, 1966-1995.**



Source: National Science Foundation.

**Figure 2-2: Ph.D.s, economics and related fields, 1966-1995.**



Source: National Science Foundation

**Table 2-3: Funding for social science research, 1939-1980**

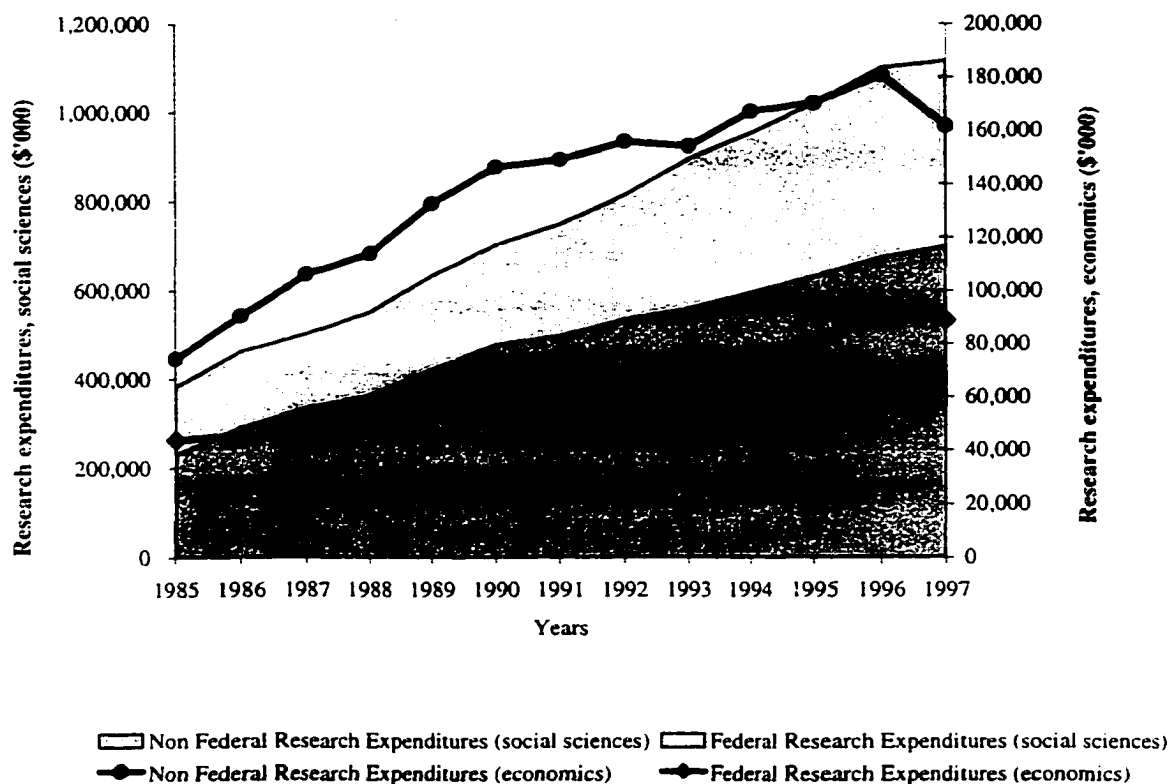
(Estimated amount, Millions of current dollars)

Source of funds	1939	1956	1964	1972	1980
Colleges and universities	12	46	95	160	300
U.S. government	—	30	103	307	524
Private foundations	3	21	38	41	41

Source: Robinson, 1983, p36.

**Figure 2-3: Research expenditures, economics and social sciences: federal and non-federal sources.**

Source: National Science Foundation.





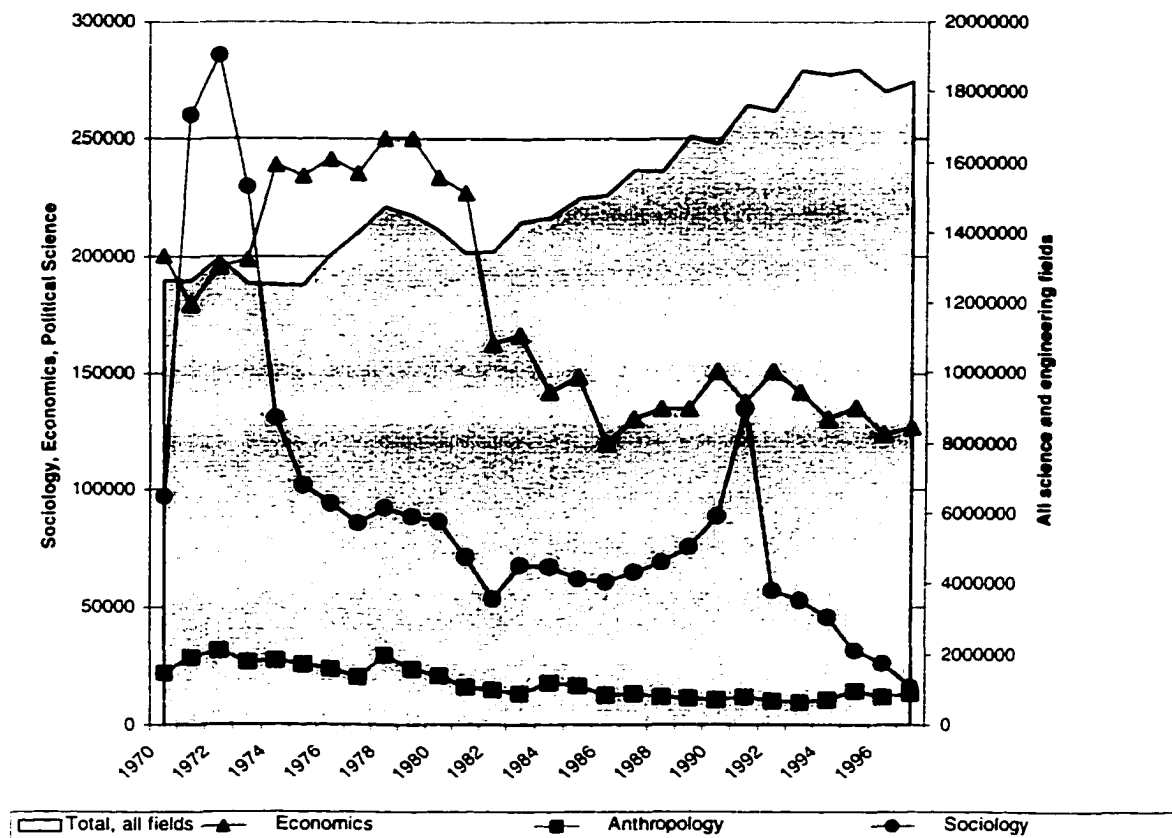
**Table 2-4: Federal Support for the Social Sciences, 1967-1983**

	All federal agencies (%)	National Science Foundation (%)
<b>Anthropology</b>	6.4	25.6
<b>Economics</b>	59.4	45.8
<b>Political Science</b>	3.8	11.8
<b>Sociology</b>	30.4	16.8

Source: Robinson, 1983, p37.

**Figure 2-4: Federal obligations for total research, 1970-1997**

(Millions of constant 1983 Dollars)



Source: National Science Foundation, Census Bureau (for Consumer Price Index).

**Figure 2-5. Excerpt from Paul Samuelson, Foundations of Economic Analysis, Cambridge: Harvard University Press, 1947, p7-8.**

Chapter II. Equilibrium Systems and Comparative Statics.

‘Most economic treatises are concerned with either the description of some part of the world of reality or with the elaboration of particular elements abstracted from reality. Implicit in such analyses there are certain recognizable formal uniformities, which are indeed characteristic of all scientific method. It is proposed here to investigate these common features in the hope of demonstrating how it is possible to deduce general principles which can serve to unify large sectors of present day economic theory.

In every problem of economic theory certain variables (quantities, prices, etc...) are designated as unknowns by assumption or hypothesis. These functional relationships hold as of a given environment and milieu. Of course, to designate this environment completely would require specification of the whole universe; therefore, we assume implicitly a matrix of conditions within which our analysis is to take place.

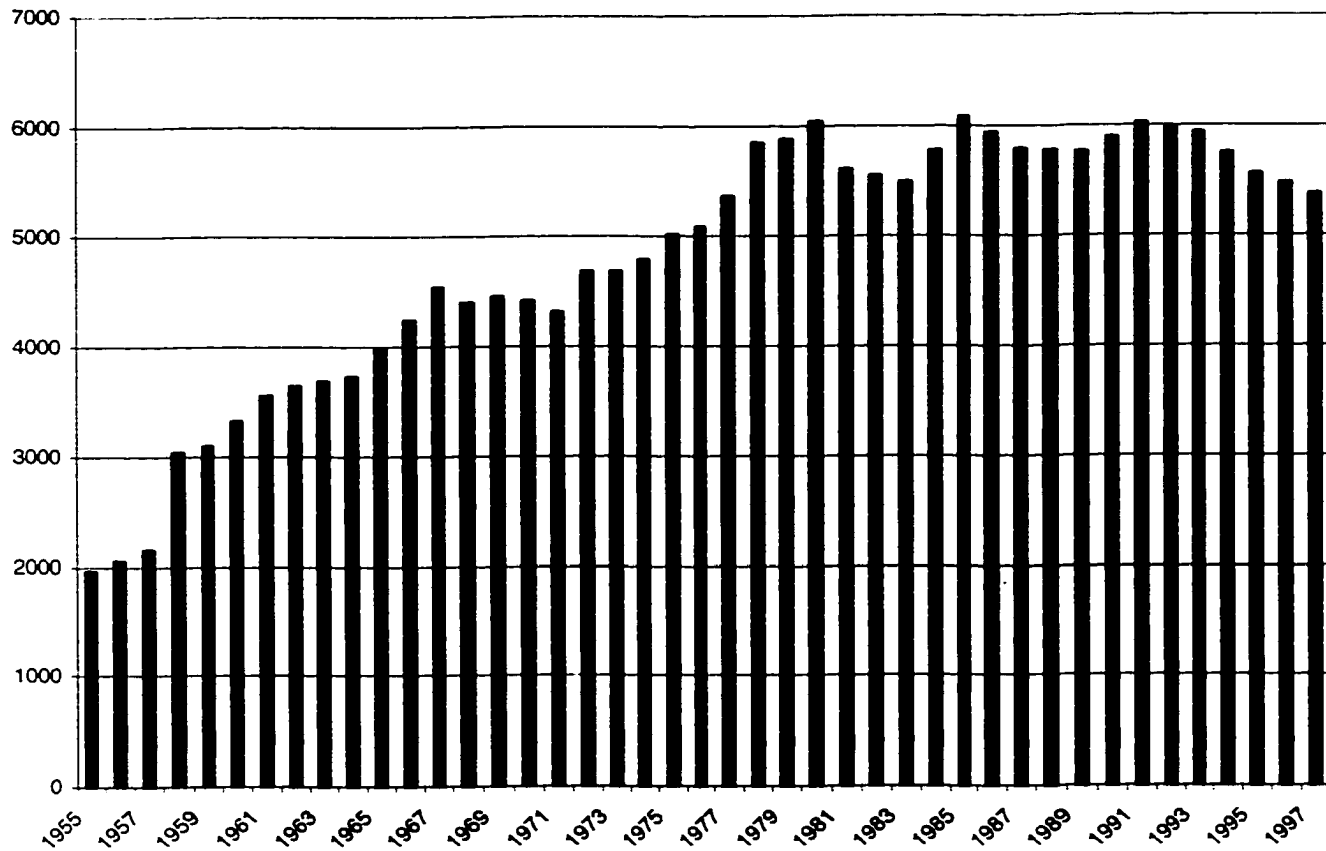
It is hardly enough, however, to show that under certain conditions we can name enough relations (equations) to determine the values of our unknowns. It is important that our analysis be developed in such terms that we are aided in determining how our variables change quantitatively with changes in explicit data. Thus, we introduce explicitly into our system certain data in the form of parameters, which in changing cause shifts in our functional relations. The usefulness of our theory emerges from the fact that by our analysis we are often able to determine the nature of the changes in our unknown variables resulting from a designated change in one or more parameters. In fact, our

theory is meaningless in the operational sense unless it does imply some restrictions upon empirically observable quantities, by which it could conceivably be refuted.

This is in brief the method of comparative statics, meaning by this the investigation of changes in a system from one position of equilibrium to another without regard to the transitional process involved in the adjustment. By equilibrium is meant here only the values of variables determined by a set of conditions, and no normative connotation attaches to the term. As will be shown later, it is always possible to set up completely trivial equilibrium systems.

This method of comparative statics is but one special application of the more general practice of scientific deduction in which the behavior of a system (possibly through time) is defined in terms of a given set of functional equations and initial conditions. Thus, a good deal of theoretical physics consists of the assumption of second order differential equations sufficient in number to determine the evolution through time of all variables subject to given initial conditions of position and velocity. Similarly, in the field of economic dynamic systems involving the relationship between variables at different points of time (e.g. time derivatives, weighted integrals, lag variables, functionals, etc...) have been suggested for the purpose of determining the evolution of a set of economic variables through time.'

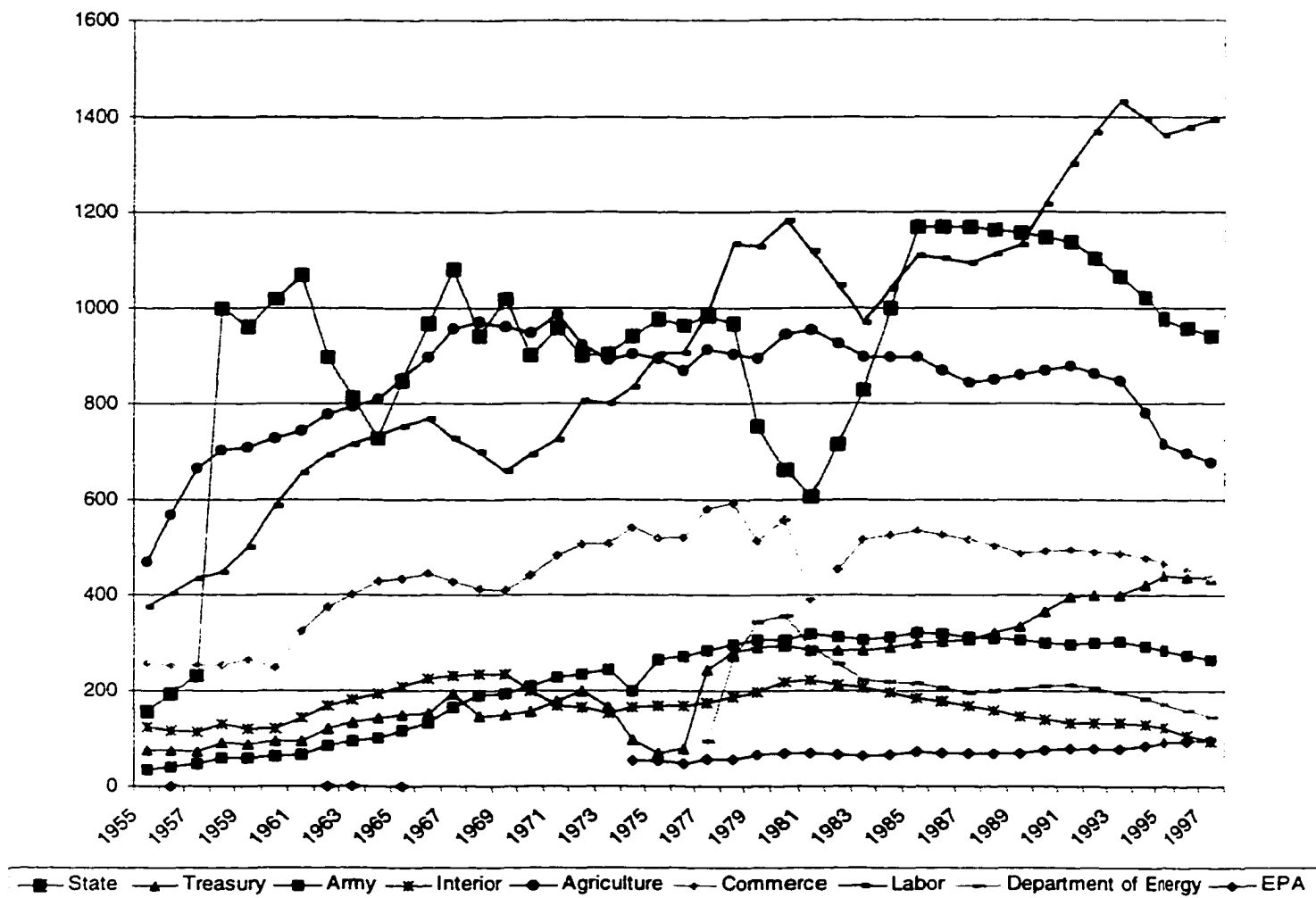
**Figure 2-6a: Total Number of Economists in American Federal Government,  
1955-1998.**  
(excluded: Congress, Federal Reserve).



Source: US Office of Personnel Management, *Occupations of Federal White and Blue-Collar Workers, 1955-1997*

**Figure 2-6b: Number of Economists in American Federal Government, 1955-1998.  
Selected government departments.**

(excluded: Congress, Federal Reserve).



Source: US Office of Personnel Management, *Occupations of Federal White and Blue-Collar Workers, 1955-1997*

**Table 2-5: United States: Self-identifications as 'Economists' by type of employer.**  
(1976 and 1983)

	Total 1976	Total 1983	Percentage 1976	Percentage 1983
Business/industry	34800	58300	55.68	51.82
Educational institutions	13000	23700	20.8	21.07
Federal Government	8300	16200	13.28	14.40
State/local government	2600	3900	4.16	3.47
Nonprofit organizations	900	3300	1.44	2.93
Other	2900	7100	4.64	6.31
Total	62500	112500	100	100

Source: National Science Foundation, 1985, Science and Engineering Personnel: A National Overview

**Additional Data.****Table 2-6: American Economic Association, Membership Data**

	1895*	1950*	1965*	1974*	1984**	1997**
Total number of members	572	6,936	14,127	18,766	19,459	22,738
Academic						64%
Government						9.3%
Business						14.8%
International Organizations						3.2%
Research / non profit						4.8%
Other						3.9%

Sources: \* Spengler, 1976, p53.

\*\* American Economic Association, Directory of Members (1984 and 1997).

**Table 2-7: Presidents, American Economic Association**

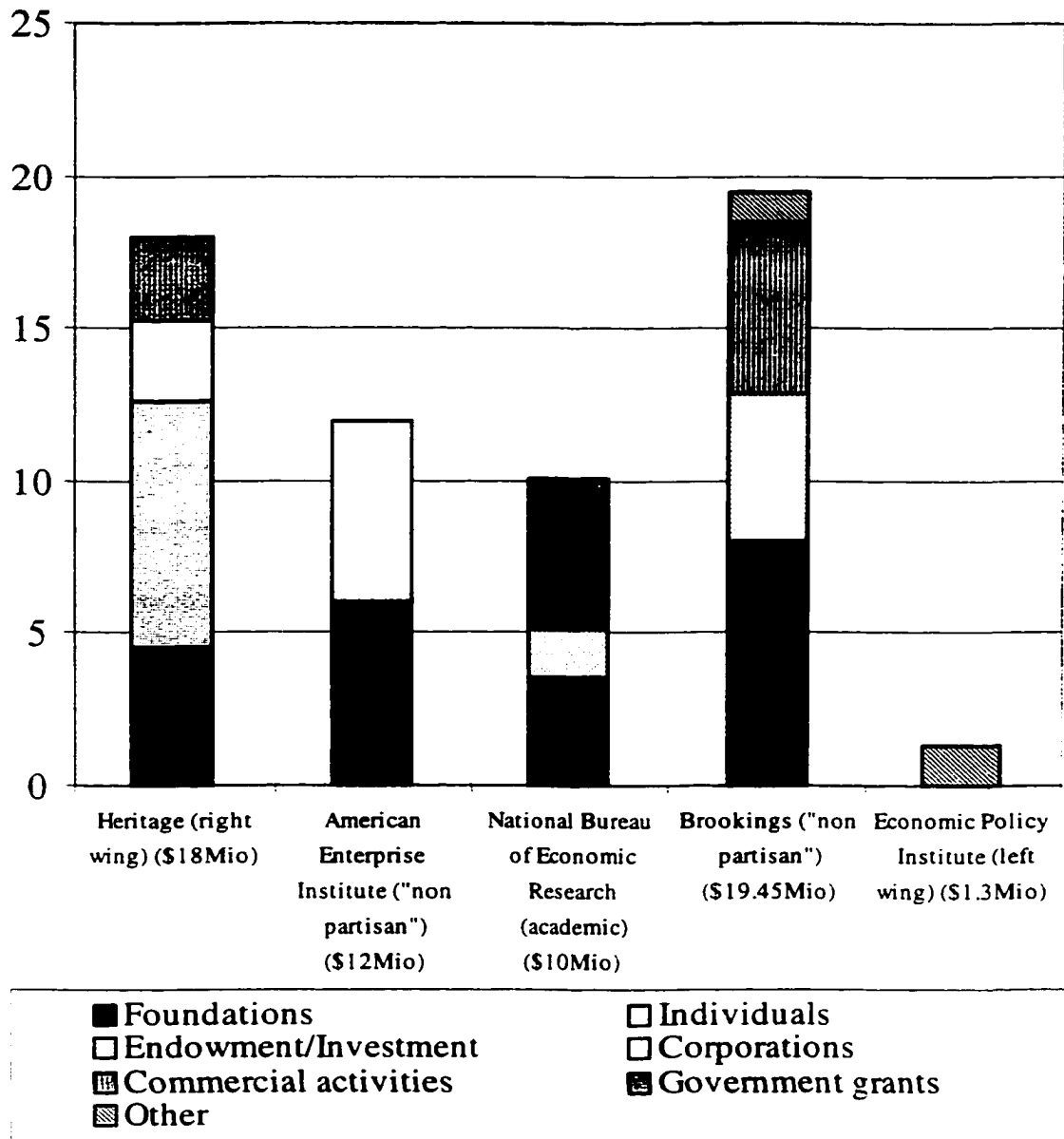
<b>Year</b>	<b>Name</b>
1938	Alvin Hansen
1960	Theodore W. Schultz
1961	Paul A. Samuelson
1962	Edward S. Mason
1963	Gottfried Haberler
1964	George Stigler
1965	Joseph Spengler
1966	Fritz Machlup
1967	Milton Friedman
1968	Kenneth Boulding
1969	William J. Fellner
1970	Wassily Leontief
1971	James Tobin
1972	John Kenneth Galbraith
1973	Kenneth J. Arrow
1974	Walter W. Heller
1975	Robert Aaron Gordon
1976	Franco Modigliani
1977	Lawrence Klein
1978	Tjalling Koopmans
1979	Robert M. Solow
1980	Moses Abrahamovitz
1981	William J. Baumol
1982	Gardner Ackley
1983	W. Arthur Lewis
1984	Charles L. Schultze
1985	Charles P. Kindleberger
1986	Alice M. Rivlin
1987	Gary S. Becker
1988	Robert Eisner
1989	Joseph A. Pechman
1990	Gérard Debreu
1991	Thomas C. Schelling
1992	William Vickrey
1993	Zvi Grilliches
1994	Amartya Sen
1995	Victor R. Fuchs
1996	Anne O. Krueger
1997	Arnold C. Harberger
1998	Robert W. Fogel
1999	D. Gale Johnson
2000	Dale W. Jorgenson



**Table 2-8: Leading Journals in American Economics, 1885-present**

Name	Date Founded	Remarks
<i>Quarterly Journal of Economics</i>	1886	Harvard
<i>Journal of Political Economy</i>	1892	Chicago
<i>American Economic Review</i>	1911	American Economic Association
<i>Review of Economics and Statistics</i>	1919	Harvard
<i>Econometrica</i>	1933	Econometric Society (International)
<i>International Economics Review</i>	1960	
<i>Journal of Economic Theory</i>	1969	
<i>Brookings Papers on Economic Activity</i>	1970	Brookings Institution
<i>Bell/Rand Journal of Economics</i>	1970	ATT / Rand Corporation
<i>Journal of Mathematical Economics</i>	1974	
<i>Journal of Monetary Economics</i>	1977	
<i>Journal of Economic Perspectives</i>	1987	American Economic Association

**Figure 2-7: American Think Tanks. Budgets, 1992.**



Source: Day, 1993

### Chapter 3. Great Britain: A Civil Society Model.

'-So, are the journalists relatively separate from academics?

-No, everything is very mixed up. All the people I can think of have a lot of academic friends, and meet academics and meet politicians. They are a bit of intermediaries, I guess, so that's -- yes. I think comparing it with the U.S., I think just the fact of it being so much smaller a society here is -- so that we all know a lot of academics. We all know a lot of journalists, a lot of media people, a lot of politicians. I don't think that is so much so of my friends in America who are academics. And they don't seem to know journalists, and they don't seem to know politicians. They seem to be much more isolated in academia, whereas I think Oxford is such a small society and we all know lots of them and they are all much more mixed up here.' (Professor, Oxford University, June 1997)

Economic reasoning and references seem omnipresent in British public culture. The country is famous for the level and quality of economic reporting in the generalist press, as well as its specialized financial and economic publications, which are old and widely read both at home and worldwide.<sup>172</sup> Many commentators would argue that this public interest for economics has been partly nourished by a century-long debate about the causes of Britain's long-run economic decline. In the middle of the nineteenth century, Britain was the world's leading industrial power. By the 1910s, the country had lost this preeminence to the United States and Germany. Between 1913 and 1979, its

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<sup>172</sup> *The Economist* (weekly magazine) had a worldwide circulation of 530,000 in 1993, nearly 40% of it going to North America, 20% to the UK and 20% to the rest of Europe. (Edwards, 1993, p951) *The Financial Times* (daily) in 1986 had a circulation of over 254,000, with nearly 75% going to the British market. (Kynaston, 1988)

ranking in terms of GDP per capita further 'deteriorated from third to eleventh amongst the OECD-16 nations.' (Middleton, 1996, p16) This somewhat shocking situation in the collective memory has kept economic questions, and the search for solutions, to the fore of the public agenda.

Likewise, the situation of the 'economics profession' is the object of constant solicitude on the part of interested groupings. For one thing, the history of British economics and economists exerts a remarkable fascination there, and has given rise to a quite remarkable scholarship, which is mostly the result of economists and economic officials turned historians of their own discipline.<sup>173</sup> Another aspect is the anxious concern for the future of the profession, which the *Royal Economic Society* has been monitoring quite closely through repeated studies and surveys.<sup>174</sup> Several newspapers recently rang the alarm bell and warned of the announced death of the British economist. Due to a considerable salary differential between the public and the private sectors, both government departments and universities are having great difficulties retaining capable economists; U.K. graduate economics programs only fill up thanks to the incoming flow

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<sup>173</sup> In addition to numerous biographies of major economic writers (see, among many examples, Groenewegen, 1995 on Marshall; Skidelsky, 1983 and 1992, on Keynes; Thirlwall, 1987 on Kaldor; Harris, 1988 on Beveridge) and a host of personal memoirs and recollections (see for instance the many publications by Sir Alec Cairncross), there exists a recent and fertile scholarship studying the institutions of academic economics in the United Kingdom (see notably Coats, 1991 and 1993; Kadish and Tribe, 1993). Little, however, has been produced on the most recent period, although Middleton (1998) and Backhouse (1999) constitute notable exceptions. The *Royal Economic Society* also plays an active and important role as editor of the texts and papers of influential past economists.

<sup>174</sup> See for instance two reports: Blaug and Towse, 1988; Machin and Oswald, 1999.

of foreign students, but attract a very small proportion of nationals. (Machin and Oswald, 1999)

In fact, the entire field exhibits a high degree of self-consciousness. There seems to be among the British elite an almost informal sense of who is an 'economist', and who is not –in contrast to France where such a demarcation appears much more fuzzy, or even to the United States where the public recognition of such a capacity ought, at the minimum, to be sanctified by the possession of a specialized university degree. An 'economist' in Britain is someone who has a demonstrated ability in economics, most obvious in economic writing or commentary. In addition to academics, that may include civil servants, journalists, financiers or businessmen.

Historically the center of gravity of the British economics establishment has been located in the universities, and especially among the Oxbridge-London academics, who are also closely connected to the policy community and the public sphere, and involved in public debates and shadow politics. Certainly British economists often deny having any influence on policy and compare their position unfavorably to their American counterparts, who have an institutionalized channel of entry into the political process with the Council of Economic Advisers, and can also access important decision-making positions thanks to the mechanism of political appointments. However, there is reason to think that such a view is partly misleading, being based on a confusion between formal access and influence. Against this conception, I will argue that academic establishments have been in fact quite closely articulated with the administrative world, as well as with an active public sphere where ideas circulate more through informal channels and political organizations than on the basis of formal appointments and functions. In part

these patterns are rooted in older traditions, for instance the nineteenth century, pre-civil service, 'clerisy ideal' whereby educated men and women's participation into the affairs of the nation was natural and predicated upon their social status as 'intellectual aristocrats'. (Schweber, 1996b; Rothblatt, 1983)

## **The Institutional Context of Knowledge Production in Great Britain**

### **The British Higher Education System from 'College' to Mass Education**

For most of its history, higher education in Britain has remained a private affair managed privately. British academic culture, forged in the medieval ages -at a time when neither the state nor the market represented powerful forces in the shaping of social organizations-, was centered on the academic 'guild', or the community of learned men. (Trow, 1993, p282) British universities developed as relatively insular institutions, exhibiting little responsiveness to their social environment. The oldest institutions of Oxford and Cambridge, which dominated higher education in Victorian Britain and provided a model for the 'new' establishments to come, were thus self-regulating communities, jealous of their elitist status and autonomy from state control. Institutions created in the nineteenth century -London first, and the 'Redbrick' universities later- followed a similar pattern, and emerged as private corporations. They relied extensively on financing by local private sources and were managed in a decentralized manner.

The historical reluctance of the British State to get involved in educational affairs (both at the elementary and higher levels)<sup>175</sup> further contributed to the persistence of such patterns. The emergence of state-sponsored education was delayed until the first half of the twentieth century, and a commitment to 'mass' education did not materialize until well after World War II. Even after the state organized some limited support to the higher education system in 1919,<sup>176</sup> official authorities continued to encourage the search for alternative sources of funds, and in any case refrained from getting involved in the supervision of curricula, examinations, or appointments. (Fisher, 1977, p79)

The British University system remained very selective until the 1960s, not only academically but also socially. First, Britain had much lower rates of university-level enrollments than its industrialized counterparts, a situation, which was only challenged in recent decades (see Table 3-1). Second, the two institutions of Oxbridge were closely tied up with the upper echelons of British society and promoted a characteristically aristocratic conception of education. Downstream they were intimately articulated with the most selective institutions of the upper secondary system, the public and grammar schools. Upstream they provided recruits for the clergy and the governing class.

The principal purpose of these old universities as social institutions in the nineteenth century was to educate the society's gentlemen, socialize future members of the elite, and form their character --much less to produce and diffuse 'useful' knowledge. In practice, this meant an emphasis on liberal, mind-cultivating erudition at the expense of more vocational knowledge forms, such as professional training or academic research.

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<sup>175</sup> See for instance Ramirez and Boli, 1987. Britain did not establish a Ministry of Education until 1944. (ibid., p9)

<sup>176</sup> Through the University Grants Committee, the 'central allocating body'.

As such, the ancient universities were poorly equipped to train the children of the middle class and the bourgeoisie, which had emerged from the industrial revolution. (Anderson, 1992; Wittrock, 1985) Consequently, business long remained suspicious of university graduates and somewhat reluctant to employ them.<sup>177</sup> In part the revolution of the 'civic' (or 'red-brick') colleges and universities established at the turn of the century came from the institutionalization of a more practical orientation for education, more 'suitable' for the industrial classes. These universities were often closely tied to local business communities and sought to provide for local labor market needs.

The 'old' academic system relied on a particular, quite 'intimate', organizational form –the *college*. At Oxbridge, individual tutorials within the colleges valorized personal, close working relationships between students and the teaching staff, a pattern which contrasted sharply with the more impersonal and larger classes common in continental European universities. In the British system, the education function (associated with the college) thus preceded both the research and 'credentializing' functions (associated with the university). This character was reinforced by the absence of a strong stratification of training. Being almost exclusively focused on undergraduate education, British universities gave only limited recognition to advanced credentials and developed graduate schools much later than their American and German counterparts. Thus in sharp contrast to these more 'professionalized' academic systems, university

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<sup>177</sup> The traditional view among the British business elite was that the art of 'affairs' (like that of law, or medicine) was learnt after long years of work experience, rather than through education. Indeed, available surveys of the educational background of business leaders show that British entrepreneurs and managers have been fewer to attend a college or a university than their American, German, and French counterparts, and that such a pattern has remained consistent since the nineteenth century. (although naturally



appointments in Britain did not (until recently) require a doctorate.<sup>178</sup> Instead, the attribution of academic positions often rested on social connections and intellectual prestige; for instance, self-recruitment of brilliant students (i.e. those who graduated from the university with *a first class honours*) was common practice, especially at Oxbridge.

Since the 1960s, the rise of public expectations about access to higher education and the democratization of recruitment have created the conditions for a late and massive expansion of the British universities, which has put the traditional institutions of the system under considerable strain. One example is the declining role and social status of academic guilds. Indeed, educational and research organizations in Britain are traditionally self-managed by the 'academic oligarchy' (rather than through centralized administrative regulation like in continental Europe), notwithstanding the gradual expansion of public control over higher education, both in financial and administrative matters.<sup>179</sup> (Clark, 1983) This tradition of academic self-government, however, has been somewhat upset in the last two decades. The necessity of managing large-scale organizations, coupled with the state's desire to increase its control over spending, have

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the proportion of those receiving university training over the period still increased markedly over time) (Kaelble 1980, p417)

<sup>178</sup> A recent survey thus found that among university social science staff in post during the academic year 1989-90, 33.5% had a doctorate, 27.8% a master, and 38.7% a Bachelor's degree. (the same figures for economics were, respectively 30.7%, 36.4, 32.9%) (Pearson et al., 1991)

<sup>179</sup> State grants' share of total university income rose from about 34% in 1920 to 73% in 1967. (Halsey and Trow, 1971, p63) Similarly, the status of the Ministry of Education was progressively enhanced and a separate Department for Education and Science (DES) with responsibilities for higher education was created in 1964. (Premfors, 1980)

prompted the professionalization of administrative and managing functions to the detriment of the academic faculties. (Rothblatt, 1990, p73)

Similarly, the elitist, aristocratic approach to education has undergone important changes in the course of the twentieth century. First was the massive expansion of university enrollments after the Robbins report of 1963, which, after 'discovering' that Britain's ratio of university graduates to the corresponding age group was the lowest of any advanced country, enthusiastically called for mass higher education. However, unmatched by a comparable growth of financial means, this rapid democratization and move towards mass education also ended up altering some of the most 'prestigious' features of the old learning environment, like the tutorial tradition. The second transformation has to do with the gradual erosion of the social prestige and autonomy of the academic community, following the virulent anti-intellectualism of the Thatcher era and a substantial (in relative terms) decline in university salaries after the 1970s. These are major transformations in a society where the 'dons' were always tightly incorporated into the cultural and political establishment, through a 'network of tutelage to the manners and morals of the dominant class'. (Halsey 1992)

In spite of these transformations, however, the overall structure of the British higher education system has remained relatively unchanged, with the three older universities still topping the hierarchy.<sup>180</sup> Oxbridge, London, and the Redbrick universities still constitute the main feeder institutions of the British academic

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<sup>180</sup> Thus Halsey shows that the three universities still provide the majority of the Royal Society Fellows (62% in 1990), and the Fellows of the British Academy (76% in 1990) in spite of a slight decline (the corresponding numbers for 1900 were, respectively, 68% and 82%). (1992, p77)

professions, but their predominance is not as strong as it used to be.<sup>181</sup> (Halsey, 1992, p140) From a relatively closed system devoted to the selection (and reproduction) of an elite, British higher education has slowly evolved into a more democratic instrument for the inclusion and promotion of the lower classes.

In addition to sheer expansion in size, the British University system has also been transformed by the emergence of new, more professionally-oriented, institutions catering to the middle and working classes, and better articulated with the industry. (Sanderson, 1972) Like the redbrick universities in earlier periods, the twenty-five 'new' universities created in the post-World War II years were designed with a more explicit vocational orientation. During the 1960s, several colleges of technology with heavy concentration on engineering and the applied sciences were granted university status; so were forty-four 'polytechnics' in 1992. These new generations of educational institutions were often organized around departments (as opposed to colleges), and became important centers for the dissemination of a more professional ethos.

Elite institutions themselves have also had to come closer to the 'American' ideal of universities as repositories for technical expertise –as opposed to the traditional British model of universities as purveyors of cultured education. The indirect pressure of 'successful' educational institutions of lower prestige and that, more direct, of external funding partners (both public and private) interested in the practical relevance of knowledge, have encouraged their slow transformation into full-fledged research

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<sup>181</sup> The percentage of self-recruitment of teachers at Oxbridge in 1992 was 31%, (Halsey, 1992, p140) which is still important, but significantly down from its level a few decades earlier. (78.1 % in 1961-2, 59% in 1976) (Halsey and Trow, 1971, p85)

institutions and a progressive, still ongoing, incorporation of vocational education.<sup>182</sup> Thus Cambridge and Oxford have recently accomplished their conversion to business studies, after decades of struggle. A MBA program opened in Cambridge in 1991 -110 years after the establishment of the Wharton school at the University of Pennsylvania. Oxford followed in 1996.<sup>183</sup> Both innovations, however, took place amidst bitter controversy that was remindful of older debates about whether practical studies (including economics) had a legitimate place in universities.

### The Organization of Academic Research

Like higher education, science in nineteenth century Britain was by and large a private activity, undertaken in a decentralized manner among scientific societies and clubs. These were independent bodies, which included a mix of scientists and non-scientists, most of them 'cultured gentlemen'. While some public funds were allocated to scientific activity quite early, their management remained in private hands (hence the Parliament's grants to the Royal Society). (Alter, 1987) The universities, on the other hand, which were originally conceived as educational institutions, showed little interest for advanced training or academic research. However, the nature of the curriculum (which relies on a very specialized undergraduate degree) later proved useful for the

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<sup>182</sup> Fisher (1977) argues that American philanthropy had an important impact in orienting Oxford, Cambridge, and London towards an emphasis on 'scientificity' and promoting a conception of education as 'capital', as well as the building of specialized skills.

<sup>183</sup> The Saïd Business School. However, Management Studies has been taught at Oxford since 1965.

development of a research base in universities, and explains that the opening of graduate schools might have looked less like an urgent necessity. (Rothblatt, 1990, p70)

With the progressive socialization of higher education in the twentieth century, and the inauguration of state/science partnerships during the two World Wars, scientific and academic research in Britain increasingly became a state-supported activity. Since the interwar, government's involvement has been articulated around two different sets of institutions: the University Grants Committee,<sup>184</sup> which provides a block grant to universities that covers salaries, research assistants, and libraries; and the research councils, which offer direct support to research centers and specific projects, and are organized in broad domains (e.g. Science and Engineering, Social Science, Medicine...). As pointed out earlier, the academic community still manages both organizations, but indirect oversight by extra-academic authorities has increased substantially in the 1980s.

### **British Political Culture and Institutions**

#### **Political authority**

The British political system has been traditionally associated with the image of a 'weak state'. (Birnbaum and Badie, 1983; Nettl, 1968) Thus the monarchical institution in England has been dominated by the landed class since the time of the Magna Carta (1215), which constituted the Parliament as the true center of political power. The sovereignty of the latter was further confirmed and expanded by the 1688 revolution. Early parliamentary rule and the extraordinary concentration of wealth and economic

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<sup>184</sup> Established in 1919. It has since then been renamed the Higher Education Funding Council.

power in the hands of the British landed and mercantile elite insured the relative independence of individuals and their wealthy representatives from the Crown, and institutionalized a system of political sovereignty heavily rooted in the local estates and constituencies.

The social and political legitimacy of the landed class and its appendages (e.g. industrialists) thus extended well beyond parliamentary control. In the nineteenth century, they also occupied local offices and ran local governments independently from the central state. Whereas in France such functions were accomplished by scores of paid bureaucrats who were accountable to the state only, in England they were regarded as the benevolent privilege of the wealthy and educated. (Charle, 1997)

British nineteenth century political culture thus valorized individual citizens, and especially responsible 'gentlemen', as carriers of sovereign capacities in the public sphere.<sup>185</sup> It remained weary of the state, 'which existed mainly to serve the convenience and protect the rights of individuals in private life'. (Harris, 1990, p67) Against central government, the local institutions of 'civil society' (voluntary associations, communities, clubs, trade unions...) were seen as 'the rightful locus of public life.' As Harris points out, centralization of policy under state authority in the twentieth century was only accepted as an 'occasional but regrettable economic necessity'. (ibid., p69)

### Administrative authority

In contrast to continental European countries, then, the traditional institutions of central state authority have remained rather underdeveloped in Britain. The bureaucracy,

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<sup>185</sup> See for instance Lipset (1963) on the respect and social acceptance of the aristocracy in British society.

in particular, appeared limited for a long time, both in size and influence. At the turn of the century, England possessed only 116,000 state employees (compared to around 400,000 in France as well as Prussia). (Charle, 1997) Until the rationalization of the Civil Service in 1871, which institutionalized competitive examinations for recruitment into the bureaucracy, Britain had no professional civil service to speak of. Administrative appointments were dominated by parliamentary patronage and there were no formal requirements of competence. (Silberman, 1993)

These non-professional and gentry origins of public functions in England explain one of the distinctive traits of the British civil service throughout history --its (often celebrated) 'amateur' character. Still today, the British higher education system offers little formal administrative training, and almost none for the higher civil service, which contrasts quite markedly with its narrowly specialized continental counterparts (especially the French *École Nationale d'Administration*). Instead, it relies on an elite of generalists, largely educated at Oxbridge,<sup>186</sup> and who often graduated in 'arts' subjects -- that is, in the humanities.<sup>187</sup> This 'classical' orientation, naturally, contrasts with the prevalence of law graduates on the continent. While the absence of elite vocational training never excluded high levels of job competence and policy influence (especially

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<sup>186</sup> Although it has somewhat weakened in the lower civil service grades, the Oxbridge dominance among higher functionaries has remained pervasive in the post-war period. Theakston, for instance, remarks that, if anything, 'Oxford and Cambridge increased their representation at Permanent Secretary level over the century, from 62.7% of all Permanent Secretaries in 1900-1919 to 75% in the 1965-86 period'. (Theakston, 1996, p37) (Permanent Secretaries are the most senior civil servants, who head government departments and serve as personal advisers to ministers.)

<sup>187</sup> For instance, only one permanent secretary of the Treasury since World War I --Terence Burns, who occupied the position from 1991 to 1998- has been a professional economist. Source: Personal survey derived from Browning, 1986; Barberis, 1996; Middleton, 1998.

from the Permanent Secretaries), it has been repeatedly denounced (for instance by the Fulton report in 1968) as a source of weakness. The nature of training as well as the stability and longevity of administrative careers has promoted a particular bureaucratic culture, which valorizes experience and pragmatism as opposed to expertise. (Bulmer, 1987; Christoph, 1975)

The other notable trait of the British civil service is its 'apolitical' character, which can be traced back to the specific circumstances of its institutionalization. In contrast to most other continental European countries, the higher civil service in Britain is fairly recent, and succeeded the establishment of representative institutions rather than preceded it. When its foundations were laid in 1854, political alternation was already firmly entrenched in the political system. Separation between administrative and political functions and the mandatory neutral stance of public functionaries seemed the most appropriate mechanisms to deal with the situation of bipartisanship.<sup>188</sup>

Mutual isolation between administration and politics bears a number of important consequences. First, top administrative functions rarely serve as instruments for elite recruitment in other sectors (such as business, government, or politics), as they do in France or Germany (or even in the United States more recently). Higher civil servants, as a matter of fact, usually accomplish their entire career in the bureaucracy.<sup>189</sup> Second, these highest ranks of the civil service (known as the 'Administrative Class') have been described by detractors as a closed, secret world, isolated from the rest of society.

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<sup>188</sup> In the United States, a similar political situation was dealt with by patronage and political appointments.

<sup>189</sup> The recent deterioration of the civil service status (in relative terms) has led to higher levels of turnover. A Treasury experience, for instance, has become a valuable background for entry into the City. (Source: Interviews)



Whether this is true or not is still a debated question. What appears quite undisputed, however, is that, 'civil servants can maintain the public appearance of impartial partisanship only as long as their actions are conducted privately' and away from public light. (Rose, 1984, p142)

The higher British civil service thus constitutes a fairly unitary and homogeneous institution, which remains wary of outsiders –in contrast, for instance, to the top levels of the federal administration in the United States. Heclo and Wildavsky (1974) famously described the government community as a 'village', and the Treasury as a 'nuclear family'. Because of the weakness of formal administrative training and specialized skill requirements, much of civil servants' knowledge is accumulated on the job, through socialization. Administrative departments generally have well-formed and long-lasting 'views' in which their staff is socialized early on. (Christoph, 1979; Rose, 1984)

Both the more limited structural authority of the central government apparatus and the absence of a tradition of specialized administrative expertise perhaps explain the 'reactive' nature of British public officialdom, which has often been opposed to the voluntarism of the French bureaucracy. (see Jepperson, 1992, p115) The permanent bureaucracy is indeed rarely a source of innovation, and has often been accused to resist change or 'obstruct' ministers. Whitehall's role is to investigate 'what is practicable' (which creates a natural bias for the status quo, 'do-able' by definition) –not to propose or initiate change. When faced with specific problems or issues on which recommendation is needed, the practice of the British government has been typically to set up a temporary Committee of Inquiry or a Royal Commission. (Birnbaum and Badie, 1983, p124) These organizations represent perhaps the most well institutionalized British version of

impartial advice.<sup>190</sup> They include members from across the political spectrum, inside and outside experts, and are a priori free to report as they wish.

### Economic Management in Post-War Britain

There is no doubt that the vast expansion of the capacities of British government in both the social and economic domain after World War II has significantly altered this model. However, that the general orientation of the British economy shifted over the course of the twentieth century towards a more mixed economy does not preclude the persistence of attitudes of general cautiousness, if not suspicion, towards the exercise of public power. If anything, the Thatcher government represented a high point in the ideology of self-regulating markets –which was certainly not out-of-line with the country’s historical ‘market’ culture, as described by Polanyi (1957), for instance.<sup>191</sup> As many commentators have pointed out, these dispositions are also widely shared by the actors themselves, both on the side of the state and on that of business. Thus the culture and administrative tradition of the British civil service have remained remarkably non-interventionist: on the other hand, any attempt at expanding the interventionist capacity of the state have been understood by the industry as an attack on its prerogatives.<sup>192</sup>

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<sup>190</sup> Hennessy notes that Margaret Thatcher during her terms in office appointed much less Royal Commissions and Committees of Inquiry than her predecessors. (1989, p577)

<sup>191</sup> Cross-national value surveys have shown that individuals in liberal polities seem to exhibit less support for direct government control of economic instruments than people in statist polities –with the possible exception of Germany. (see Jepperson, 1992, Chapter 7)

<sup>192</sup> Zysman, 1983, p202-203; p224-225.

Shonfield famously characterized post-war economic management in Britain as an instance of 'arm's length government' (1965, p88), both in the public and the private sectors. Indeed, the procedures and instruments of government intervention in England have remained quite limited, and directed towards short-term objectives. Post-war nationalizations, unlike their French counterparts, were not integrated into a larger program of industrial policy, nor was the management of the new public companies really altered. Similarly, the nationalization of the Bank of England in 1946 did not produce a significant change in policy. Bankers –not government officials– continued to rule the institution.

The attitude towards planning constitutes another example of this reluctance to fundamentally alter the functioning of the economy through government intervention. The movement in favor of planning, which had emerged among Labour circles during the 1930s, never really succeeded as a full-fledged policy strategy in Britain and continuously lacked political and administrative support. In France, the higher civil service became the main agent in the promotion of planning. In Britain by contrast, the post-war Treasury sought more moderate alternatives, and promoted Keynesian management instead. (Weir, 1989, p75) Thus when planning was finally implemented after the creation of the NEDC<sup>193</sup> in 1961, it was a weak and ineffective version of its French counterpart and model, and it never involved any measure of long-term finance to promote growth (as the *Commissariat Général au Plan* did in France through its close association with the Ministry of Finance). (Shonfield, 1965; Zysman, 1983) The NEDC

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<sup>193</sup> National Economic Development Council –'a committee of government, employers and union representatives, which (met) monthly to discuss economic and

was a public agency outside the main structure of government, which operated as a consultation forum on long-term economic orientations between three equal parties (government, business, and trade unions).<sup>194</sup> It was, as Eatwell recalls, 'carefully placed outside the apparatus of government and its main instruments were exchange of information and moral persuasion'. (1985, p69) Its tripartite structure, as a representative of diverse (and often competing) interests, was another source of weakness. (Hall, 1986, p86-87)

In the end, what perhaps best characterizes the economic role of the British state in the long term is the old nineteenth century idea of an 'arbiter of the market', that is, an institution charged with the facilitation of competition –not the active 'management' of a market economy as a whole. Some commentators have attributed this relative lack of a fully interventionist state tradition in Britain both to the country's liberal political culture and to the political institutions in which this culture is embedded.<sup>195</sup> Because the idea of

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industrial problems'. (Keegan, 1979, p109) It possesses a permanent staff, the NEDO, or National Economic Development Office.

<sup>194</sup> The British practice of planning acknowledges a greater role for interest groups (especially trade unions) than its French model, characterized by Shonfield as a 'voluntary collusion between senior civil servants and big business'. (1965, p128) The functioning of the NEDC, for instance, was based on tripartite arrangements, which included (in almost similar proportions) state officials, trade unionists, and industrialists, supported by a staff of economic experts. (Hall, 1986, p93)

<sup>195</sup> See for instance Hutton, 1986, who develops an argument about how British political culture and institutions were incapable of dealing with the fundamental message of Keynesianism –and are ultimately responsible for the failure of a Keynesian program of public policy in Britain:

**'The Keynesian insistence that in economic terms the public interest can be guaranteed not to be produced by the free interplay of markets, and that the State must act purposively in the economy if the public good is to be**

a rational, autonomous and efficient state seems unconceivable without raising the specter of its capture by sectional interests, the British form of government avoids self-confident strategic action and chooses instead to diffuse authority to a multiplicity of independent advisory and consultative bodies. (Dyson, 1980)

### **Economic Organization: Markets and the City**

Long historical legacies have shaped the governance of the British economy and British economic culture in characteristic ways. Hall, for instance, enumerates distinctive institutional features of British markets, which he traces back to the combined experiences of early industrialization and empire. (1986, p41-45) First, unlike its continental European counterparts, the British industry relies heavily on the stock market for finance (rather than on the banking system, which, early on, found it more profitable to invest in overseas markets). This historical role of the City as the banker of the empire, and then its revival as 'international financial entrepot' since the 1960s, have led to the structural domination of financial over industrial capital, and the latter's considerable influence and leadership over decisions of economic policy throughout the twentieth century. Economic historians, for instance, have long stigmatized British chancellors' (including Labour ones) obsession with defending the sterling as one of the main reason for Britain's long-term economic decline. This preoccupation with the currency not only motivated the much-debated return to the pre-World War I gold parity of the pound in 1925. but also the 'stop-go' strategies of the 1950s and 1960s, which were typically

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ensured, is in effect a challenge to the entire panoply of classical liberalism –political as well as economic.' (1986, p198)

geared at maintaining the exchange rate –even at the expense of industrial growth. (Longstreth, 1979)

Economic historians consider that the hegemonic power of financial interests in Britain draws on the existence of close interpersonal connections and overlapping economic ideologies between the City, the Bank of England, and the Treasury. The three institutions traditionally favor fiscal conservatism and the protection of the international role of London, which can be at odds with industrial interests. The Bank of England overlooks and interacts closely with financial institutions, at the same time that it entertains an intimate relationship (based on voluntary collaboration rather than outright dependence, as in France) with the Treasury. As a result, it enjoys a position of go-between between the center of government and the highly concentrated network of clearing banks constituting the City, and acts as a mediator of their political influence in Whitehall. (Longstreth, 1979; Ingham, 1984, Green, 1992) 'The basic tenet of the Treasury position', Green writes, 'has been that the City's earnings have been either a mark of underlying prosperity or the means to achieve prosperity. In this respect the Treasury's definition of what actually constitutes a healthy economy has, over the long run, constantly foregrounded the role of Britain's financial sector.'<sup>196</sup>

Another reason for the dominance of financial over industrial interests lies in the segmented nature of the British industrial structure, which does not lend itself easily to the centralization of corporate interests. As Hall argues, due to early industrialization, 'Britain left the industrial revolution still a nation of small firms.' (Hall, 1986, p42) Hall claims that such a situation has had a number of important implications, on the nature of

corporate relations, or the segmentation and lack of formalization of managerial hierarchies. The business sector, for instance, exemplifies a fairly decentralized pattern of organization. The Confederation of British Industry emerged quite late, and has had permanent difficulty at federating a dispersed and fragmented industrial structure. Likewise, the labor movement in the United Kingdom consists of a multiplicity of competing organizations tied to craft organization, over which the central organization, the Trade Union Congress, retains only partial control. Labor negotiations are decentralized in a system of 'free collective bargaining' often located within firms and plants –hence the State has only a limited role in labor consultation. The localization of labor conflicts on the shop floor (as opposed to the branch or industry level) has also created a situation where unions retain a significant degree of control over work organization, and often oppose strong resistance to the introduction of new technologies and rationalization of production. (Hall, 1986, p44-45)

### **Economic Knowledge Production in Great Britain**

The emergence of the modern economics profession in England came about not as a result of a conscious design by state authorities, as in Germany, but instead as a relatively private endeavor from groups of individuals in civil society and educational institutions, with little intervention from the state. In the relative absence of external control, but in the presence of a firmly stratified academic system, academic guilds located in the most prestigious institutions have exerted a powerful influence on the

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<sup>196</sup> 1992, p212. Also see Brittan, 1964, Chapter 11, for a first-hand account of the 'priority to the pound policy' of the Treasury.

intellectual development of the field, and contributed to its consolidation into a coherent and centrally controlled scientific edifice.

Unlike its American counterpart, the British economics profession until the last quarter of the twentieth century -which has seen, among other changes, the institutionalization of the Ph.D. as a requirement for an academic job, and the increased reliance on American scientific norms- was initially not very well bounded by formal criteria. Authority in the field flowed from 'peer recognition' within tightly knit social networks, and the belonging to a socially recognized elite rooted in the passage through elite institutions -rather than through credentials (even publications initially played a limited role). Since the late 1970s, however, the general degradation of academic status and working conditions have profoundly altered this system.

### **Economics and the Academic Sphere: A Late But Extensive Institutionalization**

The history of the development of economics in the British higher education context starts with a paradox. Indeed, notwithstanding the far-reaching influence of British authors on the shaping of the intellectual identity of economics worldwide from the eighteenth century on, academic institutionalization of the discipline was slower in England than in other advanced countries -for instance Germany,<sup>197</sup> or even the United States. In the early part of the nineteenth century, economic writers rarely held professorial appointments, with the exception of Scotland. A few chairs in political

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<sup>197</sup> Prussia, for instance, established its first 'chairs' in 'Oekonomie, Policei und Kammersachen' in 1727. (Hennings, 1988, p43)



economy were created in the 1820s,<sup>198</sup> but the following decades witnessed little expansion from this embryonic situation. At the end of the century, political economy existed chiefly as a 'practical' subject whose place in the elite university tradition was still controversial: it was included as a subordinate part in the general training in history (e.g. at Oxford) or moral science (e.g. at Cambridge).<sup>199</sup> Otherwise, it was present as a minor subject in the recently created faculties of commerce (e.g. in Manchester and Birmingham), and in the university extension classes designed for a popular (rather than elite) audience. (Tribe and Kadish, 1993)

The slow pace of development of the subject in an academic environment, especially in the core institutions of Oxbridge, comes partly from the absence of a demand for such qualifications by potential employers. The business and industry communities did not deem economics to be a useful subject until the 1890s and 1900s. (Sanderson, 1972, p191) Neither did the British Civil Service (even after its reform in the 1850s) formulate expectations about specialized skills in political economy. On the one hand, professional education was traditionally excluded from British universities and was handled by the interested occupational groups themselves --so that the commercial professions felt little need for formal training in political economy. And the British Civil Service was the province of elite amateurs often educated in the humanities. Political economy became a required subject of civil service examinations after 1871, but it carried far less weight than the classical subjects did. (Howson and Winch, 1977, p5:

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<sup>198</sup> The very first chair was occupied by Malthus, at the Training Institution of the East India Company (1805). Oxford got its first chair in 1825; University College, London in 1828; and Dublin in 1832.

<sup>199</sup> It should be noted, however, that there existed a significant university basis for economics in Scotland, notably at the University of Glasgow. (Mair, 1990)

Silberman, 1993, p394) The latter fact stands in marked contrast with the German model of the cameralistic sciences, or even the French Ecole Libre des Sciences Politiques, which, as Winch remarks, both 'embody the vision of a more technocratic state'. (1990)

Still, the practice of political economy in nineteenth century England was very alive, but many of its key institutions were non-academic. The field was organized around popular reviews, on the one hand, and learned societies and clubs, on the other. The publication of books of vulgarization of economic ideas directed at the popular classes, such as Mrs Marcet's *Conversations* (1816) and Harriet Martineau's *Illustrations of Political Economy* (1832), were greeted with immense success. Pamphlets and newspapers remained one of the most privileged forms of communication on the subject of economics until the late part of the nineteenth century; serious economic debates took place in non-specialized and popular settings, for instance in general purpose reviews such as the *Edinburgh Review*, the *Quarterly Review* or the *Westminster Review*. But even in these media 'the great majority of economic articles were written by part-time journalists, whose major occupation was most commonly politics'. (Stigler, 1965, p43) So much so that when the scholarly *Economic Journal* first appeared in 1891, the more polemical *The Economist* had already been around for almost five decades, and, under the feather of Bagehot, constituted a powerful medium for the widespread diffusion of the classical economists' ideas. (Middleton, 1996, p71)<sup>200</sup>

The people who devoted their time to the practice of political economy during that period were often leisured gentlemen, enlightened businessmen, intellectuals,

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<sup>200</sup> Founded in 1843. The front page of *The Economist* still reads its original motto: 'First published in September 1843 to take part in "a severe contest between

journalists, statesmen and civil servants. They were gathered in learned societies such as the powerful *British Association for the Advancement of Science* (whose 'Section F' covered economics and statistics), the *National Association for the Promotion of Social Science*, and the more scientifically minded *London Statistical Society*, or in elite clubs, such as the orthodox *Political Economy Club of London*.<sup>201</sup>

Towards the end of the nineteenth century however, political economy started to equip itself with the attributes of a more professorialized (and professionalized) field --so much so that by 1914 the field 'had become dominated by academics' (Middleton, 1998): first, the *British Economic Association* (later *Royal Economic Society*) was created following the American model of the scientific work organization, and the *Economic Journal*, founded in 1891, provided the new body with an in-house outlet. *Palgrave's Dictionary of Political Economy* identified and centralized what had become a recognized and separate domain of knowledge. Second, critical steps were then taken to make political economy a subject for full-time professional study. All major British universities established chairs in political economy in the 1890s and 1900s, but by far the most decisive events were the foundation of the London School of Economics and Political Science (LSE) in 1895, the establishment of the faculty of commerce at Birmingham University in 1900, and curricular reform at the university of Cambridge where a separate tripos in economics and political science was constituted in 1903.<sup>202</sup>

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intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress”.

<sup>201</sup> Founded in 1821 (and still well alive today), and dominated by businessmen and bankers (Coats, 1993a, Chap. 18).

<sup>202</sup> The next paragraph draws heavily on Sanderson's account (1972).

The three institutions originated in very different motivations and different views about the role and mission of political economy. The first two emerged as 'new' institutions and the shape of their economics curriculum exhibited the pressure of external constituencies; the latter, by contrast, represented the evolution of an older institution, which is mainly regulated internally. Originally the LSE was created by the Webbs<sup>203</sup> as a vocationally-oriented organization, modeled after the French *École Libre des Sciences Politiques* to train experts for government service (who, it was hoped, would also hold modern, socialist views). However, the financial involvement of the City and the London Chamber of Commerce rapidly fostered an evolution towards the business occupations (for instance the school later acquired a railway department).<sup>204</sup> In Birmingham, the faculty of commerce was even more explicitly an initiative from the business community. Its organization reflected the concerns and desires of its major constituency. With its graduates entering the industry in large proportions, economics at Birmingham was acknowledged a fairly subordinate place among a host of other

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<sup>203</sup> Sidney Webb was the main 'thinker' of the Fabian society (est. 1884), a circle of intellectuals interested in social reform who sought to 'educate' society towards the goal of socialism, as well as to promote the use of rational expertise in government and politics. (The organization subsequently played, and still does, an important role in the Labour Party.)

<sup>204</sup> As Winch remarks, the results were mixed:

'The Ecole Libre and the British Association report of 1894 were twin inspirations to Beatrice and Sidney Webb when they resolved to make an attempt to start a centre of economic teaching and research in London on the lines of that of Paris. Ironically, however, the institution that emerged was more like a business school than a training ground for budding public administrators destined to play a part in furthering the cause of bureaucratic collectivism.' (1990, p52; see also Sanderson, 1972, p192-193)

business-relevant subjects. (Sanderson, 1972, p210-211) This situation differs from the institutionalization of an economics program at Cambridge, which created a core that was to dominate the English field of economics for the next half-century. The principal architect of the reform, Alfred Marshall, sought primarily to advance the cause of economics, as a distinct theoretical and scientific enterprise, even though he never rejected the importance of final uses for economics and made sure that he secured the support of businessmen in his negotiations with the university. But the Marshallian enterprise was first of all an academic initiative and it exhibited more autonomy from the business community than the two previous ventures (the case of accountancy, which was deliberately excluded from the Economics and Moral Science Tripos, bears witness to this fact.)

During the interwar, following Marshall's leadership, further disciplinary autonomization accompanied the expansion of economics, so that by 1945 almost all major universities in the United Kingdom had created specialized 'honours schools' in economics, and the discipline was nowhere in a position subordinate to other fields. At Oxford, curricular reorganization progressed with the creation of the PPE Honour School in 1921 (Politics, Philosophy, Economics).<sup>205</sup> By 1949-50, economics majors represented nearly a quarter of all full-time students at the universities of Oxford, Cambridge and Manchester, and almost 60% of those at the London School of Economics. (Guillebaud, 1954, p104-105)

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<sup>205</sup> The slower development of economics at Oxford (in spite of the university possessing one of the oldest chairs in economics) is in great part due to the hegemonic prestige of the Honour Schools in Arts. (Literae Humaniores, also called 'the Greats', and, to a lesser extent, Modern History) (Chester, 1986, p6)

In the post-war period, the build up of the social sciences in the universities became part of a deliberate governmental effort, following the recommendation of three successive post-war commissions on education, two of them headed by economists (Clapham, 1945-46 and Robbins, 1961-63; Heyworth, 1965). The social scientific fields served as an important vehicle for the growth of the 'new' universities in the 1960s and 1970s. The number of teaching posts in economics went from 679 in 1960 to 1802 in 1969. (Middleton, 1998, p71) During this period, the corresponding expansion of the number of graduates was largely met by the increase of employment opportunities and research capabilities in government departments, the private sector, and non-profit research institutions.<sup>206</sup>

The field's position in the higher education 'ecology' has been more uneven since the 1960s and 1970s, however. The increased assertion of newer disciplines (e.g. sociology) and 'transdisciplines' (e.g. urban planning), as well as hybrid programs with a clear vocational orientation (e.g. business and financial studies) came to challenge the more narrowly specialized, 'academic', and elitist form of training represented by economics. With the field being less adapted to feed the massive student demand of a democratizing system than other, more directly practical, types of degrees, growth of enrollments slowed down until student numbers almost stagnated during the 1980s (whereas business and management programs continued to expand rapidly). (Lisle, 1984: also see Figure 3-1) By 1989, the number of economics teachers in universities had dropped to 1332. (Pearson et al., 1991, p123) Since the educational reform of the 1990s,

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<sup>206</sup> Economics also became a popular field in the 'O' and 'A' levels (pre-university diploma) in the 1960s. (Lumsden, 1980)

however, and the emergence of a more 'academic' orientation in the ex-polytechnics (turned universities), enrollments are again on the rise.

Looking at the development of economics in the long term, we may thus qualify the paradox first announced at the beginning of this section –i.e. the fact that the country which 'invented' economics in its modern form did in fact long delay its institutionalization in an academic environment–. Indeed, once the principle of economic studies was established successfully, around the turn of the century, it developed into a quite powerful force within universities and public life. It is especially interesting to contrast the British situation with the French one, where an earlier legitimization of economics did not grow into a large and autonomous educational field until well after World War II. In Britain, on the other hand, the (initially) small size, non-professionalized structure (with Oxbridge being organized into colleges, rather than departments) and lack of flexibility of powerful and deeply entrenched academic institutions were initially an important obstacle to academicization. Yet, as I will show in the remaining sections, these same features are also what gave British economists their strong position and societal authority, especially during the early part of the twentieth century.

### **The Scientific Style in British Economics**

The intellectual characteristics of British economics as it institutionalized in the late Victorian age appear quite distinctive, especially when seen in comparative perspective. The disciplinary core was built on a particular, rationalistic, representation of society which had a long tradition in British social thought and culture, and which differed quite starkly from conceptions found in other countries. (Soffer, 1970) The unit

of analysis was the individual, his/her behavior was motivated by self-interest, and individual interests found themselves ultimately in harmony at the societal level. As a first approximation, we may remark that there appears to be some elective affinity between the intellectual form of British economic discourse and a political culture, which grants overwhelming authority to the individual and valorizes civil society as a political and economic actor. Adam Smith's 'science of wealth', for instance, was thought from the point of view of civil society seen as a collection of free, interacting individuals. In Rosanvallon's phrase, 'English political economy constructed itself on a new representation of politics'. (1989, p137)

### Science, Economics and British Society

A second point is that in marked contrast with the German historicists, or even the Americans (many of whom were at the time absorbed in fact-finding activities) the majority of British economists at the turn of the century were seeking to uncover laws for economic behavior that would be independent from the larger historical context. The development of British economic thought during the first half of the twentieth century installed economic analysis at the core of the field and witnessed the progressive marginalization of economic history.<sup>207</sup> Economists saw themselves as the practitioners of a full-fledged 'science', and conceived of their intellectual mission as a primarily

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<sup>207</sup> Economic history continued to be an active field in England. However, the progression of the Marshallian program contributed to displace it from the 'science' of economics, and it organized as an independent academic discipline in 1926. This contrasts with Germany, where economic history remained at the center of a dominant paradigm until World War II, or even the United States, where it was integrated into the mainstream as a 'subfield'. (See Koot, 1987)



theoretical one –much like that of the physical sciences. (Mirowski, 1994) Such a mission is well spelled out in Keynes' obituary of Marshall, whom he described as:

'The first great economist pur sang that there ever was; the first who devoted his life to building up the subject as a separate science, standing on its own foundations, with as high standards of scientific accuracy as the physical or the biological sciences... after his time economics could never be again one of a number of subjects which a Moral Philosopher would take in his stride, one Moral Science out of several, as Mill, Jevons and Sidgwick took it.' (1925, p56-57)

The British economists' claims to scientific status were reinforced by an early, and rather extensive (by the standards of the day) use of mathematical tools –a practice which had been inaugurated by Jevons and the conceptual breakthrough of marginal analysis, and steadily expanded since then. (Schabas, 1991)<sup>208</sup> In order to understand the success of the scientific program in British economics, it is important to remember that intellectual legitimacy in late nineteenth century England was heavily vested in the 'hard' sciences, and especially the most abstract of them. The *British Association for the Advancement of Science* was a powerful organization with considerable political power and close connections to both the throne and the Parliament to which it provided both expert advice and lobbying activism. (Haskell, 1977) On the other hand, 'the educational system singled out mathematics as the discipline most appropriate to intellectual training.' (Soffer, 1970, p 1943) At Cambridge for instance, mathematics was the most prestigious 'Tripos' at the end of the nineteenth century, and many prominent figures in economics were originally trained as mathematicians. (e.g. Jevons, Marshall, Keynes)

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<sup>208</sup> Marginal analysis was inaugurated in the 1870s in England by work of Jevons. The other prominent name in this area is that of the Austrian Carl Menger.

The establishment of economics as an autonomous intellectual and professional enterprise at the end of the nineteenth century relied partly on the central place of mathematical culture in elite universities and society. Economists (and statisticians, to whom they were closely associated) derived part of their legitimacy from the high intellectual standing and organizational strength of mathematical statistics in this country. (Schweber, 1996a) Thus at a time when Walras in France was still struggling to have his mathematical contributions recognized, and was not granted a teaching position in his own country, Marshall, Edgeworth, or Wicksteed, all of whom placed mathematics at the center of their approach to the study of the economy, stood among the most authoritative figures in England and commanded considerable influence on their 'field'.<sup>209</sup>

By and large, the use of technical tools was thus a largely non-controversial issue after Marshall's definition of a scientific program for economics. (Marshall himself had written a mathematical appendix to his *Principles of Economics*) It was admitted that, as a science and as a *technical* competence, economics required the proper use of certain instruments, and that included mathematical knowledge. This attitude was especially obvious in the support given by British economists to the development of statistics in their country, which they considered early on to be an integral part of their scientific mission. In fact, there was little demarcation between the social worlds of economists and statisticians until after 1945. Although the disciplinary boundaries between the two fields

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<sup>209</sup> See notably Schabas, 1989 and 1991. Schabas also rehabilitated the role of Jevons in this project.

had been established since the beginnings of Marshall's professionalization enterprise, both groups of professionals gravitated in the same circles and were closely associated.<sup>210</sup>

Likewise, mathematical skills were understood as a necessary part of every economist's training, though their effective use remained optional. In comparison with continental Europe, and even in contrast to the United States (which remained more pluralistic until after World War II) the scientific style in British economics was already fairly well developed before 1939. Even at Oxford, where a descriptive, historical and empirical approach to political economy had been promoted prior to World War I, the faculty largely rallied to a-historical, mathematical, and marginalist views by the 1930s. (Young and Lee, 1993, p23-24) An analysis of papers in the *Economic Journal* by Middleton showed that by 1940, only less than 40% of those were entirely 'literary'. (1998, p165) A comparison with Stigler's survey of economic articles in five prominent American professional journals shows that by 1942 65% still used 'no special technique'.<sup>211</sup>

Yet some skepticism remained. The unwritten rule throughout the interwar and after, and especially at Cambridge where a number of prominent writers were not

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<sup>210</sup> For instance in the Section F (economics and statistics) of the *British Association for the Advancement of Science*. At Oxford, the department of economics still bears the title 'economics and statistics'.

<sup>211</sup> Stigler, 1965, p48. The reviews are: *American Economic Review*, *Quarterly Journal of Economics*, *Review of Economics and Statistics*, *Journal of Political Economy*, *Econometrica*. By 1960, however, the percentages for both countries were similar (with about 33% of purely literary articles. We should, however, be careful with these numbers, especially the most recent ones since all the journals are partly 'internationalized' in their authorship. This is especially true of *Economic Journal* (as well as, for that matter, the other important U.K. publication, *Economica*), both of which had only about 50% of British authors by 1960, and 30% of 'American' authors. (The latter also dominated the *Review of Economic Studies* almost from its creation). (Backhouse, 1997)

mathematically literate, was that as long as precise words could 'carry the message', it was better to rely on them than on equations. (Schackle 1967, p291-292) Keynes famously expressed skepticism at the emergence of econometrics. (Keynes, 1939, Patinkin, 1976) More specifically, British economists entertained a quite ambivalent attitude towards 'mathematical economics' well into the 1960s, as it then developed into a powerful scholarship across the Atlantic. In her analysis of American economics rhetoric, McCloskey thus compared the 'embarrassed modesty with which British economics writers (J. R. Hicks most notably)<sup>212</sup> pushed mathematics off into the appendices' to the glorious confidence of Samuelson's *Foundations*. (1985, p70) Lionel Robbins' assessment in his Presidential address to the *Royal Economic Society* in 1955 perhaps represents best this pragmatic approach to the use of mathematics<sup>213</sup>:

'The question of whether it is sometimes useful to put economic propositions in mathematical form has been long ago settled; it is no longer intellectually interesting. We take it for granted nowadays that, in the treatment of some parts of the subject, an occasional resort to simple mathematics is quite a normal thing.

But to say this is one thing; to say that a separate division of the subject entitled mathematical economics should be compulsory on all students taking honours economics is another. To such a proposal I should see very great objection. (...) I think that mathematical economics is a division of the subject, which should be fostered; it deserves a place in the programme of a properly articulated department. But at this stage, at any rate, where examinations are concerned, this should be the place of an option, not part of the syllabus compulsory on all candidates.

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<sup>212</sup> Probably one of the most distinguished British mathematical economists, who imported general equilibrium analysis into Anglo-Saxon economics.

<sup>213</sup> Robbins does not seem to have been himself very at ease with sophisticated mathematics. Source: interviews.

In contrast to this, I would say that the opposite status should be given to a paper in economic statistics. In my judgement, an honours degree in economics should not be awarded to any candidate without a certain minimum degree of competence in this subject. (...) It is also clear that it is an absolute prerequisite of the kind of practical work our honours graduates are expected to do later on. It is perhaps the chief technical qualification, which the outside world has the right to demand of any applicant for a job who comes bearing our certificate of competence.' (Robbins, 1955, p590)

And indeed the organization of economics teaching in the early post-war period seems to have reflected both of these attitudes. Thus a cross-national UNESCO survey in 1954 found that the teaching of economic statistics, mathematics for economics, and econometrics was especially strong in the United Kingdom compared to the United States, Sweden, and France. But the sub-field 'mathematical economics' was for a time less well represented than in these other countries, including France, where the engineers played a pioneering role in this domain. (Tintner, 1954)

### Policy

Due to the special role of Oxford and Cambridge in the training of British civil servants, policy has always represented an important dimension of both teaching and the substantive interests of academic practitioners of economic science in Britain. Theory, in the British context, was to be cultivated not for its own sake, but for its applications to practical problems of public policy, and the articulation between the two was routinely underlined in economics courses. Marshall was famously concerned with the practical applications of economic knowledge. Following Keynes' remark that economists ought to be useful people, 'much like dentists', an entire generation of economists who had come of age during the inter-war found the relation of theory to policy to be somewhat

definitional to their own 'professional' project.<sup>214</sup> Someone like Meade, for instance, of whom Middleton says that his 'influence on policy remains unsurpassed, at home and abroad' (1998, p169), perhaps best epitomized this attitude. He repeatedly described his 'main concern in economics' to be located in the 'contribution which economic analysis has to make to the solutions of problems of economic policy.'<sup>215</sup> But even such a powerful theorist as John Hicks stated in the preface to his opus *Value and Capital* that theory "should be the servant of applied economics".

Naturally this 'practical' orientation was most developed at Oxford where the absence of a single honors degree in economics explicitly valorized (and continues to) such questions, and which has always deliberately cultivated a more 'applied' orientation. But it was also true of Cambridge, in spite of it being one of England's main theoretical centers until the 1960s.

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<sup>214</sup> The broadness with which Keynes famously defined the economist's role, which certainly reflects the confidence of high, gentlemanly culture, contrasts quite remarkably with the more narrow and specialized understanding of American definitions. While he does emphasize competence ('he must understand symbols'), he also makes clear that one should not stop there.

'The master economist must possess a rare combination of gifts. He must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician, statesman, historian, philosopher –in some degree. He must understand symbols and speak in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in light of the past for the purpose of the future.' (Keynes, 'Essays in Biography' in *The Collected Works of John Maynard Keynes*, Vol. 10, London, Macmillan, 1972, p173-174)

<sup>215</sup> Inaugural lecture at the London School of Economics, February 1948, quoted in Howson, 1988a, p139. Also see Meade's entry in Blaug and Sturges (1986).

'Whereas most places (and especially Cambridge) had micro and macro courses, at Oxford at the time (the mid-1970s), and until quite recently, there was one core paper called 'economic principles', which included both micro and macro. And that would be what you'd imagine... focused on theory. Then there was a paper called 'economic organization', which was focused on U.K. economic policy questions and institutions. This meant being familiar with practical policy questions of the day. Knowing how the Monopolies Commission works... Knowing how the Bank of England works... Now the organization of the economics curriculum has changed, but the balance of practical policy issues to theory is still pretty high at Oxford, higher than most places, especially considering that economics has only one-third of the time. Now we have a macro and a micro sequence; but the macro would be principles and practice, and micro would be both too.'(Professor Oxford University, June 1997)

'What I saw (at Cambridge in the mid-1960s) was very applied; there was a model in which the dominant way of teaching was that you were being trained to write Treasury memos so that you were supposed to absorb a lot of economics but be able to turn it into practical policy advice or background papers. And they were pretty good about that. And even the people who were theoretically based, you know, spent a lot of time writing for newspapers and being involved in policy debates.'(Professor, Princeton University, July 1999)

### **Authority and Control in the Economics Establishment<sup>216</sup>**

In contrast to the other countries in this study where intellectual life was more decentralized and thus remained more diverse longer, in England the stratified organization of the university system as a whole came to foster a concentration of intellectual authority around a limited number of overpowered personalities. (Coats, 1964b; Whitley, 1987) Soffer remarked that around the turn of the century, Marshall's students held half the economics chairs in England (1978, p69). Reflecting on the same period, Skidelsky states:

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<sup>216</sup> This title refers to an article by A. W. Bob Coats 'The Role of Authority in the Development of British Economics', *Journal of Law and Economics*, October 1964.

**'Most British economists before Marshall were men reared on a single book –John Stuart Mill's *Principles*. Their successors also tended to be men of a single book –Marshall's *Principles*, supplemented by oral tradition, Marshall's evidence to a couple of Royal Commissions, and privately printed fragments of the master's thought.'** (1994, p206)

This situation continued throughout the interwar, and well into the post-World War II period. The absence (or extreme rarity) of higher degree diplomas (the first economics Ph.Ds at Cambridge, with one earlier exception, were granted in the mid-1930s) meant that appointments occurred very early in people's career, often immediately after college. They also rested frequently on personal contacts and recommendations, and an informally shared sense of whom is promising and 'brilliant'. In his interview to Tribe, Singer recalls that young economists (including himself) were routinely 'designated' for jobs by their powerful mentors. 'Keynes' weekly seminar', he says, 'was also a tremendously powerful job market because in the background there would be sitting important visitors to Cambridge.' (Tribe, 1997, p62) There was little formalization of the career-making process (but as we pointed out earlier, 'formal' advanced training was very limited too, and thus could not serve as a basis for career claims). As a matter of fact, the situation of relying on social capital and interpersonal evaluations persisted well into the after-war:

**'Lionel Robbins used to love telling the story that when I applied to the LSE, they rejected me because they had never heard of City College. And so I wrote back to them and said I should apply for the following year. And Robbins, being a very kind man, said: "We can't torture him like that! Let's let him in, but only for a Master's degree." Six weeks later, I was a member of the faculty.'** (Professor, New York University, Ph.D. LSE, 1947)

**'The great thing for a long time, in Cambridge and Oxford, you took your degree, and if you got a first class, you got a fellowship straight away.'**



And you could stay in the college and never publish a line and read your books.' (Professor emeritus, University of Cambridge, June 1997)

'These professors would spot some undergraduate who they thought had an enormous amount of talent and then they would do extraordinarily well and be hired for the faculty. D., for instance, who is now Director of the B., he was effectively tenured, given a tenured position on the faculty as an undergraduate, before he'd taken his exam. Now there was no uncertainty about that because everybody knew that he was a great genius and was going to get a First and would be the best thing that had ever been there. And it was terrible for him, for something like 10 years, he wrote absolutely nothing because he'd never had a chance to find out what he was good at. He'd been declared a genius at birth and it almost finished him off.' (Professor, Princeton University, July 1999)<sup>217</sup>

In countries like Germany and the United States, which are both federal and possessed early on an expanded system of higher education, intellectual authority in economics has been historically dispersed across a large number of academic institutions of comparable weight and prestige. In Britain, by contrast, it has long remained concentrated around the three 'elite' universities of Oxford, Cambridge and London School of Economics, which trained the largest numbers of economists and were involved in constant intellectual exchanges.<sup>218</sup> These establishments were also centrally located around or in London, and remained associated with the main institutions of power in British society. Each was a rather small structure, whose professorial body often reproduced itself by means of its graduates. Pre-World War II Cambridge economics perhaps exemplifies best the prevalence of such 'endogamic' practices.<sup>219</sup>

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<sup>217</sup> NB: letters have been assigned to protect the anonymity of the person in question.

<sup>218</sup> See for instance Young and Lee, 1993, p89-118 on the 'cross-fertilization' of ideas.

<sup>219</sup> See Collard, 1990.

Naturally these features had important repercussions on the nature of economic knowledge and on the consolidation of economic 'styles' in each institution. Johnson, for instance, argues that this 'centralization of professional advancement' within the Oxbridge-London network contributed to the solidification of an orthodox Keynesian core in England and the relatively belated diffusion of the monetarist counter-revolution in academic circles. (1971, p6) A visitor to Cambridge in the 1950s, he wrote cynically about the somewhat confined and insular atmosphere of the campus, and the overwhelming presence of the 'shadow of Keynes'. (1978) That a large number of economists in the 1960s spent a lot of time and effort arguing about 'what Keynes really said' is an indication of the powerful hold of his ideas in British academia during the second and third quarters of the twentieth century. (Peden, 1996, p183)

Another factor contributing to the convergence of authority towards these three centers was the persistence of a somewhat elitist character to the identity of the 'economist' in England. First, class seems to have been an important factor for securing advancement in the economics establishment, as elsewhere in British society. The work of Kadish (1989), for instance, shows that the modest background and income level of heterodox historical economists in the nineteenth century was an impediment to their successful incorporation into elite culture, which, ultimately, affected their career. In my own fieldwork I have had a strong sense that class origins was also an important aspect of the (unsuccessful) challenge of post-Keynesians to orthodoxy.

Second, as Maloney (1987) demonstrated, the Marshallian mission clearly understood economics as a professional project in addition to a disciplinary one, and established a demarcation between practitioners of the 'science' (who could equally be

academics, enlightened civil servants or businessmen) and laymen. This specialized 'knowledge' was practiced not only in journals and professional outlets, but also in social clubs and learned societies. Participation in such bodies was informally controlled and relied more or less on 'co-optation'.<sup>220</sup> At the same time, the main institutions in British economics remained also under the direction of an almost permanent 'establishment'. Thus while the *Royal Economic Society* was not formally a closed organization,<sup>221</sup> its government and operations long remained oligarchic. As Coats points out, the Council of the *Royal Economic Society* (like that of the *Scottish Society of Economists*), had a 'constitutional procedure for dealing with the expulsion of undesirable members'. (Coats, 1964a, p267 n.14, p272 n.18)<sup>222</sup> Between 1912 and 1971, it had only two secretaries: Keynes (1912-1945) and E.A.G. Robinson. (1945-1971) (Robinson, 1990), and the society's publication, the *Economic Journal*, had only three editors between 1891 and 1961 (Edgeworth (1891-12), Keynes (1912-45) and Harrod (1945-61)).<sup>223</sup>

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<sup>220</sup> For instance, Johnson, testifies that student membership in the Political Economy Club of Cambridge, created by Keynes, was 'by invitation'. (1978, p91 and p132)

<sup>221</sup> Anyone subscribing to the *Economic Journal* was a de facto member.

<sup>222</sup> Coats' detailed studies of the social and educational background of the members of the *Royal Economic Society* also show that the latter was also a socially elitist body until the 1960s at least. (Coats and Coats, 1973)

<sup>223</sup> During the 1960s, the *Royal Economic Society* faced the competition of the more 'proletarian' (three of my interviewees independently chose this word to describe the organization) *Association of University Teachers in Economics*, which gathered people who taught in provincial universities and colleges. The AUTE had been created in 1924 but was revived in the after-war. It was ultimately incorporated into the RES. Naturally the conditions of this incorporation are interesting with respect to the current discussion about the role of authority, but I have not been able to investigate them so far.

### American Influence and the Professionalization of British Economics

In part the authority structure of British economics started to break down as a result of two trends: (1) the democratization of the higher education system and (2) the migration of intellectual leadership in the field away from England and towards the United States. This transfer of influence, which took place between the 1940s and 1960s, corresponded, on the one hand, to the emergence of a 'neoclassical mainstream' in America, and on the other hand, the leftist evolution of a number of Cantabrigian economists.<sup>224</sup> The advent of the neoclassical synthesis made mathematical skills the cornerstone of economic literacy. As Hirschman demonstrates convincingly, Keynes' economics was exported from Britain to the United States in the 1930s, but was then marketed back to Europe as 'Keynesian economics' in the 1940s and 1950s. (1988, 1989) In my interviews I collected numerous commentaries on this critical episode in the intellectual history of the British economics profession:

'(People in Cambridge) did not accept (the rise of American economics). Joan Robinson thought that the world revolved around Cambridge. When Joe Stiglitz applied to Cambridge on a research fellowship, she said he had to take the Economics Tripos, because he would know nothing in economics coming from a different place... Somebody once said: 'we thought of ourselves that Cambridge was the center of the universe, that King's College was the center of Cambridge and Keynes the center of King's'. And that persisted. There was an enormous arrogance.' (Professor, Cambridge University, June 1997)

'When Hicks would come to the United States, he would get a royal procession. The British attitude was to look down upon the Americans. In the United States, they met second-rate civil servants whereas they were used to the very high personal quality of the British civil service. The

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<sup>224</sup> This conflict, which culminated in the 'capital controversies' of the 1960s between the Cambridge Keynesians and MIT, is narrated in Marjorie Turner's *Joan Robinson and the Americans*. (1989)

American civil service is more open, more fluid. I think the British did not understand American society...The key shift in influence happened towards the end of the 1950s. There are some people whose reputation did not really cross the Atlantic, like Joan Robinson, Nicky Kaldor, Richard Kahn –all the militant Keynesians. Those people had the feeling that Britain was the center of pathbreaking ideas. Joan Robinson told me one day: ‘Why have the Americans forgotten all that we taught them?’. That was bastard Keynesianism for her.’ (Professor, University of Sussex, June 1997)

Exchanges with the United States, notably through the annual conferences of the *Econometric Society*, which have been more developed in the United Kingdom than in continental Europe (if only because of a common language), have constituted a fundamental channel for the professionalization of the British field on the American model. Today, the operation of the main institutions of the British economics field, from the *Royal Economic Society* (which has become more of an umbrella organization like the American Economic Association) to scholarly publications, remains very similar to that of the American field, and the mainstream scientific core is regulated ‘internationally’.

The London School of Economics played a critical role as a channel for the internationalization of the British profession. Being a ‘relatively new’ institution, it was always more cosmopolitan, with close links to both American universities and (in the pre-World War II period) continental Europe, especially Austria. (Coats, 1982) Backhouse (1999) reports that between 1945 and 1995, 40% of the LSE staff with a doctorate was US-trained, including many Americans. The school’s *Review of Economic Studies* (started by a group of young Turks in the 1930s), epitomized this ‘international’ orientation, and served as a vehicle for the diffusion of technically advanced innovations produced both at home and abroad. Being elected on its editorial board, for instance, had a significance, which went far beyond the national boundaries. It was an ‘honor, it was

some measure of the fact that you were one of the young people who was really doing good stuff.'<sup>225</sup> As the largest economics department in the country, the LSE also naturally became a feeder institution for the new establishments created as part of the general move towards mass education (e.g. Richard Lindsey (a Canadian-born economist with a LSE Ph.D.), who built the economics department at Essex).<sup>226</sup>

By the 1960s, American academic institutions (e.g. graduate schools and journals) had already established their control over international prestige hierarchies. After the LSE, the 'new' economics departments in Britain (at the universities of Essex and Warwick especially [Backhouse, 1997]) often set up advanced programs that sought to emulate the structure of American higher degrees, and participated in the diffusion of American scientific norms.<sup>227</sup> The democratization of higher training thus authorized the emergence of institutional 'niches', which used the standards of American-style professionalism in order to establish their position. By contrast, Oxford, and especially Cambridge, had little incentives to follow these standards because their dominance in the field was already well established, and because they were relatively protected from competitive pressures by their institutional prestige. Oxford changed first, using its unique two-year program (the MPhil) and the entrepreneurial spirit of Jim Mirrlees (after his arrival there in 1968), who set out to establish a more 'rigorous' training. But

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<sup>225</sup> Professor, Princeton University, June 1999.

<sup>226</sup> Lindsey is also the author of a textbook widely diffused in England during the 1960s and 1970s, *Introduction to Positive Economics*. (1<sup>st</sup> edition 1963)

<sup>227</sup> See for instance the article by Sargent, who founded the department of economics at Warwick, titled: 'Are American Economists Better?' (1963).

curricular reform at Cambridge was delayed until the 1990s, and was implemented amidst general intellectual warfare.<sup>228</sup>

Naturally the 'anti-establishment' and pro-market research policies of the 1980s, to which economics as a discipline was particularly vulnerable, accelerated the challenge to traditional hierarchies, as well as the reconstruction of the intellectual environment around a more narrowly professional model. Among the changes deserving mention is the (absolute) contraction in university budgets and available research funds and the (relative) contraction in salaries, as well as the general reorientation of funding towards 'useful' knowledge. These transformations created a very difficult climate within universities, and many economists decided to leave for the United States then. The introduction (in 1986) of institutionalized competition between departments with the periodic practice of the Research Assessment Exercises, which rank them according to their publishing performance in 'top' journals, created further tensions by promoting a focus on 'legitimate' scientific output and efficiency. In this sense, what is often understood as the 'Americanization' of British economics was also profoundly embedded in very specific processes at the national level. The broader transformations of the relationship between government and academia, which entailed the rationalization of the national academic environment along more competitive lines, challenged traditional patterns of academic authority, and created an opening for the diffusion of American-style professionalism.

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<sup>228</sup> Source: Interviews.

## **The Production of Economic Information**

This examination of the academic system in Britain would not be complete without a more detailed analysis of the structures and institutions, which have supported the development of economic research in the twentieth century. Since the 1930s, Britain has possessed a fairly well developed sector of applied economic expertise, loosely integrated with the universities. Yet historically the pattern of development has been somewhat analogous to that identified earlier for the process of academicization. First, in contrast to the United States, where federal and state governments actively 'sponsored' the philanthropic involvement in such enterprises during the inter-war, British administrations' interest for applied economic expertise remained fairly low until the 1960s, when the existing institutions were incorporated into a quasi-public industry.<sup>229</sup> Second, interest for economics as such has also been quite limited among the business elite, and hampered by a general preference for 'business studies' over the much more theoretical subject of economics. (Sanderson, p270-271) As a result, the philanthropic basis for economic research in Britain, although not negligible -for instance, the development of economics at Oxford during the inter-war resulted in great part from a private benefaction- has been relatively narrow.

### **Economists and Statisticians**

By the turn of the twentieth century, Britain enjoyed not only the notoriety of a distinguished scholarship in mathematical statistics, but also possessed a well-developed applied tradition, institutionally established in the frequent use of surveys for social

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<sup>229</sup> However the war, as elsewhere, was somewhat of an early turning point.



policy purposes. As pointed out by Desrosières, in this society obsessed by the social costs of rapid industrialization, local societies and reform groups participated actively in the promotion of social investigations, which were often closely articulated with administrative agencies and policies (both at the local and central levels). (1993, p203-217) Much of these activities, however, remained centered around social, not economic, problems and data. The Board of Trade,<sup>230</sup> which collected the latter, seems to have been somewhat less effective in its task than its 'social' counterpart, the General Register Office. As Middleton points out, the collection of economic data was particularly uneasy due to the 'enormous resistance to any intrusion into the affairs of wealthy individuals or businesses'. (1998, p123)

British economic statistics until 1945 were famously dispersed among a fairly disorganized ensemble of institutions, from central administrative departments to local offices, learned societies, research institutes and newspapers. Between the wars each government department plus the Bank of England developed its own statistical branch, but the connections between the various parts of the system were non-existent. Royal Commissions constituted other occasions of factual economic inquiry, though they were non-permanent. (Bulmer, 1982) The *Economist* was the main provider of financial data, and, in 1926, created an 'Intelligence branch', which collected statistical information for commercial purposes.<sup>231</sup> Finally, academics were also involved in the production of their own economic surveys and data –an activity organized, among other places, at Oxford University and at the *London and Cambridge Economic Service* (see below). It is only

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<sup>230</sup> Created in 1832.

<sup>231</sup> Middleton, 1998, p122. Edwards, 1993, p614. In the post-war period, the latter evolved into a major research consultancy.

with the outbreak of World War II, and even more the preparation of the White Paper on Employment Policy (1944),<sup>232</sup> which established the framework for the post-war welfare state, that the government finally implemented a comprehensive program for the collection of official economic statistics. A Central Statistical Office (today named the Office of National Statistics) was created in 1941 to federate the various British government offices, and a Government Statistical Service was established in 1946. As did the pre-World War II ventures, these changes owed a great deal to the action and interests of academics (both economists and statisticians), and to the established professional and social closeness between the two groups of practitioners.

### The Organization of Economic Research in the United Kingdom

The movement of academicization during the later part of the nineteenth century and early part of the twentieth meant that economic research had become a full-time activity, mostly carried on by university professors. The specialized role of the economic researcher, which would be institutionalized later with the emergence of large, state-sponsored research departments and institutes, was nearly non-existent then. Yet a number of important forerunner organizations, supported mostly by private means, deserve mention. During the 1920s and 1930s, partly following the American example, many academics participated in the establishment of organizations devoted to the systematic study of economic fluctuations. The *London and Cambridge Economic*

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<sup>232</sup> The founder and former director of the Central Statistical Office thus stated that 'the paragraphs in the White Paper became the Gospel for the development of economic statistics afterwards'. (Campion, 1958, p2)

*Service* (LCES), created by professors from the universities of Cambridge and London<sup>233</sup> in 1922 in order to 'collect and disseminate basic data for (their) own use, and funding this activity by sales to the business sector',<sup>234</sup> was one of these earliest enterprises. Applied research institutions were then established during the 1930s, notably at Oxford and Manchester where empirical interests were quite prominent by intellectual tradition. The Oxford Economists Research Group, a collective devoted to the investigation of business decisions, was formed in 1935. A few months earlier, the Oxford Institute of Statistics had been set up for the theoretical and empirical study of the business cycle and the launching of industrial and labor surveys.<sup>235</sup>

Foreign linkages were often crucial to the development of such endeavors. First, W. Mitchell, founder of the NBER in the United States, spent a year at Oxford in 1931 and had an important impact in orienting the research program towards applied quantitative studies, as well as promoting the organizational form of the 'research institute'. Second, American foundations played an important role in the funding of organized social-scientific research throughout Europe, and especially Britain, both before and after World War II. Altogether, 'Rockefeller philanthropy (in the area of economic research) provided more funds than either Government or British philanthropy put together.' (Fisher, 1977, p557) This activity was essentially geared at the promotion

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<sup>233</sup> Chiefly Beveridge, Bowley, Keynes and Robertson. The LCES used the Harvard method for the study of the business cycle.

<sup>234</sup> Middleton, 1998, p159. Robinson, 1978.

<sup>235</sup> See Young and Lee, 1993, p128-136.

of the model of scientific empiricism described in the preceding chapter.<sup>236</sup> Thus the organization supported the expansion of the London School of Economics<sup>237</sup>, but also ventures at Oxford, Cambridge, and Manchester, as well as the creation of a *National Institute of Economic and Social Research* (NIESR) in 1938.<sup>238</sup> Immediately after the war, the creation of a Department of Applied Economics at Cambridge<sup>239</sup>, initiated by Keynes, also relied on Rockefeller money.

These institutions constituted an important organizational step for British economics. Staffed with academics, they encouraged a new conception of economic research as a 'collective' enterprise. Empirical investigations undertaken under the new organizations' auspices contributed to the further 'professionalization' of British academic economics -giving rise, in particular, to a new wave of scholarly publications. For instance the review *Oxford Economic Papers*, created in 1938, became a receptacle for the works of Oxford-based economists and their program of 'grounded empiricism'. Similarly, the review *Manchester School* (created in 1930) became a vehicle for the work of the Economic Research Section of the University of Manchester (1931), which worked in close association with local industries.

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<sup>236</sup> See Fisher (1977; 1980) detailed study of the role of American foundations in British social-scientific (and especially economic) research between the wars.

<sup>237</sup> For instance, nearly one-quarter of the London School of Economics' total income during the period between 1923 and 1937 came from Rockefeller sources, although the two institutions ended up 'divorcing' from each other later on. (Dahrendorf, 1995, p317-318)

<sup>238</sup> see Jones, 1988 on the foundation of the NIESR.

<sup>239</sup> Created in 1946.

## Socialization and Marketization of Economic Research

Since the war, however, this 'private' pattern has been considerably altered, and economic research in Britain has by and large become a 'socialized' activity, financed by public means and stimulated by public demand. The main elements of the current system, however, were somewhat slow to emerge. Today, most of the funding goes through the Higher Education Funding Council (formerly University Grants Committee) and through a specialized research council, the Economic and Social Research Council, (formerly Social Science Research Council). Established in 1965, the latter organization inaugurated Britain's adoption of a central scheme for the funding and organization of social science research. As is common in British science policy, the SSRC was designed a 'quango', or privately managed, yet public, organization. Economics, which has received between one quarter and one fifth of all SSRC/ESRC funds since the council's creation, represents by far the best endowed 'discipline' among all of the organization's constituents. (Lisle, 1984, p95)<sup>240</sup> The SSRC/ESRC typically funds applied economic research, whether macro or micro, which differs from the National Science Foundation in the United States where such an orientation towards 'relevance' is much less developed.<sup>241</sup> Finally, as pointed out earlier, foundations, both local and foreign, represent the last source of funds. (Kirman and Dahl, 1996)

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<sup>240</sup> Kirman and Dahl even suggest that the proportion of funds devoted to economic research in the United Kingdom has increased markedly in recent years. (1996, p104)

<sup>241</sup> For instance, about one third of its budget goes to forecasting agencies such as the NIESR, the DAE in Cambridge, the Macroeconomic Bureau in Warwick, and forecasting units at the university of Liverpool and the London Business School. See Smith and Larsen, 1989, p47; King, 1997, on the question of 'relevance'.

With the rise of a quasi-‘corporatist’ policy paradigm, the state itself has constituted a considerably important channel of economic research development. From the late 1960s, individual government departments started the practice of commissioning large amounts of research to teams in universities and research institutes, which thereby often evolved into semi-public organizations. Some were incorporated into the functioning of the broader Keynesian framework of economic management, and derived their legitimacy from their association with the formulation of policy. For instance, the *National Institute of Economic and Social Research* (forecasting) and the *National Economic Development Office* (planning) enjoyed a certain visibility in the public sphere, although they –especially NEDO– partly lost it with the collapse of Keynesianism in the 1970s and the emergence of a new policy agenda.

In contrast to France, however, government support in modern Britain is often a necessary but not sufficient condition for establishing a somewhat secure base for a research organization. It is generally after a research enterprise has been legitimated by private support and proved its excellence in its special domain that public funding may be secured. Indeed there exists almost no example of an organization authoritatively set up ‘from above’ (even the creation of NEDO was the result of a tripartite consultation). British institutes often depend on a large variety of sources, including public research grants, subsidies from individual government departments and ministries, private trusts, individual corporations and interest groups. This contrasts with both the American system (which relies essentially on foundations and large endowments) and continental European systems (which rely on state finance, whether central or federal). As a result, they need to

forge links with a fairly broad 'market' of 'clients', and to ensure the 'relevance' of their research for their different constituencies.<sup>242</sup>

### **An Example: Macroeconometric Models and Forecasts**

Since 'economic knowledge', especially that of a technical nature, is primarily located among academics in England, universities have constituted 'natural' sites for the emergence of applied, often policy- or (more recently) business-relevant, economic expertise in Britain. A good example of this pattern is the sector of economic forecasts (especially those involving the utilization of a macroeconometric model), which largely developed as a pan-academic enterprise.

Public officials in England –including some government economists—<sup>243</sup> long remained skeptical of the relevance of economic forecasts, and especially those derived through mathematically sophisticated tools. (Ball and Holly, 1991, p199-200) The Treasury produced forecasts after the Second World War, but they relied on informal expert opinion rather than on the systematic application of statistical or econometric instruments. This attitude, however, started to change in the late 1950s. First, the development of statistical and macroeconometric techniques and computing facilities had created new technical skills among academic economists. In 1957-8, the American economist Lawrence Klein developed the first econometric model of the United Kingdom during a prolonged visit to the Oxford Institute of Statistics. Another project was formed

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<sup>242</sup> Including the public funding bodies. The ESRC, after the crisis in the 1980s which almost saw its disappearance, became much more 'instrumental' in its approach to research funding.

<sup>243</sup> See for instance Cairncross' address to the *Royal Economic Society*. (1969)

in 1960 at the Department of Applied Economics of University of Cambridge.<sup>244</sup> Second, the commitment of British governments to a policy of demand management, and the rising popularity of instruments such as planning in political and industrial circles, meant that bureaucratic administrations were becoming more interested in quantified economic knowledge. The Treasury decided in 1959 to support an outside forecasting team at the National Institute of Economic and Social Research, which would provide alternative figures and estimates to the official ones. (Jones, 1988)

The creation of the SSRC in 1965 further contributed to the expansion of this sector. One interesting trait of public support in the United Kingdom is that it enabled not only the growth of model-building and economic forecasting, but also their variety, based on the assumption that 'diversity is healthy'.<sup>245</sup> Thus in contrast to France where successive models (built by the public administration) largely remained set in a Keynesian framework, the landscape 'encouraged' by the SSRC was purposefully much more varied. During the 1970s and 1980s, the agency participated in the financing of modeling teams at NIESR (Keynesian), London Business School (monetarist), Cambridge Growth Project (eclectic) and Cambridge Economic Policy Group ('new' Cambridge economics or post-Keynesian). (SSRC, 1981) In 1983 the SSRC supported the creation of the Warwick Macroeconomic Bureau whose task is to evaluate and improve the performance of the instruments developed by all the other organizations. The

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<sup>244</sup> The Cambridge Growth Project, directed by Richard Stone. See Ball and Holly, 1991; Worswick, 1982, about the development of macroeconomic model-building in the United Kingdom.

<sup>245</sup> Third Report from the Treasury and Civil Service Committee, 1980-81, quoted in SSRC 1981, p43. The same consideration prompted the Parliament to make the Treasury model a 'public good' in 1975.



Treasury and the Bank of England also encouraged modeling efforts 'outside' (mostly NIESR and the London Business School) before they themselves entered the field massively in the 1970s.<sup>246</sup>

Macroeconometric models played an important role in familiarizing public officials in Whitehall with economic instruments, but they also contributed to the changing intellectual climate of the 1970s.<sup>247</sup> Like in the United States, they were vehicles which competing groups of economists used for the legitimization of their economic approaches, and as such became vulnerable to political whims. By the early 1980s, the rising popularity of monetarism in academia and public life had made NIESR, as well as the Cambridge Economic Policy Group, suspect of 'old-fashioned' Keynesianism, and they both lost an important proportion of their public funding. The CEPG's subvention was practically annulled, which amounted to a major setback for the 'New Cambridge' approach in economics.<sup>248</sup> By contrast, other institutions, which had started producing forecasts using monetarist and/or supply-side assumptions, relied often more extensively on private sources (e.g. the London Business School, the University of Liverpool and the City University Business School).

The distinctive feature of the British macroeconometric modeling landscape is its diversity, its embeddedness (except for NIESR and the governmental administrations) in

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<sup>246</sup> For instance, NIESR in 1975/76 derived more than 80% of its income from public sources (mostly Treasury and SSRC). (Jones, 1988, p52)

<sup>247</sup> Peter Hall, for instance, has convincingly shown the role of macroeconometric models in the progressive transformation of public officials' views from Keynesianism to monetarism. (1990)

<sup>248</sup> Nonetheless, the CEPG survived in a private form, renamed Cambridge Econometrics.

academic institutions, and the absence of major corporate players. As in France, the state played a role in the development of this research sector, yet it did so at arm's length, and with a very different purpose, which was to deliberately foster intellectual diversity. Also, it would be unthinkable in France to have the models used by the Ministry of Finance made public, as the Treasury's model has been since 1975.

### **The Making of Economic Policy**

Economic policy in England is nominally in the hand of Parliament, but in practice the latter has had little influence on its making in the twentieth century. The organization of the political system around a majority rule, whereby a single party controls the executive and the legislative, makes for a relatively unambiguous and easy policy implementation. The true centers of the British economic policy machine are thus located in the Cabinet, and especially the Chancellor of Exchequer, and in administrative departments (Treasury foremost, but also the Bank of England, as well as the Departments of Industry, Trade and Employment). (Keegan and Pennant-Rea, 1979, p64-65) This situation contrasts with the United States where economic policy decisions, even the most basic ones, are the subject of constant negotiations between the executive and congressional committees, each with its own staff of experts.

Governments and public officials prior to World War I certainly had little notion of their role as economic policy makers. Even after the conflict, such conceptions were rare. However, there was already a certain consciousness, no doubt also supported by the skillful self-promotion of specialists like Keynes, or the persistent advocacy of a Beveridge, that 'expertise' in economic matters was a quite distinct competence, which could be found among academic writers, in addition to Treasury civil servants and

'practical men of affairs'. Economists and statisticians, for instance, publicly petitioned the government for improving official statistics, and for the establishment of an economic general staff in the cabinet. These propositions, especially the latter, often faced the opposition of higher civil servants, but were able to secure some support from politicians. (Cairncross, 1989, p7)

Since the 1930s, successive governments have undertaken repeated efforts to institutionalize some form of central, that is, non-departmental, economic advice relying on expertise provided –in part– by outsiders. Some of these organizational innovations, especially those implemented by Labour governments, have been also directed at breaking the Treasury's monopoly on economic policy, as well as contesting its 'bias' for financial orthodoxy by promoting 'un-orthodox' ideas (e.g. planning, industrial policy, incomes policy...). Over time, they certainly had a lasting impact in familiarizing civil servants with economic reasoning and tools, and played a non-negligible role in the 'conversion' of Treasury officials to new approaches to economic policy. However, each of these structures was also in some sense an individual 'failure', as none remained able to achieve any measure of institutional longevity. Some were absorbed into the Treasury (as the Economic Section or the Central Economic Planning Staff), others purely dismantled and their responsibilities transferred to other departmental structures (as the Department of Economic Affairs and the CPRS). Over the long run, then, the power of the Treasury within Whitehall has remained largely secure.

The history of economic policy advice in twentieth century Britain thus revolves around the complex relationship between economic specialists and generalist administrators, and the progressive, but difficult, legitimization of the former as a

constitutive part of the civil service.<sup>249</sup> In part the original difficulty to establish separate channels of advice on economic matters came from the resistance of leading administrators who saw both economists and non-departmental administrative structures as a threat to their prerogative, and were suspicious of the technical machinery developed by the economic staff. Another source of tension came from the potential 'politicization' of extra-departmental economic advice, conflicting with the traditional impartiality of the regular civil service. (Indeed this concern became reality under the Wilson and Thatcher governments, both of which made ample use, albeit in very different ways, of politically oriented economic advisers)

### The Development of Economic Expertise in British Government

Unlike the United States, Britain did not develop a permanent staff of 'government' economists until well after World War II. Civil servants taught in the liberal tradition of Oxbridge often possessed little, if any, formal economic training. Economic advice came mostly from a few officials who had developed a solid expertise in economic and financial matters (e.g. at the Treasury or the Board of Trade), and from professionals in industry, banking and finance (the City was especially prominent). What we now commonly call the market for economic advice was almost nonexistent prior to World War I, and very narrow still during the interwar.

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<sup>249</sup> This tension between the two 'professional' functions for instance appears very self-conscious in the collective memory of Whitehall, and is explicitly expressed in the titles of two biographies of prominent economic public servants, *Don and Mandarin: Memoirs of an Economist* (MacDougall, 1987) and *An Economist Among Mandarins. A Biography of Robert Hall*. (Jones, 1994)

As in other countries, the advent of the first world conflict, and the resulting rise of state involvement in the economy, prompted the employment (on temporary appointments) of embryonic teams of external advisers in governmental administrations. A few of these experts came to serve in the British Treasury during World War I, including Keynes, Beveridge and Henderson.<sup>250</sup> Such practice was discontinued after 1918, when governments sought to dismantle all wartime controls and go back to the pre-war model of a 'watchman state', at arms' length of any direct economic involvement. Nonetheless, the persisting centrality of economic (and in particular, monetary) questions on the political agenda during the interwar helped maintain close interpersonal relationships between economic experts and policy, both officially and unofficially. A post of Chief Economic Adviser to the Government was even symbolically created in 1919, although it was mostly honorary and served for quasi-diplomatic functions until after World War II. (Coats, 1981; Harris, 1990, p100) More importantly, civil service departments started the practice of contracting out research to universities, and made the inclusion of economists in Royal Commissions and official committees more routine. (Middleton 1998, p80-81) On the other hand, civil servants became better acquainted with expert economic knowledge. The London School of Economics, for instance, organized numerous training courses for administrators under the impulse of its director, William Beveridge, a former government official himself.<sup>251</sup> (Harris, 1988, p236)

The establishment of a more formal and central structure of advice became more pressing as Britain faced chronic unemployment problems during the 1920s, which

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<sup>250</sup> Keynes was also an economic adviser to the British delegation to the Versailles treaty conference in 1919.

<sup>251</sup> Beveridge was Director of the LSE from 1919 to 1937.

rapidly intensified after 1929. Shortly after the 1929 election, Labour Prime Minister Ramsay MacDonald assembled a small structure of 'economists', civil servants, and industrialists in order to help his government face the slump. This *Economic Advisory Council* (1930-1931) and its weaker successor, the *Committee on Economic Information* (1932-1939), which included such academic teachers as H. Clay, H. Henderson, J.M. Keynes, A. Pigou, L. Robbins or D. Robertson among their members, constituted the first centralized structures concerned exclusively with economic advice, with an in-house staff of 'economic experts'. As such, they represented important precursors to later institutions. However, it is generally acknowledged that they had almost no effect on policy, partly as a result of their own internal divisions,<sup>252</sup> and partly because of the traditional civil service's reluctance to grant them authority in economic matters. Successive governments remained largely committed to 'Treasury' orthodoxy throughout the inter-war, in spite of the general skepticism, if not virulent criticisms, of certain academic economists.<sup>253</sup> (Middleton, 1982)

It is only with the Second World War that the Treasury monopoly on economic advice started to fissure with the creation of a separate expert body in the War Cabinet itself –the *Central Economic Intelligence Service*, which evolved into two distinct services in 1941, the *Economic Section* for coordinating general economic policy and the *Central Statistical Office* for data collection. (Booth, 1986) These organizations relied more explicitly on specialized expertise than their forerunners, especially on

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<sup>252</sup> Notably between Keynes and Robbins. (Clark, 1977)

<sup>253</sup> But see Howson and Winch, who argue that the works of the Council and then the Committee contributed to alter Treasury views in a Keynesian direction. (1977)

academics.<sup>254</sup> Professional economists and statisticians were also recruited into regular Whitehall departments. (e.g. Keynes, Henderson, Robertson and Lord Catto in the Treasury) (Coats, 1993, p557; Howson, 1988a) Cairncross argues that 'in the Second World War there were at least fifty officials in Whitehall who had at one time or another been university teachers in economics.' (1996, p33)

For these reasons, Middleton (1998) argues that the war and the work of the *Economic Section* may be looked at as the heyday of economists' influence in government, as the 'dons' were associated with the formulation of policy at the highest levels -in the Cabinet itself. The war context also meant that, for the first time, British governments came to explicitly support, sponsor, and regard as legitimate important technological improvements in the measurement of economic activity. As Patinkin (1976) has shown, the development of national income estimates by Meade and Stone in 1941 was considered a major achievement, yet their predecessor in 1932, Colin Clark, had never succeeded in securing governmental assistance in support for his work.

In contrast to the United States where the drive to incorporate professional expertise was prolonged with the creation of the *Council of Economic Advisers* in 1946, and by a vast influx of economists into government service, the *Economic Section* in its wartime form remained a transitory episode. Although the organization continued to attract young academics through the post-war years, most of the professors who had been drawn into government advice during the conflict quietly and willfully returned to their university departments as soon as it ended.

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<sup>254</sup> Among the members of the *Central Economic Intelligence Service* were Stone, Meade, Robbins, Jewkes, A. Robinson, Cairncross...

'They wanted to get back to academic life. They had had six years away, and that is a long time; I think they felt: 'this is all very well in wartime'. You could really make your own way in wartime. You could really make your own career. But in peacetime you were going to be part of a solid structure, and unless you get in the right post to begin with you may find it very difficult. Nearly all the Economic Section disappeared and went back to their universities. Lionel Robbins wasn't going to stay on, and James Meade wasn't going to stay on. (...) No, it was a great problem finding anybody for any of these jobs in the immediate post-war period.' (Interview, Sir Alec Cairncross, in Tribe, 1999, p50)<sup>255</sup>

After the war, then, the Treasury rapidly regained its preeminence over the Cabinet in the conduct of economic affairs<sup>256</sup> –after a short-lived attempt by the Labour government to create a Ministry of Economic Affairs and institutionalize planning (with the creation of the Central Economic Planning Staff).<sup>257</sup> The *Economic Section* was maintained, however its function changed from advising the Cabinet to advising the Chancellor on matters of macroeconomic policy. Also, the production of economic forecasts in preparation for the budget, which had started in 1940, was now among its accepted attributions. The organization was finally integrated into the Treasury in 1953. Although the hostility of 'generalist' public administrators against economic 'specialists' persisted, there is ample evidence that this modestly sized structure (it counted less than

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<sup>255</sup> On staffing problems in the post-war *Economic Section*, also see Cairncross, 1989, p135.

<sup>256</sup> On the key period of the immediate after-war, and the policy choice between planning and demand management, see Weir, 1989. She shows that the 'conversion' of the Treasury to Keynesian demand management was partly a 'negative' choice, motivated by the desire to avoid the stronger alternative of planning promoted by members of the Labour party.

<sup>257</sup> The CEPS (1947-1954) was a small advice structure (25 people), which served as a de facto *cabinet* for successive Chancellors before being absorbed into the regular Treasury machinery. It consisted of a mix of regular civil servants and outsiders, both generalists and specialists (including trained economists). (Hennessy, 1989, p153-154)



20 people) helped familiarize officials in Whitehall, especially the highest ranked ones, with the Keynesian approach. More generally, it contributed to the diffusion of an 'economic culture' in British government. (Cairncross, 1989, p132-161) Economic specialists started being recruited away into other Treasury divisions, even transfer to administrative grades. In 1963 a Center for Administrative Studies, comprising a core of economics and statistics, opened for the purpose of in-house training of career civil servants. (Brittan, 1964, p26)

One of the major societal concerns in post-war Britain was the 'relative' decline of the British economy, which was evident in slow growth rates and the continuing weakness of the British industry. Thus while the country experienced constant growth of output during the period, its poor performance relative to other industrialized countries, was a considerable source of disenchantment. (See Figure 3-2) This situation prompted political and industrial elites to engage a reflection on alternative models of economic governance, such as the French managed economy. Undertaken both by Labour and Conservative governments, these experiences contributed to strengthen the position of economic expertise within Whitehall. First, a National Economic Development Council, charged with producing a plan for the British economy, was established in 1961 by the conservative government's after its 'conversion' to planning, and as a result of a larger social movement initiated by the Confederation of British Industry. The Council's office (NEDO), and the associated committees, disposed of an important 'economic' staff, hired on a contractual basis. The organization also 'commissioned a considerable amount of research to the universities'. (Denton et al., 1968)

These organizational innovations found themselves further enhanced by the election of the Wilson government in 1964. Since the early 1960s, the Labour Party had committed to a renewed approach to economic management, which emphasized the scientific and technical aspect of administrative tasks, and promoted long-term planning as a tool for achieving growth. The Prime Minister, Harold Wilson, was himself an academic economist with public administration experience,<sup>258</sup> who set out to coordinate disparate government economic expertise within a centralized government department, the Department of Economic Affairs. (est. 1964) The new institution was also expected to provide some counterweight to the Treasury on long-term policy orientations, and especially to formulate a National Plan. (McDougall, 1987, p174) It rapidly built up a staff of economists, many of them directly drawn from NEDO. Interestingly, however, the 'creative tension' the Labour government had expected to generate between the Department of Economic Affairs and the Treasury was short-lived. As conflicts between the two institutions developed over the conduct of policy, it became apparent that the Treasury (and the Bank of England) remained the true center of power. By 1969 the hiatus between the two departments, which had escalated over the DEA's recommendation of a devaluation of the sterling, was ultimately resolved in the Treasury's favor, and the DEA's macroeconomic responsibilities were transferred back to it. (Hennessy, 1989, p182-188)

The episode points towards two important facts about the relationship of economists to public administration in the United Kingdom. First, as we have repeatedly shown until

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<sup>258</sup> Harold Wilson studied PPE at Oxford. He was successively an Oxford fellow in economics, a member of the Economic Section, and President of the Board of Trade (1947-51). (Middleton, 1998, p378)

now, is the general administrative preeminence of the Treasury in economic matters, and the difficulty to contest it from the outside (Weir [1989] actually, shows that new economic ideas in Great Britain can only have an impact if they come from 'within'). But it is important to recognize that the Treasury's administrative authority has also been closely articulated with an in-built conservative economic philosophy, which, almost by definition, limits the contribution of 'economists'. Being a purely financial institution, not an agent of economic development (as the French post-war Ministry of Finance for instance), the Treasury's outlook has tended to be focused consistently on the such matters as the control of public spending and the defense of the pound, as opposed to the promotion of economic growth.<sup>259</sup>

#### The 'Economization' of Whitehall?

Most government economic specialists during the formative period and for several years thereafter, were not 'career' civil servants, but rather temporary appointees (hence their nickname of 'irregulars'). An important innovation in 1964 -the organization of the Government Economic Service (GES) as a distinct civil service class and a government-wide organization for the management of economists' careers- contributed to transform these transitory positions into steps of an 'institutionalized' career path. Now economic specialists could enter the civil service directly through the GES, and expect, as time went on, to reach higher levels of responsibility through the application of seniority rules. (See Figure 3-3a.)

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<sup>259</sup> For instance, in 1977, Heclo and Wildavsky wrote that the Treasury never believed in the philosophy of economic growth.

In spite of the failure to institutionalize a separate ministry for economic policy, the mid-1960s thus represent the most important watershed for the position of economists in British government, as they consecrated the legitimization of the 'specialist' function against that of the generalist administrator. (Middleton, 1998; Coats, 1981) All Whitehall departments, the Treasury especially, started recruiting economic staff, and employ teams of economists in a large variety of functions (microeconomic, macroeconomic, statistics).

Economic specialists also benefited from the political climate of the late 1960s, which promoted the rationalization of government structures and operations, partly out of imitation of American methods of cost-benefit analysis. The Plowden report (1961) on public expenditure control, and the Fulton report (1968), which denounced the 'amateurish' character of the British civil service (especially in comparison with the French technocracy), had contributed to launch the rationalization debate. The Conservative Party itself had worked out proposals to improve the processes of governmental machinery, and the creation of the Central Policy Review Staff in 1971 by the Heath government (1970-1974), as well as a Policy Unit in 1974 symbolically marked the institutionalization of this more technical and managerial approach to public policy-making and evaluation. After the election of the Heath government, the movement of rationalization in the public service and the development of quantitative microeconomic methodologies (notably in cost-benefit analysis, where Britain followed the American lead) accelerated the spread of applied economic expertise into all branches of government. By the middle of the 1970s, for instance, the departments of Energy, Environment, Trade and Industry, all had concentrations of economists that were

comparable, if not superior, to that in the Treasury itself. (Colvin, 1985, p57; also see Figure 3.3b.)

As elsewhere, the increased presence of specialized economic expertise in government was closely linked to the expansion of technical tasks, in national accounting, forecasting, modeling, or microeconomic policy evaluation. The evolution of 'training' for would-be civil servants also partly reflects these changes. On the one hand, the economics paper at the Oxford PPE program -the main 'feeder institution' of the generalist civil service still, has become somewhat more quantitative over time, although the broad and 'unspecialized' spirit of PPE has been preserved.<sup>260</sup> On the other hand, the 'specialist' civil service and the Bank of England actively recruit economic technicians. In a labor market situation where it is sometimes difficult to attract candidates with the required skills (because of inferior salaries to the private sector), government agencies will seek to 'produce' them through participation in their training.

*'Q: How are people recruited as economists by your department (Department of Trade and Industry)?'*

*A: We send a list of ads around, in universities. The way we get people is that the government offers the opportunity to get a MSc on full pay.<sup>261</sup> There are 3 of them a year at the Department of Trade and Industry who go for this program. All the young can do a MSc if they don't have one. We usually prefer LSE or Warwick, because they are more technical.'*

*(Economists, Department of Trade and Industry, June 1997)*

The institutionalization of the economics profession within the British civil service is also evident in the move of economic specialists into administrative positions,

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<sup>260</sup> **Source:** Interviews.

<sup>261</sup> The Treasury and the Bank of England have similar programs.

which still carry the highest prestige and influence. The appointment of Sir Terence Burns, a former economics Professor at London Business School and former Chief Economic Adviser to HM Treasury under Thatcher, to the post of Permanent Secretary of the Treasury, for instance, is significant of this convergence between the two functions.

*'Q: According to you, how has the function of the economist in government changed over time?'*

**A: It has widened. When I started in 1970, there used to be specialists in narrow areas. A lot of economists now have become administrators. For instance in the top three grades of the Department of Trade and Industry's administrative jobs, 14 of them are former economists, which is higher than any other group of professionals.**

There used to be more senior economist posts, but those have been dramatically cut down. At the same time, the bottom economic posts have been expanded. People do not have the same career prospects to become senior economic advisers, which explains the swap into administration. And there are plenty of administrative jobs at the senior level. But the swap into administration is easier in the Treasury, for instance, where the jobs are closer to their subject.' (ibid.)

### **Channels of Economic Advice: British Economists and Government**

British politicians and public officials understood the need for specialists in economic and statistical matters early on, but the relatively closed character of civil service recruitment and the hostility of generalist administrators towards specialists prevented them from developing permanent institutional structures and advisory bodies. Thus almost twenty years after the creation of the ENA in France and the Council of Economic Advisers in the United States, the newly created 'Government Economic Service' counted only about two dozens specialists. Also, with the very antagonistic

nature of party competition in this country, most attempts at establishing a central economic policy 'think tank' did not survive an election.

Except for a few rare cases,<sup>262</sup> economists in Britain usually do not have, as such, access to top decision-making positions. The relative absence of permanent and institutionally strong channels of advice (like the Council of Economic Advisers in the United States) has prevented a regular and formal access of economists within the state administrations and the policy process.<sup>263</sup> Economic specialists (e.g. university teachers) have also rarely been ready to abandon their university posts to enter the public service as career bureaucrats.

Instead, the formulation of expertise and advice has relied on the incorporation, often on a temporary basis, of university economists into peripheral advising bodies, and, especially, on informal interpersonal relationships. From the beginning of the twentieth century, economists were routinely called upon as expert witnesses in Royal Commissions and Committees of Inquiry.<sup>264</sup> Although powerless in terms of decision-making, these institutions had an important impact in altering the terms of the debate on the issues they dealt with: the history of British economic policy is peppered with

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<sup>262</sup> For instance Keynes –who became director of the Bank of England from 1941 until his death in 1946.

<sup>263</sup> The Treasury academic panel, started in 1976, however, constitutes a notable exception. Another recent institution is the Monetary Policy Committee of the Bank of England (established in 1997), which includes three 'academic' economists among its seven members, all of whom jointly determine monetary policy, independently from the government.

<sup>264</sup> See Harris 1990. For instance, Alfred Marshall served on the Royal Commission on Labour, and was heard at the Gold and Silver Commission, the Royal Commission on the Aged and Poor, the Indian Currency Committee, and the Royal Commission on Local Taxation. (Soffer, 1978, p88)

landmark blue books and commission reports bearing the name of a famous economist. (e.g. the Beveridge report, the Meade report on taxation) From the 1930s, economic professionals have played a more important role in government, most often in 'advising' positions within departments concerned with economic issues (e.g. at the Treasury, the Board of Trade, the Department of Trade and Industry). Since the war, for instance, the position of Chief Economic Adviser to HMG / Treasury has always been filled by an 'expert economist', most often drawn from the university. (See Table 3-3) Finally, economists have also played a prominent role as 'special advisers', outside the regular framework of the career civil service. Harold Wilson during his two governments (1964-70 and 1974-76), and Margaret Thatcher (1979-1992), both of whom, but for different reasons, were suspicious of Treasury expertise, made an especially conspicuous use of these positions.<sup>265</sup> And it is certainly not an exaggeration to say that the careers of several of the major British economists in the twentieth century, including Keynes, Meade, Henderson, Harrod, later Kaldor or Balogh were also those of lifetime political advisers.

Formal administrative structures, however, do not constitute the only form of incorporation of professional economists into the British polity. A more important point, perhaps, is that economic ideas in Britain are constantly exchanged through informal networks. Many of the connections between academics, businessmen, civil servants and politicians were formed during the college years, sometimes even before. Due to

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<sup>265</sup> Because of the absence of a system of political appointments at the top of the administrative hierarchy (as in the United States), and the stability of the civil service, the latter may appear committed to the particular economic strategies of the party in place. When Wilson came to power in 1964, the Treasury had been under conservative rule for 18 years. Similarly, Thatcher was deeply suspicious of her possibility to rely on the regular civil service to implement an economic program, which was antagonistic to the previous 'Keynesian' economic policy strategies.



prominent role of Oxbridge in the training of the higher civil service, connections between the two institutions are natural, and actively maintained by both. Public officials, for instance, routinely turn to their former teachers in universities for research and advice, both formally and informally. Also, in contrast to the United States, the passage by a government department (the Treasury or the Bank of England) is not uncommon as a prelude to an academic career, especially in applied fields.<sup>266</sup> In a situation where advanced graduate education was long barely existent, these institutions served a training purpose and conferred a great prestige. The Bank of England, in fact, has a long tradition of being a permanent institutional 'bridge' between academic and policy careers, with elite professors serving in top administrative and advice capacities for prolonged periods of time.<sup>267</sup>

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<sup>266</sup> That was, somewhat to my surprise, true of several of my interviewees. The Treasury, in particular, is often considered an invaluable training ground, both by academics and by City bankers. One of my interviewees, a macroeconomics professor at the London School of Economics, told me:

'I went to the university in Cambridge, then worked for the Treasury for four years. In Cambridge I started my first year in mathematics, then I switched to economics (I had done economics before in high school). I guess I did not miss much by not doing the first year in economics. Economics was hopeless at Cambridge at the time. It was dominated by the post-Keynesians. (...) All the macro I learnt I got it from the Treasury.' (Professor, London School of Economics, June 1997)

<sup>267</sup> This tendency has been considerably reinforced since the 1970s. See for instance the careers of John Flemming, who returned to Oxford in 1992 after eleven years at the Bank of England (including six as chief economist), and one year at the European Bank For Reconstruction and Development, or Charles Goodhart, back to the London School of Economics in 1985 after 17 years as monetary adviser to the Bank of England. Other, more recent, examples include: Mervyn King, a LSE professor who has been (in succession since 1991) the bank's executive director, chief economist and deputy governor, or John Vickers, appointed chief economist in 1999 from his post at Oxford.

Such relationships are also maintained through a network of associations, clubs, or political organizations. Under its early forms, for instance, the *Royal Economic Society* was a place of engagement and contact between the worlds of policy, science, and business. For a long time indeed, the *Society* was much more than an academic forum. Its first president in 1892 was the then Chancellor of the Exchequer, Goschen, and the four initial vice-presidents were all members of Parliament, (Schabas, 1991) which contrast markedly with the United States where the American Economic Association was from the beginning the nearly exclusive province of professors. As Coats' studies (1973) have shown, the organization was presided by a non-academic figure until 1928, and individuals from the private sector (e.g. business and banking) continued to constitute the dominant fraction of the membership up to the 1960s at least. Although this form is now died out, having shifted towards strict scientific professionalism,<sup>268</sup> other important forums have emerged, which play a similar role. Since 1983, for instance, the Center for Economic Policy Research (which is a European organization, but more heavily British) animates the linkages between the academic community of economists and the 'intelligent public' (civil servants, business leaders). The emergence of think tanks has been another major development, which economists have been closely associated with. Finally, party politics has played an important role throughout the twentieth century, a point I develop more fully below.

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<sup>268</sup> The composition of the organization, for instance, resembles much more that of narrowly scientific organizations such as the *American Economic Association*. Current data show that business members represent now only about 10% of membership (against about 64% in academia). (Source: RES directory, 1994) This should not come as a surprise since the principal benefit from RES membership is a subscription to an academic publication, the *Economic Journal*.

### **A Civil Society Model?**

A substantive amount of economic discourse is thus produced and diffused informally among non-academic elements in Britain, by economists acting not only as professional experts, but also as educated members of broadly defined policy networks. As we have seen earlier, nineteenth century British civil society was a fertile ground for economic discourse. Certainly there has been a long tradition among 'economic specialists' in Britain of interest in practical, policy questions, and involvement in public debates. The history of the nineteenth century is filled with high profile economic policy controversies involving important intellectual figures. As Coats remarks, the Ricardians during the first half of the nineteenth century were perhaps the first group to present themselves as 'experts' on economic issues and be recognized as such by the larger public. (1993, p402) But in later periods it has not been uncommon for university economists to issue public statements in the media when they felt they had some authority, and whether this authority was solicited or not. Middleton, for instance, shows that out of 24 key British economists still alive in 1914 (19 of them in academia). 7 engaged in policy advice, 13 in journalism, and 12 in policy advocacy.<sup>269</sup> (1998, p128-9)

During the inter-war, British economists did not hesitate to take a public stance and participate in activities of lobbying and political debate. Direct political involvement of economics professors was common. Keynes, Beveridge, Henderson, and Harrod, for instance, were all involved with the Liberal party and worked actively in its committees

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<sup>269</sup> Middleton analyzes in depth the episode of the tariff reform campaign in 1903, which witnessed the first public action of a collective of economists in the publication of a free-trade *Manifesto* by fourteen professors, among them Marshall, Edgeworth, and Bastable. According to Middleton, the campaign marked a decisive step in the constitution of the British economics profession as a separate and self-conscious entity. (1998, p132-141)

and summer schools. (Harrod later switched to the Conservative Party) (E. Johnson, 1978; Brown, 1980) Keynes' pamphlet of 1929 (*Can Lloyd George Do It?*, written with Hubert Henderson), became the textbook of the 1930 Liberal campaign. (E. Johnson, 1978, p22)

A similar situation could be observed on the left. The predecessor to the Labour Party, the Fabian society, had from its beginnings established a close association between social reform and efficient administration, the latter including a rational use of economic knowledge. (Rueschemeyer and Van Rossem, 1996) Such a stance had for instance prompted the Fabians to sponsor the establishment of the London School of Economics in 1895. After its creation in 1906, the Labour Party continued to entertain close relationships with academic intellectuals, and, in particular, relied on economists to shape its economic thinking and policy formulation. In the 1930s, in addition to the Society's and the Party's powerful economic committees, several organizations<sup>270</sup> were set up to generate new economic ideas and research, as well as helping the Labour governments in power with their economic policy. Together they 'enlisted an impressive array of economic expertise that included, among others, Colin Clark, E.F.M. Durbin, Ernest Bevin, G.D.H. Cole, Hugh Gaitskell, Douglas Jay, James Meade and John Strachey.' (Thompson, 1996, p87-88; also see Howson, 1988b) During the 1960s and 1970s, academic economists (and especially two Hungarian-born ones, Kaldor and Balogh) continued to be involved in Labor party politics. In the early 1970s, the party's left-wing, together with a number of Cambridge dons, developed the 'Alternative Economic Strategy', based on a mixture of Keynesian demand management, nationalisation and

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<sup>270</sup> E.g. the New Fabian Research Bureau, the XYZ Club.

planning agreements between the state and the private sector. And the New Labour has been shown to have close connections at the London School of Economics.<sup>271</sup>

The Thatcher years stand as somewhat of an odd moment in this history, which saw academic economists retreat massively from the political power scene. In 1981, a Cambridge manifesto that strongly disavowed the Prime Minister's monetarist economic policies attracted massive support from the community of academic economists and collected 364 signatures across 40 departments. (Wickham-Jones, 1992) The episode, as well as the general policy towards academics, intensified the rift between the mainstream profession and the Conservative Party, and corresponded to a low point in the prestige and morale of both academic and government economists, who were dismissed outright as irreducible Keynesians. (Middleton, 1998; interviews) Most of the governmental economic advisers during the Thatcher years came not from the ranks of traditional academia (except for a number of monetarists, such as Alan Walters and Patrick Minford)<sup>272</sup>, but from the business sector, the think tanks and, especially, the London Business School. (e.g. Burns, Beesley, later Littlechild)

### The Expansion of Semi-Academic Economics?

The rise of think tanks and research institutes is an especially important development to consider in relation to a discussion of the British economic public sphere. Indeed, like the United States, Britain possesses a number of policy-oriented research

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<sup>271</sup> For instance Richard Layard, adviser to the Minister of Education in the Blair government.

<sup>272</sup> Still, both were then at the margins of the traditional Oxbridge-London axis. Minford was then teaching at Liverpool. Walters, although a former LSE Professor, was then at the World Bank.

organizations, which seek to influence the political and legislative agenda on economic issues. Some were established before World War II,<sup>273</sup> but for the most part, deliberately 'partisan' institutes are an 'invention' of later periods. Post-war think tanks in Britain developed as a reaction to the pro-government, anti-market, left-wing Keynesianism of (especially) Oxford and Cambridge, and against the economic commitments and policies of the post-war Labour government. This movement for a revival of classical economic liberalism crystallized in 1955 when members of the Conservative Party and captains of industry created the Institute for Economic Affairs, a 'libertarian' think tank promoting free-market views. During the 1960s and 1970s, the IEA published a series of pamphlets applying free-market principles to a large variety of microeconomic problems, and helped spread free-market and monetarist views. (Cockett, 1995) The Adam Smith Institute (founded in 1976), and the Center for Policy Studies, on the other hand, constitute more directly political organizations with close linkages to the Conservative Party. One of my interviewees, a LSE professor thus commented: 'you would give a lecture at the Institute for Economic Affairs, it is still a serious organization. But you would not do so at the Center for Policy Studies.' (June 1997) As Peter Hall (1992) demonstrated, all of these agencies played an important role in the conservative movement of the 1970s and 1980s, both by creating a public climate favorable to the monetarist counter-revolution, and by providing the 'expertise' upon which the new policies could rely upon.

The British research institutes, unlike their American counterparts, do not have access to institutionalized channels of entry into the British legislative process. Rather,

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<sup>273</sup> For instance, the Political and Economic Planning (since then PSI, or Policy Studies Institute), a private research organization founded in 1931, diffused and publicized planning views.

their political influence is mediated through interpersonal networks, via the political parties and the press. In addition, they need public visibility in order to survive in an organizational context where funds are attributed on a competitive, not automatic basis. *The Economist*, for instance, summarized the discrepancy between the two countries by writing that ‘in Washington, think tanks have large, grand offices. In London they are strictly hole-in-the-wall jobs, occupying a few town houses in Westminster.’<sup>274</sup> In contrast to the United States, then, think tanks in Britain are not part of the policy process, or the ‘Washington industry’, but remain firmly within the locus of civil society.

Public funds are often necessary to sustain sizeable institutions. Yet as governmental funding prohibits partisanship, it has been mainly directed towards ‘independent’ institutions –namely the academic world. This has prompted the rise, over the last 30 years, of a new generation of quasi-academic research organizations focused on policy questions, which fill a more ‘expert’ niche. The Institute for Fiscal Studies, originally financed by the corporate sector in 1969 for investigating tax-related issues, perhaps represents the best example of an organization with an important influence on (especially) tax policy, yet which also commands considerable academic standing. Since 1991, it also receives a grant from the ESRC.<sup>275</sup> The Center for Economic Performance at the London School of Economics (originally set up as a left-leaning think tank), and the Center for Economic Policy Research, already mentioned, are other examples. The public visibility of the British economics profession has now become increasingly centralized around these organized academic enterprises with specialized niches of

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<sup>274</sup> ‘I think, therefore I tank’, *The Economist*, November 25, 1989.

<sup>275</sup> Source: Institute for Fiscal Studies, Annual Report, 1997.

expertise and close connections to the worlds of policy and business, as opposed to the eminent individual personalities of the past (although each party still has its 'gurus'). These research organizations, which are also partly commercial, play an important role in animating the public debate, not only at home but also in the broader European context where they have been especially successful in securing research contracts.<sup>276</sup>

### The British Press and Economic Persuasion

As pointed out earlier, the press, and 'popular economics' in general, have been central to the formation of the identity of the British economics profession. The principle of the specialized economic commentary was established in the nineteenth century, to a greater extent than in other countries. This took the form of an incorporation of economics into the general press, and the formation of specialized economic reviews. As Gordon (1955) has shown, *The Economist* after its creation played an important role not simply as a vehicle for free trade agitation, but in the development and diffusion of the laissez-faire doctrine itself. Over the course of its long life, it has been a central element in the British (and now international) public sphere, remaining remarkably consistent in character and style, as well as true to its original ideological commitments.

These changes, naturally, were in part the result of the development of economics itself. In the nineteenth century, journalism was well rewarded financially and, in the absence of other channels of diffusion, generalist reviews constituted the principal medium for the expression of economic ideas, whether theoretical or policy oriented.

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<sup>276</sup> For instance some German interviewees stated that their own research organizations were facing a strong competition from 'the British institutes', even at home. The CEPR's near monopoly of the market of EC contracts is also notorious.



Nassau Senior, who occupied the first Drummond Chair at Oxford, and had a marked influence on 'economic policy' during the 1830s (through his participation in several government commissions and advisory activities with the Whig party), wrote regularly for the *Economist*.

Although the late nineteenth century movement of academicization led by Marshall partly established itself in reaction against this association between economics and public debate or policy agitation, university economists continued to write frequently in the press up until the late 1950s, and the links persisted beyond that period. Keynes' talents as a pamphleteer and journalist are almost legendary: a wonderful debater and proselyte, he wrote around 300 articles during his lifetime, many of them in the *Nation and Athanaeum* (later *New Statesman* after the fusion of the two periodicals), whose purchase he had arranged and whose editorship he placed in the hands of another economist (Henderson). Indeed, the Keynesian revolution in the 1930s-1940s, like the monetarist counter-revolution in the 1970s, was carried in large measure by a group of young converts in economic journalism: Nicholas Davenport in the columns of the *New Statesman*, Francis Williams at the *Daily Herald*, and Douglas Jay at *The Economist* and the *Daily Herald* –all of them active in Labour economic policy circles. (Parsons, 1989, p66)

'The 'Keynesian' revolution in economic theory was to bring in its wake a revolution in economic journalism which was as significant as that which had taken place during the 'Ricardian' revolution.' (ibid., p5)

There is, however, some reason to regard this mode of communication of British economists as a structural feature that goes beyond the historical moment of the Keynesian revolution and the little world of the Cambridge converts. For instance, in his

biographical essay about Roy Harrod, Phelps Brown reminds us that 'already in 1951-1959 Harrod had published 356 articles, through 99 media. (...) He wrote regularly for the *Financial Times*. (...) In addition, on the first day of each month, he supplied Phillips and Drew stockbrokers with a memorandum on the current situation.' (Brown, 1980, p30-31) Another example is Lionel Robbins, who, while somewhat less prolific in the public place, and extremely reluctant to take 'political' positions, was chairman of the *Financial Times* from 1961 to 1971. (O'Brien, 1988)

Let us briefly mention two possible explanations for the centrality of economic commentary in the British public sphere, and the role of professional economists in it. The first argument, evoked earlier, refers to the structure of the British state and its relationship to society. Weir and Skocpol (1985, p149) suggest that this journalistic involvement of Keynes and his followers had a lot to do with the closed 'organizational structure of the British state in the 1920s', which, by excluding outsiders from economic policy-making positions, incited them to proselytism and popularization of their ideas. A second line of analysis might point towards the importance of certain specific economic factors, in particular the focal position of the City of London as an all-important consumer of economic and financial news. *The Financial Times*, for instance, emerged in the mid-1880s as a direct outgrowth of the rising international power of financial institutions, and has both dominated financial journalism in Britain ever since, and exerted a profound influence on other similar ventures.(Kynaston, 1988)<sup>277</sup> From the 1920s to the 1990s, another set of publications, the bank reviews, also constituted an important locus of economic writing. (See Table 3-4) Started as 'mouthpieces for the

views of their proprietors', the 'bank reviews' came during the 1930s to assume a much broader role by opening their pages to outside experts and, in particular, academic contributors, who used them as public platforms in the course of their career. (Roberts, 1995)

The centrality of academics in economic commentary declined markedly after the mid-1950s, however, when the main newspapers, including the *Financial Times* (which hired Samuel Brittan), turned to 'specialized' economic journalism. Since then, 'popular' economics has become increasingly the affair of a distinguished body of 'columnists' and vulgarizers, who not only occupy specialized positions in journals, but also frequently publish books for the general public, in the tradition of the great nineteenth century writers (such as Walter Bagehot). This new generation of journalists manifested its noisy presence most visibly by associating itself with the monetarist 'counter-revolution', (Hall, 1992) after a virulent controversy on the 'economic consequences of Lord Keynes' erupted in the *Times* in the fall of 1974. (Parsons, 1989, p189) Much of the attack against Keynesianism during the 1970s (and the Keynesian counter-attack) was thus fought in the economic and financial press, as well as in the bank reviews. (Middleton, 1998, p290; Hall, 1986)

The emergence of a class of financial journalists should not be read too simply as a competitive displacement of academic writers from the public sphere. however. In part, it was a development of its own, motivated by the editorial policies of important

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<sup>277</sup> This role was in large part linked to the international institutionalization of the gold standard after 1870.

institutions (the *Financial Times* in particular),<sup>278</sup> and by the existence of a pool of talented marginals who were experiencing some difficulty in creating a position for themselves within the 'regular' economics establishment: in a fairly restrictive academic and administrative context, the press served as a refuge for people who, for intellectual or social reasons, did not 'fit' the traditional British model of authority. One of my interviewees, a prominent economic columnist thus reflected on his own trajectory in the following terms:

'...[The press] offered a job to people from the universities to develop their careers much faster than if they had gone to the university, or if they had gone to the Bank of England, for instance. It would have taken them a million years before they would have been able to give their opinion, and then it would have had to be private.' (Economic Journalist, June 1997)

'Harry Johnson', he went on, 'was always amazed that people like us were journalists because he couldn't understand why we didn't thrive at a university.' There is indeed little doubt that the likes of Samuel Brittan or William Hutton consider themselves (and are being considered by academics) as capable, full-fledged 'economists' who participate in a coherent professional milieu. Indeed some of their earlier peers subsequently made a successful passage back into academia (Andrew Shonfield), or higher administration (Douglas Jay). Most of them have impeccable records, having gone through the same central institutions as their academic colleagues –a quite different

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<sup>278</sup> 'Professional economic journalism seems to be specific to the United Kingdom. Martin Wolf, Sam Brittan at the *Financial Times*, or Diane Coyle at the *Independent*, the *Economist* of course. I think the single reason for this is that the *Financial Times* has put pressure on other journals to have economic editors. A lot of economic journalism is still 'up-down' economics, as Krugman calls it, that is, looking at the movements of the stock exchange. But the tradition of columnists is

crowd from the 'pop' economists, to use Krugman's word, who wrote in the columns of the *Wall Street Journal* at the time of the supply side revolution (e.g. Wanniski, Gilder, Roberts). (Blumenthal, 1986)

### **The 'Privatization' of British Economics**

The above example, about the role of the economic and financial press, points towards the importance of the corporate jurisdiction for the British economics profession. Like in the United States, the latter has been developing steadily since the 1960s. But to the difference of the United States, the business world has been less interested in economics *as such*. Also, as we have seen, in their aspiration to acquire for their discipline a high intellectual status worthy of university education, economists (especially at Oxford and Cambridge) paid only lip service to business. They established the professional project of economics through the assertion of a distinctive *scientific* identity, which maintained a clear distance from more practical (hence low prestige) occupations and fields. This position persisted in the post-world period, even after universities developed closer connections with the industrial world. (Sanderson, 1972) This ambivalent relationship of economic analysis to business disciplines in the United Kingdom (Napier, 1996) thus contrasts quite remarkably with the much more confident connection found in the curriculum of American business schools.

By the 1960s, the presence of economists in the business sector was attested by the existence of a separate professional association, the *Society of Business*

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something quite different.' (Professor, London School of Economics, June 1997)

*Economists*,<sup>279</sup> and the publication of a study on 'the economist in business' (Alexander and Kemp, 1967). The *Society's* current membership data lists about 600 members, yet this represents in all likelihood only a small fraction of the number of people involved in this occupation. (In 1993, for instance, the *Economist* reported that 'an estimated 400 economists work in financial research in the City' only.)<sup>280</sup>

Naturally, the rise of the financial markets (and especially London) after the 1960s as well as the general retreat from the welfare state, have contributed to the rapid growth of this sector of activity, in Britain as well as in other industrialized nations. Recent surveys conducted by the *Society* show the enhanced weight of the financial and consultancy occupations and the declining one of the traditional 'industrial' jurisdictions.<sup>281</sup> Yet the British situation exhibits some peculiarities, due to the character of the political context in the 1980s and the degradation of conditions in higher education since the 1970s, both of which have created the conditions for a massive exodus of academics towards the corporate sector. Thus MPhils and Ph.Ds are increasingly seen as points of entry into the financial professions, rather than as academic credentials. Commenting on these issues, the magazine *The Economist* noted that:

'The brightest Harvard economists study for Ph.Ds and end up in jobs teaching economics at university or, if they are not quite up to the mark, working for the Federal Reserve, the IMF or the World Bank. The brightest Cambridge graduates head straight for the City.' (The *Economist*, January 3, 1992)

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<sup>279</sup> Established as the Business Economists Group in 1953. The association adopted its present name (Society of Business Economists) in 1969. (source: *Society of Business Economists*)

<sup>280</sup> July 20, 1993.

<sup>281</sup> See for instance Leyland, 1992; Naisbitt, 1995.

More generally, the political and policy developments of the 1980s have moved the center of gravity of the British economics profession towards the business sector.<sup>282</sup> Policies such as privatization and the transformation of the regulatory context created a demand for economic expertise that was not easily found in the academic world then. As such, these opened a niche for the consultancy market, and prompted the emergence of 'new' locations for economic knowledge production in the corporate world (e.g. *London Economics*, specialized in privatization, or Tim Congdon's *Lombard Street Research*) or the acquisition of new skills among old ones: 'Privatization in effect forced companies to hire experts on economic regulation. [Also, as such policies have] spread across the world, British economists have found that expertise gained at home is highly marketable.'<sup>283</sup>

### **Conclusion: The Waning High Culture of British Economics**

Most authors who have reflected upon the British model of economic knowledge organization understand it as 'Mid-Atlantic' -standing half-way between the American and continental European styles of professionalization. (e.g. Baumol 1995; Backhouse, 1999) Certainly if one considers intellectual patterns, Britain is closest to the United States. Yet certain elements in the stratification of the educational field and the presence of a powerful and prestigious service, draw it towards the continental European tradition.

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<sup>282</sup> It is for instance quite revealing that the New Labour in power has been relying on business people to manage a large number of important social programs.

<sup>283</sup> *The Economist* May 9, 1998.

The idea of a 'mixed' pattern does indeed capture some important features about the British economics profession. This chapter, however, has sought to articulate the latter's nature and identity with more specific characteristics of the local social system and the political culture. Indeed, in the British 'model', the identity of economists has been historically shaped by their embeddedness in the high status of the 'educated', whose knowledge is put to the general service of society. And certainly British economists, who after the turn of the century could speak from powerful positions at such prestigious institutions as Oxford and Cambridge, which trained the elite of the civil service, could rely on such authority. They conveyed their ideas through civil society institutions, such as political parties and the press, where they naturally belonged as members of a narrow and highly elitist upper secondary and higher education system, but which had also been traditional vehicles for members of their 'profession' since the nineteenth century.

This is not to say that British economists spoke as pure 'intellectuals', rather than experts. Within their very public role, their authority on economic matters was itself firmly rooted in the coherence and scientific status of a particular disciplinary project. But there remained a certain reluctance to cast their role in purely technical terms, as exemplified by the attitude towards mathematics, which they (especially in earlier periods) considered entirely necessary as a tool, but still requiring 'translation' in plain language.

The absence of formal channels of access to the political and administrative realm (due to the closed nature of the civil service, and the Treasury's jealous defense of its prerogatives), made the recourse to such peripheral institutions and interpersonal



networks a critical element for the economists' involvement in policy debates. And indeed policy has constituted a central, defining area of intellectual involvement for economists since the nineteenth century, not only from a practical, but also theoretical point of view.

This 'civil society' model was especially well developed during the interwar and early post-war periods (the figures of Beveridge, Keynes, Meade, or Kaldor perhaps exemplify it best). It has tended to fade away somewhat as the disciplinary focus in economics, following the American model, has become more 'ivory tower' and more narrowly professionalized. Also, the country turned to a system of mass higher education, which has diluted the traditional supremacy of Oxbridge, and economic expertise (now often drawn from peripheral institutions which have gained an edge in technical matters) has come to permeate the main centers of power in British administration. Its 'form' has changed, too, with the displacement of academics after the rise of the Conservative Party to power in 1979 and the changing structure of the public sphere and economy.

The obvious question is whether such patterns constitute, in themselves, a distinctive trait of Britain. Being a small country, with a very cohesive civil service, France too can be also said to rely on such mechanisms to a great extent. Yet the nature of the educational system in France, as we will see in the next chapter, produces a profound segmentation between the administration and the university, the latter being also impaired by its institutional and intellectual weakness. In this situation, university economists have remained at the periphery of the policy world, while at the same time the management of economic tasks relies on a particular brand of economic experts, the state administrators. In the United States, exchanges between the different jurisdictional

domains are also frequent, yet they are highly formalized and rely more heavily on the impersonality of the professional role (which is expressed, for instance, in the high turnover rate of economists in administrative positions). The university is also, as an institution, less dependent and connected to the administrative world.

## Tables and Figures for Chapter 3

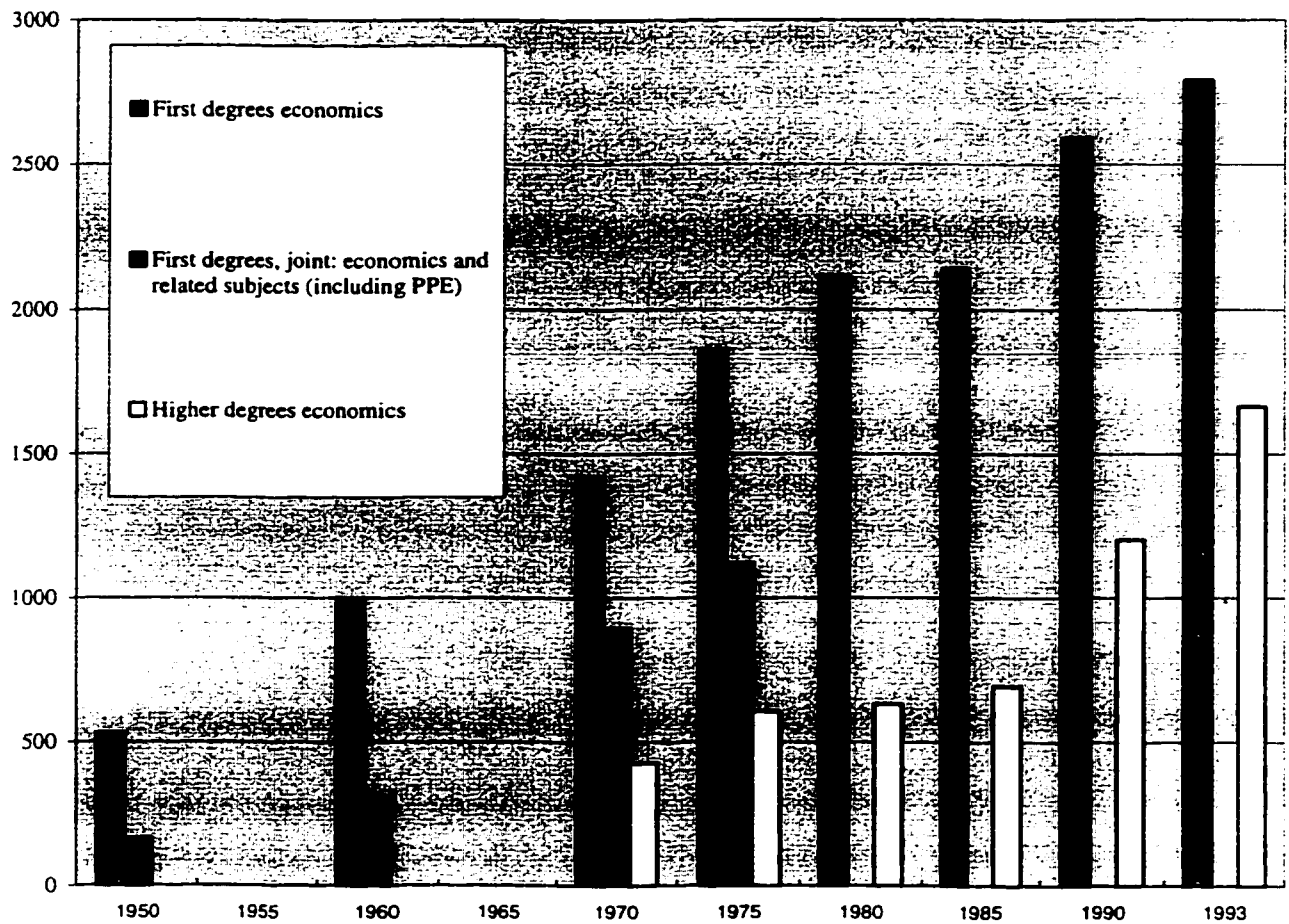
**Table 3-1: Crossnational Comparison of University-Level Enrollments Ratios**

(as a percentage of relevant age group)

	<b>United States</b>	<b>England</b>	<b>France</b>	<b>Germany</b>
1870s		NA	0.5	
1900s		0.8	1	
1920s-1930s		2	4	
1960 / 1960*	32.2*	5.5 / 8.9*	10 / 7.4*	
1970*	49.2*	13.9*	16*	
1980**	56**	19 (U.K.) **	25**	27**
1996**	81**	50 (U.K.) **	52**	45**

Source: Ringer, 1979, p229-230; \*: UNESCO, 1975; \*\*: World Bank, *World Development Indicators*.

**Figure 3-1: Economics degrees in Britain, single honors and joint honors degrees, 1950-1995**



Source: Middleton, 1998, and University Funding Council, *University Statistics*.

**Table 3-2: British Government, main economic advice positions (1919-present)**

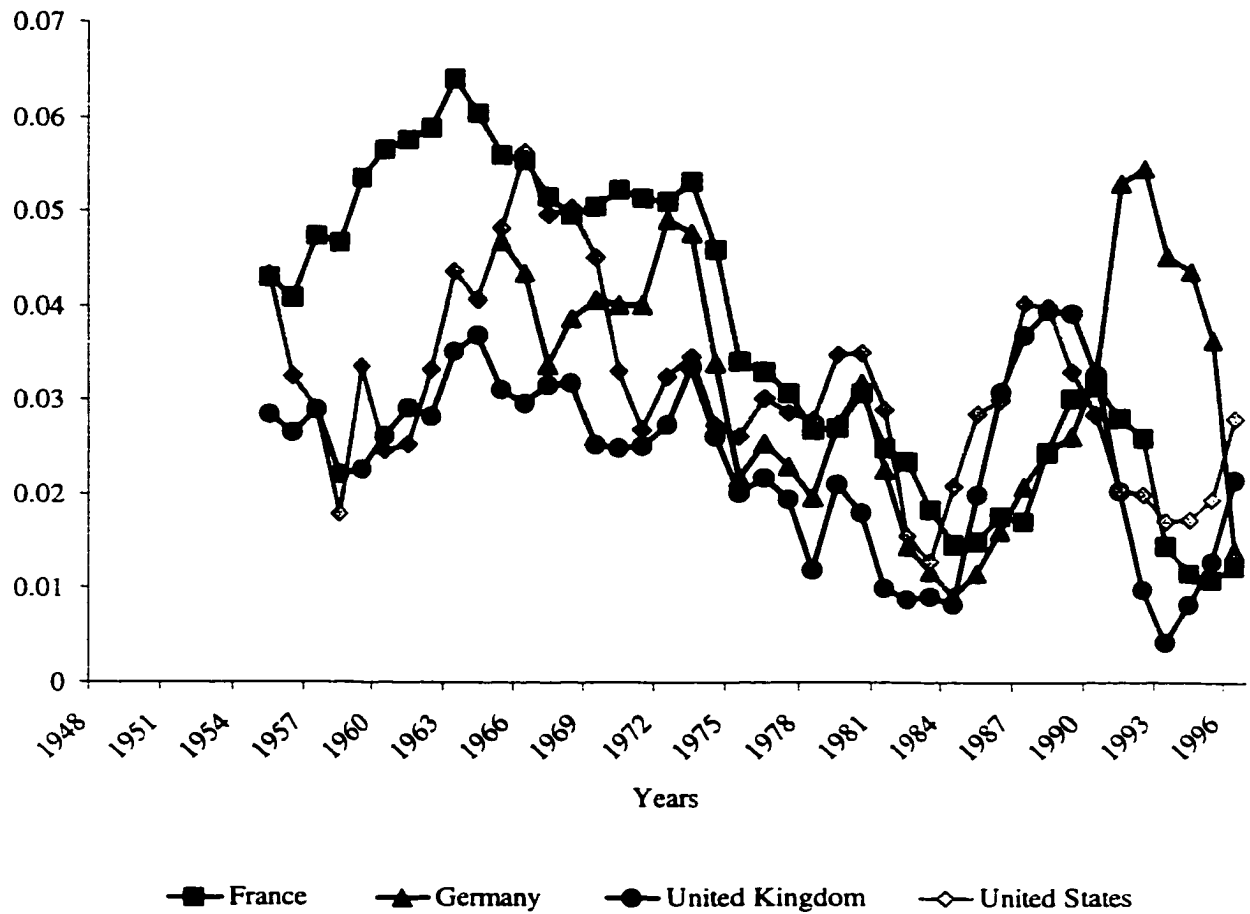
Name	Previous Function	Education	Academic economist ?	Tenure
<b>Chief Economic Adviser to HMG (1919-1946).</b>				
Smith, Sir Hubert Llewellyn (1864-1945)	Permanent secretary, Board of Trade	Oxford, mathematics	Yes / never taught but economic expert.	1919-27
Chapman, Sir Sydney (1871-1953)	Secretary, Board of Trade	London	Yes (Professor, Manchester)	1927-32
Leith-Ross, Sir Frederick W. (1887-1968)	Deputy Controller of Finance (Treasury)	Oxford (classics)	No	1932-46
(Title lapses, 1946-1953)				
<b>Director, Economic Section</b>				
Jewkes, John (1902-1988)	Professor, Manchester		Yes	1939-41
Robbins, Lionel (later Lord) (1898-1984)	Professor, London	BSc. LSE; MA, Oxford.	Yes	1941-45
Meade, James (1907-1995)	Member, ES	Oxford, PPE	Yes (Professor, Oxford)	1946-47
Hall, Robert (later Lord Roberthall) (1901-1988)	Lecturer, Oxford	Queensland, engineering / modern greats	Yes	1947-53
<b>Economic Adviser to HMG / Treasury (1953-1969)</b>				
Hall, Robert (later Lord) (1901-1988)	Director, Economic Section	Queensland, eng. / modern greats	Yes (Lecturer, Oxford)	1953-61
Cairncross, Sir Alec (1911-1998)	Professor, Glasgow	Glasgow, economics	Yes	1961-64
Neild, Robert R. (b. 1924)	Deputy Director, NIESR	Cambridge, economics (Ph.D.)	Yes (Professor, Cambridge)	1964-67
Posner, M.V. (b. 1931)	Ministry of Power, Director of Economics	Oxford. PPE	Yes (Cambridge)	1967-69
<b>Head, Government Economic Service (1964-1969)</b>				
Cairncross, Sir Alec (1911-1998)	Professor, Glasgow	Glasgow, economics	Yes	1964-69

Atkinson, Sir F.J. (b. 1919)	Chief Economic Adviser, Department of Energy		Yes (Lecturer, Oxford)	1977-79
Burns, Sir Terence (b. 1944)	Professor, London Business School	Manchester, economics	Yes	1980-91
Budd, Sir Alan (b. 1937)	Professor, London Business School	LSE, economics. Ph.D., Cambridge	Yes	1991-97
O'Donnell, Gus (b. )	Treasury (Washington)	Oxford, economics	No	1997-

(except where indicated, all teaching positions are in economics)

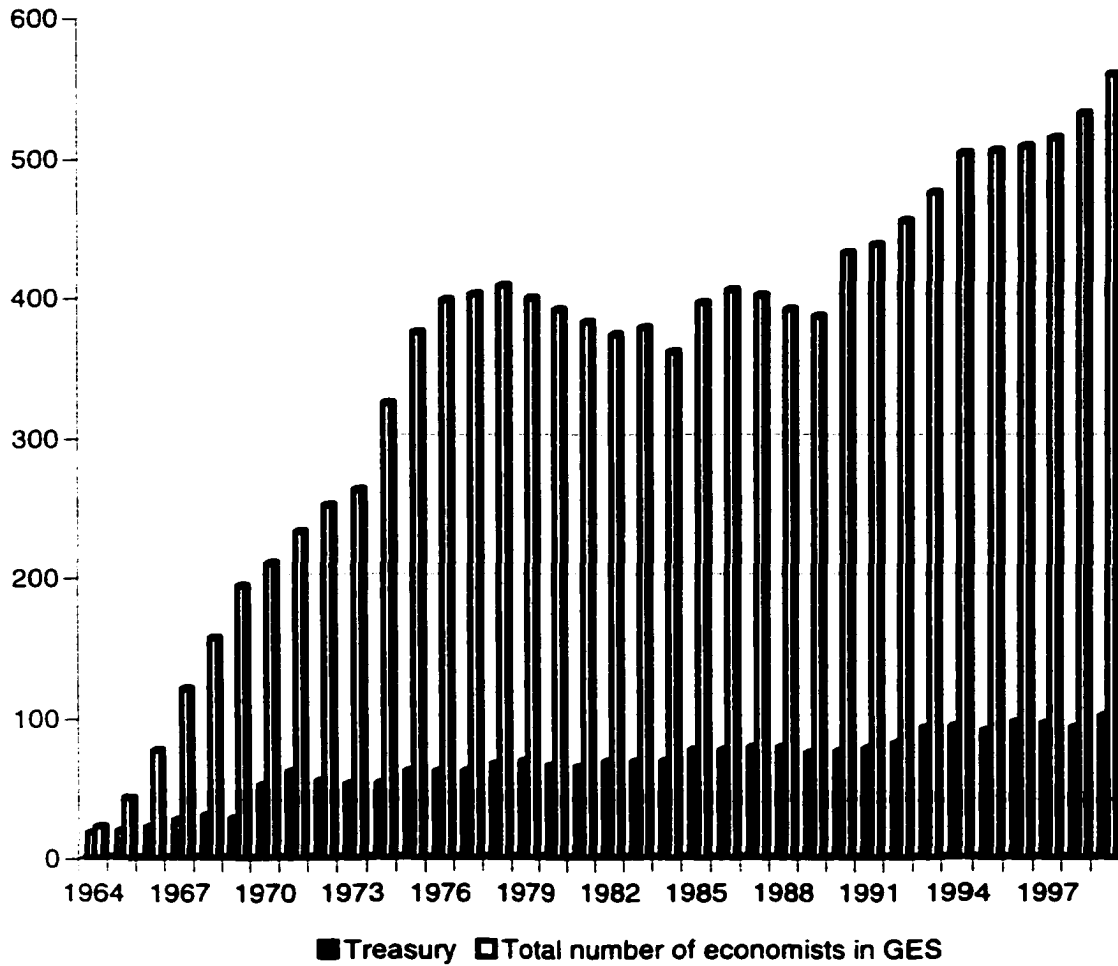
Source: Browning, 1986; Middleton, 1998, p370-378, Cairncross, 1989

**Figure 3-2: 5-year annualized GDP growth rate, 1950-1995, United Kingdom, United States, France and Germany.**



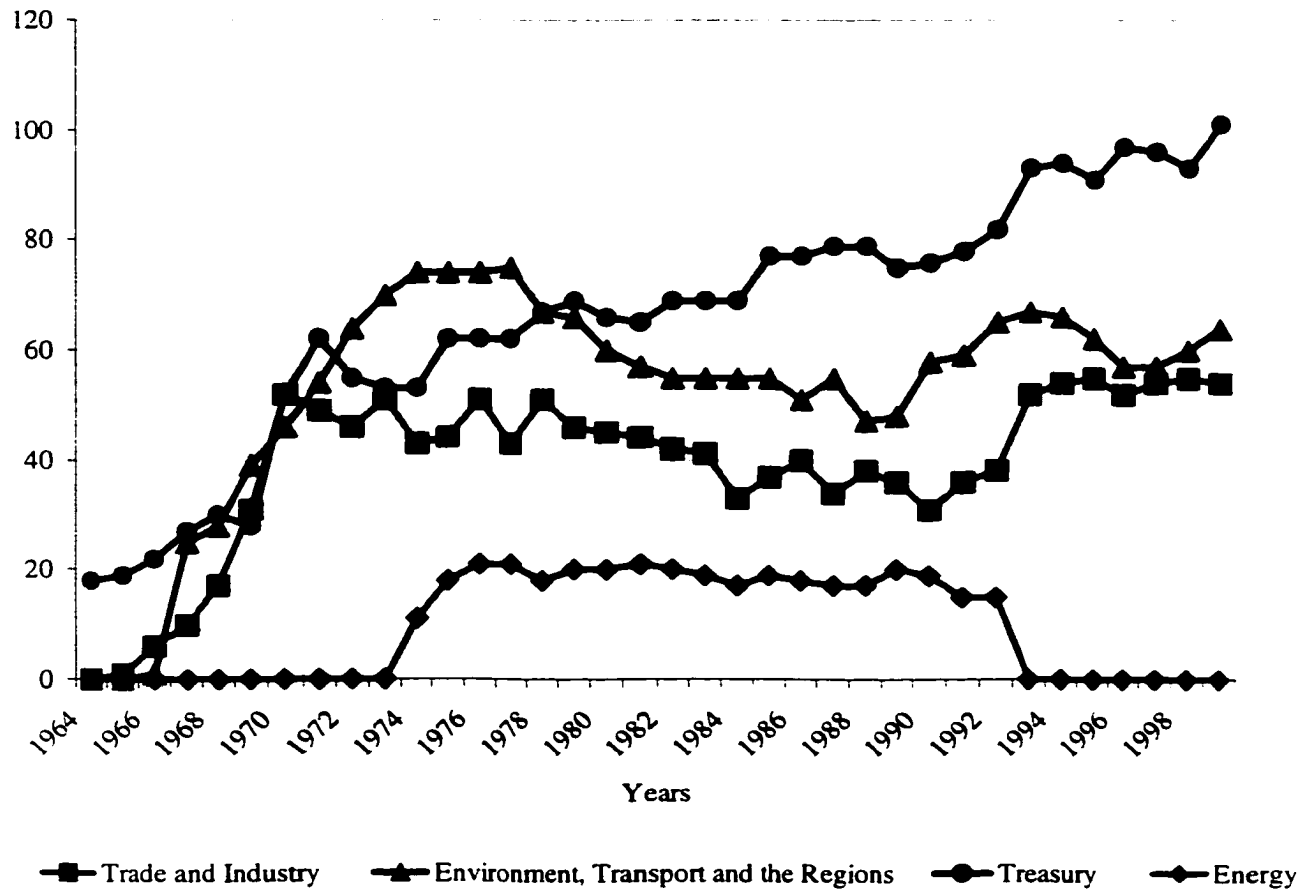
Source: World Bank, *World Development Indicators*.

**Figure 3-3.a: United Kingdom. Total Number of Economists in the Government Economic Service and the Treasury Department, 1964-1999.**





**Figure 3-3.b: United Kingdom. Number of Economists in the Government Economic Service, selected departments, 1964-1999.**



Note: I am deeply grateful to Tracie Humphrey, at the Economist Group Management Unit (HM Treasury, United Kingdom), who provided me with these data.

Remark: 'Energy' subsumed into Department of Trade and Industry in 1993.

**Table 3-3: United Kingdom, Bank Reviews.**

1. Midland Bank review		1920-1987
2. Lloyd's Bank Review	monthly, then quarterly	1930-1987
	annual	1988-1992
	Economic Bulletin	1980-
3. Westminster Bank Review		1936-1968
continued by:		
National Westminster Bank Quarterly Review		1968-1993
4. Three Banks Review		1949-1985
continued by		
Royal Bank of Scotland Review		1985-1992

Source: Roberts, 1995.

**Table 3-4: Institutional affiliations of *Economic Journal* authors**

	(% of total)			
	<b>1940</b>	<b>1950</b>	<b>1960</b>	<b>1970</b>
<b>U.K.</b>	<b>76.9</b>	<b>75.6</b>	<b>57.6</b>	<b>48.2</b>
Cambridge	30.8	26.7	6.1	19.6
London	19.2	13.3	16.7	10.7
Oxford	3.8	15.6	18.2	7.1
<b>U.S.</b>	<b>15.4</b>	<b>15.6</b>	<b>24.2</b>	<b>39.3</b>
Other EU	3.8	0	3	0
Commonwealth	3.8	6.7	10.6	8.9
Other	0.1	2.1	4.6	3.6
Total	100	100	100	100
Number of papers	26	45	66	56

Source: Derived from Middleton, 1998

## Additional Data

**Table 3-5: Leading Journals in British Economics, 1843-present.**

<b>Dates</b>	<b>Name</b>	<b>Remarks</b>
1843-	<i>The Economist</i>	Weekly magazine
1891-14	<i>Economic Review</i>	Oxford
1892-	<i>Economic Journal</i>	Royal Economic Society (Cambridge for a long time)
1921-	<i>Economica</i>	LSE
1927-	<i>Economic History Review</i>	
1930-	<i>Manchester School</i>	Manchester
1933-	<i>Econometrica</i>	Econometric Society (international)
1933-	<i>Review of Economic Studies</i>	LSE
1938-	<i>Oxford Economic Papers</i>	Oxford
1959-	<i>National Institute Economic Review</i>	NIESR
1975-	<i>Cambridge Economic Policy Review</i>	Cambridge (Economic Policy Group)
1977-	<i>Cambridge Journal of Economics</i>	Cambridge (post-Keynesian)
1982-	<i>Contributions to Political Economy</i>	Cambridge Political Economy Society
1985-	<i>Oxford review of Economic Policy</i>	Oxford
1985-	<i>Economic Policy</i>	CEPR

**Table 3-6: British Governments. Prime Ministers and Chancellors, 1908-present**

	<b>Prime Minister</b>	<b>Chancellor of Exchequer</b>
1908-1916	Asquith, Henry (LIB)	Lloyd-George, David; McKenna, Reginald
12/1916-1922	Lloyd George, David (LIB)	Law, Andrew Bonar; Chamberlain, Neville; Horne, Robert Stevenson
10/1922-1923	Bonar Law, Andrew (CONS)	Baldwin, Stanley
5/1923-1924	Baldwin, Stanley (CONS)	Chamberlain, Neville
4/1924-9/1924	McDonald, Ramsey (LABOUR)	Snowden, Philip
9/1924-1929	Baldwin, Stanley (CONS)	Churchill, Winston
6/1929-1935	McDonald, Ramsey (LABOUR)	Snowden, Philip
6/1935-1937	Baldwin, Stanley (CONS)	Chamberlain, Neville
5/1937-1940	Chamberlain, Arthur Neville	Simon, John Allsebrook
5/1940-1945	Churchill, Winston (CONS)	Wood, Howard Kingsley; Anderson, Sir John
7/1945-1951	Attlee, Clement (LABOUR)	Dalton, Hugh Neville; Cripps, Sir Stafford; Gaitskell, Hugh
10/1951-1955	Churchill, Winston (CONS)	Butler, Richard Austin
4/1955-1957	Eden, Robert Anthony (CONS)	McMillan, Harold
1/1957-1963	McMillan, Harold (CONS)	Thorneycroft, George Edward Peter; Amory, Derick Heathcoat; Selwyn-Lloyd, John (Brooke)
10/1963-1964	Douglas-Home, Alexander (CONS)	Maudling, Reginald
10/1964-1970	Wilson, James Harold (LABOUR)	Callaghan, James; Jenkins, Roy Harris
6/1970-1974	Heath, Edward George (CONS)	McLeod, Iain Norman; Barber, Anthony
3/1974-1976	Wilson, James Harold (LABOUR)	Healey, Denis Winston
4/1976-1979	Callaghan, James (LABOUR)	Healey, Denis Winston

5/1979- 11/1990	<b>Thatcher, Margaret (CONS)</b>	<b>Howe, Sir Geoffrey; Lawson, Nigel; Major, John</b>
11/1990- 5/1997	<b>Major, John (CONS)</b>	<b>Lamont, Norman; Clarke, Kenneth</b>
5/1997-	<b>Blair, Tony (LABOUR)</b>	<b>Brown, George</b>

Source: *Regents of Nations*, Volume 4; LEXIS-NEXIS.

## Chapter 4. France: Economists Inside and 'Around' the State.

'Among the French ruling elite, it is Finance Inspectors who pass as economists. That is, they are people who were trained at Sciences-Po and École Nationale d'Administration, who do not know anything about economic theory, and who emphasize economic policy as opposed to economic analysis. But they are close to political power. On the other hand, you have the Polytechnicians-ENSAE who do mathematical economics, or even mathematics without economics, and those pass for another type of economists. That is what being an economist in France means to me.' (Professor at Sciences-Po and University, July 1995)

The field of economics has become a somewhat schizophrenic object of scholarly investigation in 1990s France. Denouncing the 'conversion' of French economists and policy-makers to the virtues of the free-market economy, intellectuals on the left and popular writers have since the late 1980s asserted their claims on the field of political economy, launching a combat against the monopolization of economic ideas by 'neoliberal' experts and the tyranny of an economic policy, which seems to abandon its social objectives. This movement, whose popular success is illustrated by the publication of several best-sellers attacking a de-humanized and de-humanizing economic order, opposes the misery of the 'social sector' to the supposed fatality of economic laws.<sup>284</sup> Restating a critique, which Marx already formulated against classical political economy, it argues that economic science is bourgeois in essence. By presenting itself as 'pure

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<sup>284</sup> E.g. Viviane Forrester, *L'Horreur Économique*; The 'militant/scientific' books of the *Liber/Raisons d'agir* collection, such as P. Bourdieu, *Contre-feux: Propos pour servir à la résistance contre l'invasion néo-libérale*, and K. Dixon, *Les Évangélistes du marché*. (both Paris, Seuil, 1998) From Bourdieu, also see "Le Nouvel Opium des intellectuels: contre la "Pensée Tietmeyer", un Welfare State Européen", *Liber*, 1996, 29, Dec, 16.

science', the argument goes, the professional practice of economics conveniently ignores its 'moral' or ideological component and ends up serving only the interests of the wealthy.

This debate is interesting because it signals the difficult status of economics in France, contested not only by other intellectual enterprises, but also by practitioners within its ranks, and by its institutional 'patrons'. In fact, for much of its history, the development of the specialized sphere of economics was a disputed affair in the French context. First, the field and profession of economics were comparatively late to institutionalize in the higher educational system and the broader society. Second, both have also remained somewhat less self-conscious than elsewhere in Europe. Professional associations of economists are much weaker than in similarly sized European countries: thus the *Association Française de Sciences Économiques* possesses only around 850 members<sup>285</sup> (against nearly 3,200 for the British *Royal Economic Society* and 1,800 for the German-speaking *Verein für Sozialpolitik*).<sup>286</sup> And unlike the Anglo-Saxon countries, France does not produce regular 'surveys' of its economists' stock: employment data do not identify 'economist' as a job title, nor do surveys of scientific manpower or the civil service consider it a special occupational category. In fact, the linkage between credential and job appears rather weak, so that groups with a large variety of institutional statuses and educational backgrounds routinely produce legitimate claims to the economic jurisdiction. For much of the twentieth century, 'being an economist' in France thus does

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<sup>285</sup> Source: Membership directory. The *French Association of Economics Doctors* (ANDESE, created in 1953) has a similar number of members: around 750.

<sup>286</sup> Source: *Royal Economic Society, Register of Members*, 1994; *Verein für Sozialpolitik, Register of Members*, 1996.



not necessarily mean holding a graduate degree in economics --although such elements of specialization and professionalization are clearly under way now. The lack of a shared training ground and a clearly identifiable credential (like a Master's, or a Ph.D.) exacerbates a number of divergences between conflicting understandings of economic competence, from technical prowess to abstract economic theory, or to practical knowledge of economic institutions.

The development of economic knowledge production in France has been tightly dependent on the involvement of, and authority conferred by the state. But this came rather late --after 1945 essentially. Without strong support of political institutions, the field prior to that period relied on a weak institutional basis in universities and other educational institutions. In the post-war era, however, the state became the natural locus of economic knowledge production, understood as a form of expertise closely coupled with the management of the mixed economy, and based on the institutional power of the elite civil service training establishments, the *grandes écoles* and *corps*. With the concentration of resources, intellectual and social authority around state organizations, the administrative sector came to dominate the production of economic information, science, and ideas. On the other hand, this 'statist' pattern blocked the development of economic expertise in other sectors, most prominently the universities and business -- both at a cognitive level (they hardly saw the need for it since the state fulfilled the function) and at a material level (they lacked the resources to set up a competitive economic studies sector).

## The Institutional Context of Knowledge Production in France

### Elitism and Statism in Higher Education

The French system of higher education took shape during the Ancient Regime and Revolution and was consolidated by the Napoleonic state. It is during that period that a network of centrally directed 'elite professional education institutions'<sup>287</sup> (the *grandes écoles*) was designed in order to provide the state --and the economy in general-- with expertise in various domains, mostly in technical and administrative matters. These establishments fixed the framework within which the system was to function to this day, and provided the main basis for the particular character of the French polity --a strong state rooted in a large and autonomous bureaucratic apparatus. (Birnbaum and Badie, 1983)

The common characteristics of this ensemble of institutions were that admission was dependent upon the successful completion of a highly competitive *concours* (examination), and that they provided access to a planned career in the central administration.<sup>288</sup> Each of them offered a fairly specialized form of higher vocational training, and came under the jurisdiction of a particular Ministry. Thus the *École des Ponts et Chaussées* (1747)<sup>289</sup>, which focused on construction methods, and the *École des Mines* (1783), which trained engineers for the mining sector, were under the control of

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<sup>287</sup> The expression is from Wittrock, 1985, p19.

<sup>288</sup> See Silberman, 1993, p114-116, on Napoleon's higher education policy.

<sup>289</sup> Literally, 'School of bridges and highways'.

the Ministry of Commerce and Public Works<sup>290</sup>. The prestigious *École Polytechnique* (1794) was administered mainly by the Ministry of War. The (originally private) *École Centrale* (1829) came under the control of the Ministry of Commerce around the middle of the nineteenth century. (Fox and Weisz, 1980, p8) Other less technical institutions also came to enjoy considerable prestige. The *École Normale Supérieure*, for instance, which depended on the Ministry of Public Instruction, trained future teachers for higher secondary education (the *lycées*).

Throughout the nineteenth century, the *grandes écoles*, as well as the Paris law faculty (which supplied most of the recruits into the civil service) institutionalized as the main channels of entry into administrative positions, as well as 'gateways to higher careers in the army and in the industry.' (Silberman, 1993, p 116) The members of these institutions also held a monopoly on the prestigious *grands corps*, which gave access to lifetime civil service employment, and constituted the high point of the administrative apparatus empowered by Napoleon.<sup>291</sup> Later in the century, comparable ventures were also designed to furnish a basis for higher training in commercial affairs.<sup>292</sup> As Fox and Weisz remark. 'every time the need for a new kind of specialist was felt, it was met by the creation of another *grande école*'. (1980, p3)

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<sup>290</sup> Prior to 1830 they were under the control of the Ministry of the Interior. (Fox and Weisz, 1980, p8) Today the *École des Ponts et Chaussées* is under the control of the Ministry of Equipment (Public Works) while the *École des Mines* is administered by the Ministry of Industry.

<sup>291</sup> The Finance Inspectorate (Inspection des Finances), the Conseil d'État, and the Cour des Comptes.

<sup>292</sup> The Superior School of Commerce of Paris (*Ecole Supérieure de Commerce de Paris* or ESCP), 1820; The School of High Commercial Studies (*Ecole des Hautes Etudes Commerciales* or HEC), 1881.

The *École Libre des Sciences Politiques* (henceforth, *Sciences-Po*), a private institution created in 1871 after the French defeat against Prussia, was the result of one such perceived 'need'. Originally aimed at breaking the state monopoly in the training of political elites, it so excelled in preparing students for state examinations that soon the vast majority of those admitted to the *grands corps* had received their training there.<sup>293</sup> Almost half of the professors in post in 1900 were themselves members of the higher administration, (Favre, 1981, p459-460) thus making the school a true embodiment of an educational apparatus geared towards the service of the State, and a de facto *grande école* of its own.

The universities, which offered a broader range of disciplinary and professional training, and comprised six main faculties –medicine, pharmacy, law, theology, letters and sciences–, constituted the other principal location of higher education. (Karady, 1986) The university system was formally organized as a single centrally controlled institution (the Imperial University of France, established in 1808), which was institutionally weak and poorly funded. During the last quarter of the nineteenth century, the university system expanded and gained in institutional autonomy, yet these changes did not significantly alter the fundamental principle of centralized management. Universities in France are to this day run like any other government department –in contrast to Anglo-Saxon countries, where they constitute formally independent institutions. Curriculums and programs are subject to approval from official bodies, and each higher education diploma has to fit within a centrally defined 'national curriculum'.

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<sup>293</sup> Between 1901 and 1935, 92.5% of the new recruits (by exam) to the *Grands Corps* came from the *École Libre*. The numbers rise to 98% in the case of the

The organization of university courses, as a result, has always responded more to administrative requirements (for instance in teacher training) than to the research interests of professors. And indeed scholarly research did not emerge as a fundamental dimension of university existence until quite late, and is probably still less developed than in other countries.

Another feature of higher education in France is that in spite of the expansion of the university, the system has remained profoundly biased in favor of the *grandes écoles*. During the twentieth century, the divide between the two institutions persisted, if not deepened. The hierarchical differentiation of the French higher educational system between the two tracks created a 'state nobility' (Bourdieu, 1996), or a power elite rooted in the possession of highly prestigious credentials. In particular, the creation of the *École Nationale d'Administration*<sup>294</sup> and the nationalization of the *École Libre des Sciences Politiques* (renamed *Institut d'Études Politiques*) in 1945 (Suleiman, 1974, p49-50; Charle, 1991) further established the monopoly of elite schools over the higher civil service, and especially the economic administration<sup>295</sup>. These developments of the administrative educational apparatus were supplemented by parallel innovations in the technical apparatus of the engineering schools (for instance the creation of a specialized *grande école*, the *École Nationale de la Statistique et de l'Administration*

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Inspectorate of Finances and the Conseil d'Etat. (Suleiman, 1974, p48. Also see Silberman, 1993, p152)

<sup>294</sup> National School of Public Administration.

<sup>295</sup> Under the Fifth Republic, they came to play a decisive role in the recruitment of the political body, and the government in particular. (Birnbaum, 1982; Suleiman, 1978) For instance, the proportion of graduates of the *École Nationale d'Administration* among ministers has been oscillating between 24 and 45% since the mid-1980s. 'Les énarques omniprésents', *Le Monde*, June 27, 1997.

*Économiques*,<sup>296</sup> for economic and statistical training), as well as the gradual expansion of elite business schools. (Especially the three 'Parisian' ones: HEC, ESSEC, ESCP)<sup>297</sup>

By contrast, the universities, especially after the rapid educational expansion of the 1960s, came to be increasingly understood as an instrument of mass education, which was regarded with contempt by the elite and treated with neglect by public powers. In fact, France in the after-war has been sitting consistently at the bottom of the hierarchy of Western industrialized countries in terms of public expenditures per student in higher education.<sup>298</sup> Between 1960 and 1977, student enrollments were multiplied almost four times, representing nearly 20% of the 19-23 years cohort in 1977 (as opposed to less than 8% in 1960). The budget for higher education, however, did not match this growth: in constant francs, it increased only threefold over the same period. (Bienaimé, 1978, p5) This relative decline in selection and resources contributed to an overall deterioration of the status of the university, the lower value of its credentials, and the diminishing prestige of its teaching body, all of which became partial causes for the student crisis (and associated political upheaval) of the late 1960s.

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<sup>296</sup> Literally, *National School of Statistics and Economic Administration*.

<sup>297</sup> As Bourdieu has demonstrated, the field of the *grandes écoles* is far from homogeneous. In the *State Nobility*, he examines in details the 'palace wars', which have led to the domination of the generalist *énarques* over administrative functions, and the relegation of the graduates of top engineering schools into high-level technical positions. (1996, p197-214)

<sup>298</sup> Premfors, 1980. Data from the World Bank indicate that France in 1980 spent about 29.3% of its GNP per capita on tertiary education, against 79.9% in the U.K. and 48.2% in the U.S.. In 1996, however, the three countries were closer together, with respectively 26%, 40.9% and 24.7% of the GNP per capita. Source: World Bank, World Development Indicators.

During the same period as university enrollments were soaring, the student body at the top *grandes écoles* remained virtually constant. Consequently, entry into the elite schools became increasingly competitive, and their diplomas' 'social value' continued to grow. (Bourdieu, 1996, p193-195)

### **The Separate Realm of Research**

Like higher education, academic and scientific research in France is, and has been, a centralized affair. Beginning at the end of the 17<sup>th</sup> century, the French state established a network of special institutions devoted exclusively to the production of science: the Collège de France, the Natural History Museum, the Paris Observatory, the Science Academy, and later (in 1868) the École Pratique des Hautes Études. (Weisz, 1983, p77) A new wave of more specialized institutions was then founded at the end of the nineteenth century (e.g. the Institut Pasteur, est. 1888) (Fox and Weisz, 1980, p200).

In contrast with England (where much of the research activity was located in scholarly societies), and Germany (where the university seminars and institutes served a similar function), the French system came to be increasingly characterized by the predominance of centralized state action. During the nineteenth century, the growing financial patronage of the ministries contributed to displace the center of activity and scientific authority from the *sociétés savantes* towards the official bodies. (Fox, 1980) Likewise, although some research was always carried out in institutions of higher education (in part out of a concern to outperform the Germans whose 'research universities' were admired throughout the world), that was never their primary purpose. The French, Gilpin (1968) notes, never considered scientific research to be the true vocation of the university professor, who was long regarded as 'man of knowledge',

rather than as a 'scientist', a generalist more than a specialist. As for the *grandes écoles*, although they provided excellent scientific training and attracted the best students, they had no established linkage with research institutions and privileged instead their relationship with the administrative world. The French system from the nineteenth century on thus came to be characterized by a relative disconnection between the activities of research, teaching and elite training.

In the twentieth century, research policy came more explicitly under centralized state control. First, the policy of promotion of pure academic knowledge received additional impetus in 1939 with the creation of the *Centre National de la Recherche Scientifique* (CNRS), a multidisciplinary research center designed to provide institutional and financial support to full-time scholars. Presiding over the creation of numerous research laboratories, the CNRS provided the institutional infrastructure French science lacked, and accelerated the professionalization of scientific careers. Scientists typically performed their work in research teams, and were, at least in theory, sheltered from the pressures of the educational and the private sectors. (Papon, 1998) These policies, combined with the lower academic profile of the universities, and the *grandes écoles'* focus on professional and higher vocational training, have contributed to the persistence of the separation of teaching and research in France.<sup>299</sup>

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<sup>299</sup> Since the 1982 reform, however, the articulation between the CNRS and institutions of higher education (both universities and *grandes écoles*) has been much more pronounced. For instance, the latter now house a large number of CNRS laboratories. Yet the subject continues to be a matter of strong controversy in France. In 1998, a proposition by the Minister of Education to shift research resources towards the universities (following the American model) provoked a major outcry among French research circles.



The second pillar of French research policy, established during and after World War II, was the creation of 'mission-oriented' institutions in virtually every domain (including economics). (ibid.) These organizations were affiliated to particular ministries (for instance a number of important research centers in economics are loosely supervised by the Central Planning Agency). Formally, their function is to produce knowledge relevant to their administration, as well as respond to specific government demands, or else provide direct advice on concrete problems of public policy. This approach enables a closer state control over the management of science, and provides an explicit mechanism of articulation between scientific and economic development. Indeed, the Fifth Republic established the principle of the 'central planning' of scientific production, which it sought to integrate within the general framework of the social and economic development plan. (Gilpin, 1968) Naturally this situation creates a built-in tension between the 'scientific' and the 'research consultancy' functions which is never completely solved.

### **'L'État' in French Political Culture**

#### **Political authority**

Many historical commentators since Tocqueville have argued that the emergence of the centralized state in France has preceded that of the nation as a coherent community of individuals. Since the advent of absolutist rule, French society (including the nobility and the court) has been managed authoritatively from above. From the reign of Louis XIVth, the routine action of a large and devoted bureaucracy established a tight control over civil society, which sought to unify the country around its ruler by destroying local and corporate allegiances. (Birnbaum and Badie, 1993, p109; Tocqueville, 1955, p64) After

the Revolution especially, political elites regarded society with suspicion, as the locus of unbridled individualism, and thus factionalism and societal decomposition. The nineteenth century State, from Napoleonic administrative centralization to the institutionalization of compulsory primary school education under the Third Republic (1881-1882), preoccupied itself constantly with the management of a society of individuals always on the brink of social chaos –an attitude which Rosanvallon characterizes as the ‘State as the ‘teacher’ of civil society’.<sup>300</sup> Against this unruly world, the figure of the central State, whether absolutist, liberal or technocratic, has been historically constructed as a separate, autonomous, and dominant order. As Nettl remarked, ‘it is significant that the word *l’État* in French should be the only one normally beginning with a capital letter’. (1968, p567)

#### Administrative authority

The central administration in France traditionally exemplifies and insures the ‘continuity of institutions’ against political instability. By contrast with the American government where political appointments concern all levels of the federal and state administrations, in France only the heads of ministries and cabinet members are subject to change when there is a renewal of political leadership.

Policy is primarily the responsibility of the government, assisted by the technocratic apparatus -the Parliament’s role, especially in the economic domain, remains limited.<sup>301</sup> The French technocracy derives its legitimacy from this stability, as well as

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<sup>300</sup> ‘L’État instituteur du social’ (1990).

<sup>301</sup> Under the Third (1871-1939) and Fourth Republics (1946-1958), the Parliament and its committees used to have more authority in the determination of

from the cultivation of an ideology of neutrality, which represents it as autonomous from both political and social influences. In the post-war years, the establishment of the *École Nationale d'Administration (ENA)* served to unify administrative ideology around an activist, modernist stance whereby the government, aided by an enlightened bureaucracy, became the principal agent of growth. The technical competence of the higher civil service –rather than the market– was trusted with insuring both the impartiality of the policy process and the performance of the economy. (Hall, 1986, p177-8; Kuisel, 1981, p254)

The French system, whereby a ruling elite is consciously constructed through a state monopoly on higher education, for the purpose of serving the state and the industry, has no equivalent in Europe. Common recruitment and training at the *École Nationale d'Administration* and the *grands corps* insure homogeneity in the administrative apparatus. Top technocrats also receive a fairly generalist instruction, and are expected to transfer their skills to a large variety of administrative settings, as well as other societal domains, such as business or politics. Competence is thus not vested in the possession of specialized knowledge, although narrow professionalization plays its part. Rather, it is a quality of the individual, which is signaled by his/her belonging to one of the elite groups.

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economic policy orientations. Kuisel places the shift in influence towards the executive and the central bureaucracy in the early 1950s, when a string of 'strong-willed premiers or finance ministers like Antoine Pinay, René Mayer, Joseph Laniel, Edgar Faure, and Mendès-France took charge of economic affairs.' (1981, p254-255)

### Economic management in France.

Since absolutism, which inaugurated a tradition of rational economic management for the purpose of military expansion, the French state has also embodied economic sovereignty. As Kuisel remarks, notwithstanding the dominance of a liberal order during the long nineteenth century, 'the state was never light in France'. Since the Ancient Regime, it controlled and regulated the manufactures, agriculture, and transports. State officials normally supervised important episodes of economic expansion –such as industrialization—as well as economic crises. For instance, in spite of important private initiative, technocrats and engineers at the Ministry of Public Works largely orchestrated railway policy from above, and the same is true for the development of canals and roads. (Dobbin, 1994) Similarly, historians have shown that the state used public works programs fairly early as a device to counter unemployment, from the 'national workshops' of 1848 to the various ventures of the 1930s. (Rosanvallon, 1989a, p178)

French officials traditionally regard the close supervision of economic development as one of their principal areas of responsibility. Yet it is only after 1944 that economic management came under the full, and self-conscious, supervision of the higher administration and that the French model of 'state-led' growth really emerged. The shift towards the widespread acceptance of the managed economy took place between the 1930s and the 1950s. (Kuisel, 1981; Margairaz, 1991) Under the Popular Front government, several partisans of 'planisme' gained access to political and administrative positions.<sup>302</sup> A short-lived Ministry of National Economy was established,<sup>303</sup> and

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<sup>302</sup> E.g. Charles Spinasse, at the Ministry of National Economy, and Alfred Sauvy at the Ministry's Statistical Agency. (Kuisel, 1981, p121)

<sup>303</sup> 1936-1937. (Kuisel, 1981; Bloch-Lainé and Bouvier, 1986, p94)

important institutions, most notably the Bank of France and the Railways, came under state control through nationalization. Such measures announced the emergence of a political consensus on the role of the state in the promotion of economic expansion, which was to take shape during the Vichy Regime,<sup>304</sup> and institutionalize fully after the war with the reform of the economic administration.

The political forces, which came out of the Resistance were determined not only to reconstruct the country, but also to modernize it and to shake off the rigidities of the economy in order to make it a first-rank industrial power. The nationalization of certain banks, utilities, and large industrial corporations corresponded to the desire to rationalize economic development by placing vital sectors under centralized management. The Bank of France was fully nationalized in 1945<sup>305</sup> and its management placed under the control of the state.

The main institutions for economic management in the post-war have been the Ministry of Finance and the Central Planning Agency. The former traditionally sits at the top of the central administration in France. As an elite institution, it recruits almost exclusively from the highest schools and corps, most prominently from the *Inspectorate of Finances*,<sup>306</sup> and, after 1945, the *École Nationale d'Administration*. A great deal of its authority comes from its long function as the state's banker, and its supervision of public finances. During the troubled period of the interwar, the institution enjoyed substantial

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<sup>304</sup> Paxton, in particular, pointed out the 'modernist' dimension of the Vichy regime, which he sees as a precursor of the post-war *économie dirigée*. (1972)

<sup>305</sup> A statutory reform in 1936 had already increased the role of public authority in supervising the Bank's activity.

<sup>306</sup> The *Inspectorate of Finances* is the most prestigious of the *Grands Corps*, which recruits among the top graduates of the *Ecole Nationale d'Administration*.

oversight over economic and financial legislation. (Kuisel, 1981) However, its prerogative increased significantly with the reforms of the post-war, which expanded the state's role in the management of the economy. In contrast to its pre-war role as a watchdog of liberal orthodoxy, the Ministry of Finances came to operate as an agent of economic expansion --'a superministry and the center of economic management', practically supervising (after 1947) the Ministry of National Economy, created in 1944. (Kuisel, 1981, p253) Its most powerful 'direction', the Treasury, overlooked a 'constellation' of administrative agencies and organizations. (Mamou, 1988) Thus the Treasury controlled the financing of public and private investments, together with the Fonds de Développement Economique et Social and the Caisse des Dépôts et Consignations, the country's largest (and public) banking organization<sup>307</sup>, and after 1982 supervised the nationalized banks. The agency also played a key role in international financial negotiations through its presidency of the Club of Paris, and until 1993 was in effect responsible for monetary policy.<sup>308</sup> Finally, two of the Ministry's internal divisions (the Direction de la Prévision and the Direction de l'INSEE) governed the manufacture of domestic economic information, through a monopoly on the production and subsequent analysis of economic data.

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<sup>307</sup> Stevens, 1980, p95; Shonfield, p166-171. Also see Zysman, 1983; Hayward, 1986, p 22-23. The *Caisse des Dépôts et Consignations* is a formidably powerful financial institution which 'commands all the money accumulated in small savings in the post office and savings banks; it holds the vast pension funds of the nationalized industries and local authorities, and any tax revenues which the Government has not yet spent'. (Shonfield, 1965, p167)

<sup>308</sup> In 1993 the Bank of France was made more independent through the creation of a monetary council -not directly responsible to the Ministry of the Economy and Finances.

The Central Planning Agency, in charge of defining long-term development objectives and coordinating economic policy, was created in 1946 as an independent agency responsible to the Prime Minister. (Bauchet, 1966, p62) It was conceived as one of the main agents in the country's road to modernization. The 'indicative' five-year plans typically proposed directions for the long-term allocation of public funds, and encouraged coordination between the various sectors and groups in the economy. The political and practical significance of planning, however, was subject to variations over time. The plan never had any financial control of any sort, as the distribution of resources remained firmly in the hands of the Ministry of Finance. Only with the advent of the Gaullist regime did the plan formally serve to the elaboration of the budget. (Shonfield, p129-131) The institution then withered away with the election of Valéry Giscard d'Estaing to the Presidency in 1974. It was somewhat revived under the socialist administration, albeit with little effectiveness. (Hall, 1986) What survives to this day, however, are its important 'latent' functions as a conciliation and collective education forum for the various administrations, outside experts, and corporate groups.

### **Economic Organization and Culture**

The corporate world in France is also closely linked to the public administration, a tradition which goes back to the Colbertian system of subsidies and interest-free loans to favored industries, or the establishment of state manufactures in certain key sectors. This long history has produced an economic culture where state administrators consider that ensuring the economic well-being of the nation, including its private industries, is part of their responsibilities, and, conversely, the corporate world looks upon the state as a guarantee of its own survival and prosperity. Economic historians have repeatedly argued

that unlike England, France does not have a strong tradition of private entrepreneurship. Both popular discourse about private enterprise in France and scholarly interpretations of nineteenth century French industrialization have offered a description of the typical French entrepreneur as conservative, afraid of innovation, and '(looking) at the government as a sort of father in whose arms he could always find shelter and consolation'. (Landes, 1949, p50)<sup>309</sup>

The intimacy between the state and business thus has a long history in France. Even before the expansion of planning, which implemented and institutionalized a close association between large enterprises and the administration (Hall, 1986), the French state had been intervening actively in the economy to orient the behavior of businesses in certain directions and coordinate the various economic actors.<sup>310</sup> This decisive role was made possible by the particular structure of the French financial system, where industrial expansion is financed primarily through a government-maintained credit market and a state-owned banking system, rather than through the stock market. (Zysman, 1983, p123)

Another way in which the business sector in France is closely connected to the state administration is through the organization of management and careers. The system of the *grandes écoles* serves as a basis for the training of higher management positions in

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<sup>309</sup> Kuisel argues that the stereotype of the cautious, 'Malthusian', French businessman, emerged around 1900 (1981, p29).

<sup>310</sup> During the period following the First World War, partnerships of private and public capital were promoted on a large scale, as a means to further industrial expansion. Instances of this policy were mixed capital companies (e.g. the *Compagnie Française des Pétroles*) and a specialized banking institution, the *Crédit National*, designed to handle credits to the private industry. (Shonfield, 1965, p82)



the private as well as the public sector.<sup>311</sup> In the nineteenth century, the business sector established its own elite educational institutions, modeled after those of the higher civil service. Thus the *École Centrale* was founded in the mid-nineteenth century as a private venture with the explicit goal of training engineers and managers for the industrial sector. The *École des Hautes Études Commerciales* (HEC) later was a creation of the Paris Chamber of Commerce. And the other state *corps* and *grandes écoles* have since the middle of the nineteenth century routinely used their prestige within the public sector to claim jurisdiction over positions in business and industry, a trend which accelerated after World War II.<sup>312</sup> With the institutionalization of the *économie dirigée* after 1945, the frontier between public and private management became increasingly blurred. A recent study found that 47% of the heads of the 125 largest French companies in 1993 came from the civil service. (as opposed to 41% in 1985) (Bauer and Bertin-Moutrot, 1997)

Over time, elite professional training in France has come to be regarded as a public good for the nation as a whole –including the business sector–, and not simply for the state. Many commentators have remarked that the curriculum at some of the most exclusive elite institutions is now largely permeated by business demands and concerns. This reorientation of elite higher education toward business has been especially true of the technical schools like *Mines* or *Ponts*,<sup>313</sup> but it has also recently affected institutions

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<sup>311</sup> See especially Bourdieu, 1996, Chapter IV-2, 'Establishment Schools and Power over the Economy'.

<sup>312</sup> Caron mentions that the movement of state administrators into industry started around 1860. (1981, p77-81) Also see Charle, 1987.

<sup>313</sup> Suleiman (1978) points out that this diversification can be understood as a strategy of survival for certain *corps* and schools faced with changing economic conditions. Thus the *Corps des Mines*' move into private industry was, to some extent, geared at offsetting the consequences of decline in the mining sector. In 1970, for

like *Polytechnique* or the *École Nationale d'Administration* –to the point where a ‘private drift’ is periodically denounced.<sup>314</sup>

## **Economic Knowledge Production in France**

As in Germany, French economics developed initially as an element of legal and civil service training. Since the end of the nineteenth century, the universities have constituted the main producers of economics graduates, yet their influence on economic policy and research has remained limited, especially in the post-World War II period. Rather, graduates from that unique French elite educational institution, the *grandes écoles*, have come to dominate both domains. Thus the field of economic policy came under the control of a class of a generalist technocrats trained in top administrative schools. On the other hand, the state encouraged the emergence of a highly technical sector of economic expertise, recruited from elite engineering schools and based in the central bureaucratic apparatus. In a situation where the university remains marginalized, it is this sector which has become the principal motor of scholarly research, often through tight connections to the international academic community.

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instance, about one-third of the members of the *Corps des Mines* occupied functions in the private sector (while another third was employed in public or semi-public enterprises). (p210)

<sup>314</sup> Roughly one-fifth of *École Nationale d'Administration*-alumni currently work in the business sector (of these, three-quarters are in private enterprises and one-quarter in public enterprises). But about one-third of all graduates of the *École Nationale d'Administration* has been employed in business at one point of their career. (Source: [www.ena.fr](http://www.ena.fr), 1999)

Lebaron (1996) evokes the (contested) evolution of *Polytechnique* towards the statute of a business school.

## The Social Organization of the 'Academic' Field

### Academicization: The Legal Connection

Political economy in France organized as a specialized discursive endeavor during the first quarter of the nineteenth century. French economic discourse at the time was tightly linked to political activism and closely identified with laissez-faire liberalism. As such, it remained at odds with the prevailing economic sentiment of the country, which was, with a few exceptions, overwhelmingly favorable to protectionism. Economic writing was a monopoly of liberal networks tightly organized around powerful institutional strongholds at the prestigious *Institut de France* and *Académie des Sciences Morales et Politiques*, in a very small number of educational establishments, and in the media. The *Institut* was run as a 'salon' and saw itself as the 'guardian of sound doctrine'. It recruited members only after a long co-optation process designed to confirm their absolute faith in liberal principles. (Gide, 1907, p195) Most of its affiliates were also associated with the wider *Société d'Economie Politique*,<sup>315</sup> a pro-free-trade and laissez-faire club, and with its journalistic organ, the *Journal des Economistes*. The members of the group were primarily nobles and *grands bourgeois*, wealthy businessmen and journalists, who were often closely connected with political power.

Because of its doctrinaire liberal stance, however, successive French governments remained reluctant to grant economics a place in university education until the last quarter of the century --and even then, teaching in the field was placed under the close supervision of law. The first economics chairs were thus created in a piecemeal fashion,

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<sup>315</sup> Created in 1842. Its members were also known as the *Idéologues* for their doctrinal views. (Alcouffe, 1989; Schumpeter, 1954)

sometimes only temporarily, during the few and short episodes when economic liberalism was favored among politicians (e.g. under the July Monarchy (1830-1848), and during the second decade of the Second Empire (1852-1871)). They were located at the *National Conservatory for the Industrial Arts* (1819), the *Collège de France* (1831), the *École des Ponts et Chaussées* (1846), the law faculty of Paris (1864).<sup>316</sup> Economics, however, was considered a subordinate and limited subject. Its near identification with liberal lobbying nourished suspicions on the part of state actors,<sup>317</sup> who 'fought the pretensions (of the field) to become a guide for public policy'. (Rosanvallon, 1990, p217) As a result, most of its practitioners were denied any significant influence on policy-making.<sup>318</sup>

A first breakthrough came in 1871, when the *libéraux* 'achieved a most important institutional success with the foundation of the *École Libre des Sciences Politiques*' (Levan-Lemesle, 1993, p364-365). A private public policy school, *Sciences-Po* (as it came to be known) sought to compete directly with the university in preparing students for civil service examinations. Political economy occupied a central place in the school's curriculum from the beginning,<sup>319</sup> and the institution's success in preparing students to public examinations contributed greatly to tighten the connection between the field and

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<sup>316</sup> Occasionally, courses in political economy also took place during this period at the Superior School of Commerce (starting in 1825), the Ecole des Mines (1848), and the Ecole Centrale (1856). (Etner, 1986)

<sup>317</sup> During the early years of the Second Empire the police kept an eye on political economy lectures. (Vinokur, 1986, p190)

<sup>318</sup> Important exceptions include Michel Chevalier, Minister of Commerce (), who signed the 1860 treaty of free trade with England; and Leon Say, who was Minister of Finance ().

<sup>319</sup> By the end of the 1870s, the faculty included 10 teachers in the subject. (Alcouffe, 1984, p329)

the politico-administrative field. As pointed out earlier, by the end of the nineteenth century, the vast majority of those admitted to the *grands corps* had been trained at the *Ecole Libre*, a pattern which is still largely true today.<sup>320</sup>

The second major step was the integration of political economy as a compulsory subject in the law curriculum in 1877, whereby a chair in the discipline was created at every law faculty in France. In the absence of a separate credential for economics professors, it fell upon jurists, whose reticence for the 'new' field was undisguised, to teach the required courses at first. The subsequent development of economics as a university discipline was rather slow, moving from the complete subordination to the juridical field towards greater institutional autonomy and specialization. Thus a doctorate in law with an economic specialization was introduced in 1895 and an 'economics' option in the law *agrégation* was created in 1898,<sup>321</sup> thereby generating a specialized teaching staff. The inflow of these 'new' university professors, as well as the reinforcement of the teaching of economics in the *grandes écoles*, caused a quite notable expansion of the stock of people writing in economics at the end of the nineteenth century. This accelerated the process of autonomization of the discipline from the *Idéologues* and the 'liberal dogma', as well as a shift away from pure political

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<sup>320</sup> Silberman cites the following stunning figures: between 1899 and 1936, 97% of the new recruits (by exam) to the Conseil d'Etat and Inspectorate of Finance, and 88% of those admitted to the Cour des Comptes and Diplomatic Corps came from the school. (1993, p152)

<sup>321</sup> The *agrégation* in law is a prestigious teaching credential which gives access to full university professorship, and is based upon a competitive examination held annually.

polemics.<sup>322</sup> These new members, based in the educational institutions, played an important role in promoting 'a more scholarly type of economics', and favored institutionalization under a more scientific form. (Heilbron, 1991) This was accomplished with the creation of the *Revue d'Économie Politique* in 1887, a professors' review, deliberately open to a wider variety of approaches and especially sensitive to foreign scholarly achievements. (Pénin, 1996)

By the beginning of the twentieth century, teaching economics had turned into a full-time job, yet its academic status was still subordinate. Writing in 1937, Gaétan Pirou of the Paris school of law deplored the auxiliary character of political economy in French law faculties and its weak institutional status. In fact, the full institutionalization of economics as a legitimate and autonomous disciplinary field in France was delayed until the post World War II period. Curricular specialization (except at the level of the doctorate) did not exist before --which meant that 'every advanced student in economics had to spend (at least) his/her first three years of college studying law'. (James, 1954) Even after the creation of a separate graduate degree in economics (*licence d'économie*) in 1959, only one third of the courses during the first two years were in economics, the rest being composed of law and history teachings (however, economics courses were predominant during the third and fourth years).<sup>323</sup> Finally, an *agrégation* for 'economic sciences' independent from law was only established in 1964, yet students competing for

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<sup>322</sup> For instance, Gide described the relationship between the Law faculty professors and the members of the Institut as 'antagonistic': 'the majority of economists included in Faculties of Law must be considered as "interventionists". (...) They have also taken an active share, during recent years, in elaborating labour legislation.' (1907, p201)

<sup>323</sup> Mossé, 1957. See figure 4-3.

the 'new' examination were still expected to display a large amount of institutional and socio-political knowledge.

The expansion of the economics curriculum in France started in the late 1970s, just at the time when the corresponding student body in the United States and Britain began to stagnate (see Figure 4-2a). Yet it is interesting to notice that much of this expansion is the fact of the 'business' and 'law and economics' sections. In part this is due to the fact that civil service examinations, which have remained a traditional outlet for university economics graduates, are still based largely on legal training, whether at the lower or the higher levels.<sup>324</sup> Thus after the institutional separation between the 'economics' and 'law' tracks in the 1960s, the government found it necessary in the early 1972 to ground administrative training in a 'mixed' program which recombines the two. (see Figure 4.2b.)<sup>325</sup> And at the elite schools of *Sciences-Po* and *École Nationale d'Administration*, the teaching in economics continues to be significantly shaped by the legal influence, although it is obviously also oriented towards the practice of economic policy.<sup>326</sup>

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<sup>324</sup> In France the various public administrations (e.g. Bank of France, ministries and their affiliated agencies) hold separate examinations.

<sup>325</sup> The AES sections ('administration économique et sociale' or 'social and economic administration') are specialized programs in law and economics which constitute a major channel of recruitment into the lower civil service. Today, about the same number of students (among the 2 and 3-years diploma courses) graduates in 'AES' as in regular 'economics'. See Figure 4.1b.

<sup>326</sup> The main section at Sciences-Po, *Service Public*, thus embodies this ideology. Economics courses at Sciences-Po are presented as a 'putting economic facts in perspective and in relation with the political, the social and international life'. (www.sciences-po.fr, 1999)

### Intellectual patterns in the law faculties

The historical conditions of emergence of the field of political economy in France (in *libéral* circles and law universities) contributed to its characteristically realist and institutionalist orientation, and its reticence about 'scientism'. For the *libéral* school, which concentrated much of its efforts on propaganda, vulgarization, and political influence, hostility towards mathematics was rooted in a representation of political economy as a moral discourse on society and man –in the tradition of the eighteenth century philosophers. In contrast to the engineers, for instance Cournot and Walras (who identified a distinctive intellectual sphere for 'pure' (abstract) economics), and with the British professors of the end of the nineteenth century (Jevons, Marshall, Edgeworth), who had built economics as a deductive science, French liberal economists disregarded mathematization as an unacceptable narrowing down of a discourse which they thought resorted to art as much as to science. (Ekelund and Hébert, 1999, p36) The group's principal organ, the *Journal des Économistes*, discriminated against mathematical methods in its columns –Walras, who is now acknowledged as the intellectual father of general equilibrium theory, was a famous victim of its censorship. (Dumez, 1985; Breton, 1986)

As Breton has shown, the absence of mathematical capital among the school's members provides another explanation for their aversion for a type of approach, which had the potential to erode their quasi-monopoly on the definition and practice of political economy in France. (1986, p42) As a matter of fact, the quasi-totality of French economists in the nineteenth century, liberal or not, were trained in classics or in law, and had a widespread ignorance of even the most basic mathematics. In spite of the development of a more scholarly approach to economics after the 1878 reform, the



latter's inscription within the legal curriculum further prevented mathematical approaches from being regarded as a legitimate research endeavor.

Finally, the method of appointment, which made access to university chairs dependent on holding a national diploma (*agrégation*) rather than on individual research proficiency (as in most other countries), was also a powerful deterrent to the institutionalization of mathematical methods in universities. Administrative authorities in the Ministry of Public Instruction / Education centrally organize such examinations, which are held every two to three years. Since no one in France can obtain a full professorship in economics without the *agrégation* diploma, the latter constitutes a powerful instrument for gatekeepers in the academic institution. From the end of the nineteenth century until the present day, countless skilled economic scientists (and many mathematical economists in particular)<sup>327</sup> have failed the *agrégation* test and were thus excluded from the possibility to teach within this context. The most recent report from the *agrégation* examination for instance complains of an immoderate and sometimes not justified use of mathematics: 'Mathematical formalization is not a sufficient, nor even always a necessary condition for economic knowledge. Its use is sometimes indispensable, yet does not always guarantee pertinence.'<sup>328</sup>

French university economists continued to be embarrassed by mathematical methods well into the twentieth century, and understood their discipline largely as a

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<sup>327</sup> Breton mentions the case of two disciples of Walras (Aupetit and Antonelli) during the 1900s, who repeatedly failed the *agrégation* and were reproached their utilization of mathematical methods in their doctorate thesis. (1986; 1992, 35-36)

<sup>328</sup> 'Rapport du jury du concours d'agrégation de sciences économiques, 1997-1998', 1998, *Revue d'Économie Politique*, Vol 108-6, November-December, p851.

'juridical and literary' enterprise.<sup>329</sup> As a result, universities remained slow to accommodate the intellectual breakthrough of the econometric revolution –which occurred in Anglo-Saxon countries during the 1930s– and the rise of societal demands for technical economic expertise,<sup>330</sup> notably in the area of national accounting. Thus a 1953 survey of French post-war economics by a university professor ignores the contributions of engineers and dismisses the usefulness of mathematical methods for the discipline. (Mougeot, 1989) In 1963, less than a quarter of the economics B.A. courses at the University of Paris explicitly concerned mathematical or statistical subjects (the word 'econometrics' had not yet appeared in the educational context). The latter were also set apart from the rest of the curriculum, as a required but rather useless appendix. (Flouzat, 1963)

It is nonetheless true that with the institutional autonomization completed in the late 1950s, the study of economics in French universities took a more specialized turn. Already in 1950, the *Revue Économique* was born as a new academic outlet for the younger generation of (specialist) university professors. The *Association Française de Sciences Économiques* was created the same year, as a more scientific organization than the more 'social' circle of the *Société d'Économie Politique*. Yet a broad understanding of the object of political economy, which included knowledge of institutions, history, administrative practices, continued to permeate the production of scholarly knowledge in

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<sup>329</sup> Pirou for instance mentions that university economics courses always included a legislative component. (Pirou, 1937)

<sup>330</sup> One exception was the *Institut de Recherches Économiques et Sociales*, a private observatory created in 1933 with Rockefeller support, with the mission to produce empirical work (quantitative studies and surveys). The IRES was directed by one of the most eminent university professors at the time, Charles Rist. After the war the Institute was integrated into *Sciences Po*. (see Mazon, 1988, p43-45)

French universities through the after-war. For instance, one of the main 'principles' textbooks of the after-war, Raymond Barre's *Économie Politique* (1<sup>st</sup> edition, 1956),<sup>331</sup> exemplifies a fairly abstract approach organized around large concepts (e.g. capital, labor, wages, profit, money...) and typologies (e.g. different types of business firms: farm, small business, cooperative corporation, public corporation). Intellectually, it is also a rather eclectic book, which draws on a variety of sources, and analyzes in details the institutions and mode of functioning of socialist economies alongside those of capitalist ones.

### Fragmentation, Stratification, and The Challenge of Hierarchies

As pointed out earlier, the entire French university system entertains an ambivalent relationship towards disciplinary specialization and academic research. On the one hand, the complete 'functionarization' of professorship provides, as such, little incentive for scholarly pursuits since careers are not dependent upon scholarly accomplishments. On the other hand, the economics *agrégation* diploma, where examination questions are randomly assigned to candidates, and usually cover very broad areas of research, are biased towards the development of general abilities, and against specialized knowledge.<sup>332</sup> Already in 1907, Gide commented about the *agrégation*:

'The victors in this struggle for life are not necessarily those who are the best gifted from the scientific point of view, or the deepest or most sagacious thinkers. They are oftener the most brilliant intellects or the best speakers. Nearly all the tests, or at least the decisive tests, are exclusively

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<sup>331</sup> The book has been continuously reedited since then, and is still in use.

<sup>332</sup> The aggregation, however, has been reformed in 2000, in order to give more room to the research already accomplished by candidates.

viva voce; written work, assuming that the young candidates have already written anything, go for nothing in the decision' (1907, p207)

Interestingly, these comments by Gide have recently found an echo in the rebellion of internationally-oriented economists (especially those trained in the United States) in France against the *agrégation*, which, they argue, constitutes one of the principal obstacles to the successful integration of French universities into the international scientific field:

'The existence of the *agrégation* has unfortunate consequences, not because of its national character, not because it is an examination, not because of the possible political manipulations of examination boards, but because it provides the wrong incentives to future Ph.Ds in the most crucial period of their intellectual life. (...) Anticipating a generalist examination, a clever student will not choose a highly specialized dissertation subject and thus will not engage in the most advanced type of research. (...) After the doctorate, s/he will prepare for the *agrégation*. For several years s/he will thus pursue the myth of universal knowledge, while neglecting research. (...)'

 (Laffont, 1995, p354)

Another institutional characteristic with important intellectual consequences is the historical dispersion of economists across universities. In contrast to other countries where economics 'departments' were already set up before World War I, the French situation during the inter-war was much more decentralized, with one or two economics chair at every law faculty. In 1946, an American delegate in France noticed that 'the social sciences are weak here. Each law faculty has (only) one economics professor.'<sup>333</sup> The absence of any significant geographical concentration of economists, combined with the traditional sovereignty of academic mandarins in their own institution, led to the persistence of institutional weakness and intellectual fragmentation --as well as the relatively uneasy penetration of foreign ideas. Thus there were no notable French

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<sup>333</sup> Cited in Mazon, 1988, p85.

'schools' during the inter-war. Even in the post-war period, the university has remained particularly inconspicuous as a source of intellectual innovation, avoiding in particular an intellectual engagement in economic theory. Its principal characteristic remaining the persistence, in a dispersed order, of 'literary' approaches until the late 1970s. As I point out later, the principal scholarly developments after 1945 originated among the milieu of engineers.

### **The Technical Economists and the 'Economic Calculus' Tradition.**<sup>334</sup>

#### **Intellectual precursors**

While the French universities (and *Sciences-Po*) have constituted historically the main centers of production of academic economic knowledge, they were not the only ones, even in the nineteenth century. A tradition of economic calculation had emerged in the engineering schools around the beginning of the nineteenth century --mostly out of the necessity to solve applied public economics problems in various industrial sectors under their supervision (e.g. construction, railways, roads, mines...). Civil engineers at the *École des Ponts et Chaussées*, in particular, who were involved with the development and management of public utilities and services, developed a reflection on resource allocation, taxation, public good pricing, and cost-revenue calculation. They produced significant contributions to what is now understood as the theory of public finance, and participated in the introduction of mathematical and statistical methods in French economics. But their work had little impact on the mainstream of French economics: Cournot's pioneering work on the demand curve was largely unknown in his time. The

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<sup>334</sup> The expression is from Etner, 1987, *Histoire du calcul économique en France*.

tradition of microeconomic work developed by the *Ponts et Chaussées* engineers in the nineteenth century remained largely at the margins of the French community of economists. And Léon Walras,<sup>335</sup> an *École des Mines* engineer, had to move to Switzerland in order to find a teaching position.<sup>336</sup>

Beginning in the 1910s, economics professors in the engineering schools started being recruited among the body of engineers –rather than the jurists–, which contributed to the assertion and reproduction of a more technical intellectual tradition. Two *X-Ponts*, Clément Colson, and later his pupil François Divisia, who both taught at the *Ecole des Ponts et Chaussées* and the *Ecole Polytechnique*, dominated, if not monopolized, economics education in engineering schools during the interwar.<sup>337</sup> As Levan-Lemesle states, ‘if he ever wanted to, one single professor could train three quarters of the engineering students’. (1993, p575) In contrast to the law universities, which excluded all mathematical training, they contributed to the diffusion of Walras’s theories, and promoted the use of statistical methods in economics. Divisia became a founding member of the *Econometric Society*.

Prior to the post-World War II period, there existed then a significant tradition of economic expertise and research located among engineering-trained public administrators. By the middle of the twentieth century a small group of specialists shared a sense of their distinctiveness in the French intellectual landscape, and were conscious of

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<sup>335</sup> Walras attended the *École des Mines*.

<sup>336</sup> See Ekelund and Hébert, 1978 and 1999; Etner, 1987 on this subject.

<sup>337</sup> Colson also taught at the *École des Hautes Études Commerciales* (HEC) and the *Ecole Libre des Sciences Politiques*. Divisia, at the *École des Mines* and the *National Conservatory of Arts* (CNAM).

their original contribution to the historical development of economic knowledge in this country. However, they did not constitute a very well institutionalized group, in economic policy as in research. Except for a few professors such as Divisia, or the later Nobel-prize winner Maurice Allais at the *École des Mines*, the generations of engineers-economists prior to the late 1960s were often not 'professional' academic economists in the sense of being involved full-time in economic research activities. They worked for the most part in a fairly decentralized way. In several cases, their contributions to economic theory and applied economics were developed as by-products of a different professional involvement, which usually took place within public administrations or public enterprises. (e.g. René Roy, an *X-Ponts*, at the Ministry of Public Works; Marcel Boiteux, --a mathematician trained at *École Normale Supérieure*-- and Pierre Massé --an *X-Ponts*-- at *EDF*, the French electricity monopoly) (Divisia, 1950)<sup>338</sup>

### The Institutionalization of Public Economic Expertise in the Post-War.

The expansion of state capacities in the post-war era had a decisive impact on this sector, making it the *de facto* center of the field of economic knowledge production in France. And here I do not mean simply to underline the importance of state development in the reshaping and growth of the social sciences. The link between the development of a technical economic expertise sector (notably in the areas of national accounting, macroeconomic model-building, forecasting, planning...) and the involvement of

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<sup>338</sup> Among the 28 French influential economists selected in Blaug and Sturges' *Who's Who in Economics?* (1986), 10 have a strong mathematical background (six of these are 'Polytechnicians', and two studied mathematics at the *École Normale Supérieure*). Most of their contributions were in the fields of economic theory and applied economics.

modern nation-states with economic management after 1945 is now well established.<sup>339</sup> The different ways in which polities have faced the post-war situation, however, are less known. In most countries public administrations relied on the supply provided by outside institutions, universities in particular. In the United States, for instance, where the higher educational system is comparatively highly responsive to the demands of its environment, the latter adapted relatively quickly by institutionalizing technical forms of economic training.

France followed a different path. Its old law universities could hardly provide the kind of specialists that the public administration thought it needed. In 1945, most law faculty professors possessed little, if any, capabilities in the areas of forecasting, econometrics, and public economics. Also, the modernization strategy proposed by state officials and politicians, who advocated state intervention and structural reform, found itself at odds with the teaching of the universities. After the outbreak of the Great Depression, various reformist currents within the political parties and the administration had criticized approaches to economics diffused at the law faculties as institutional, literary, and dogmatically liberal. (Levan-Lemesle, 1993). These critiques were for the most part born among the milieu of *grandes écoles* engineers (such as the *X-Crise* group, created in 1931), and encouraged the development of new forms of economic expertise -- more technocratic, technical and interventionist.<sup>340</sup> Often imbued with modernizing

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<sup>339</sup> See for instance the work of Wittrock and Wagner, esp. Wagner et al., 1991b; Wagner, 1989; Wittrock, 1989. Also, on a similar theme for earlier periods, see Rueschemeyer and Skocpol, 1996, Furner and Supple, 1990, and Furner and Lacy, 1993, Wagner et al., 1991a.

<sup>340</sup> Alumni of the *École Polytechnique* (or 'X') made up close to the majority (49%) of the members of the *X-crise* association or *Centre Polytechnicien d'Études*



ideals and the ethos of efficiency, they advocated the recourse to state intervention and planning as a way to restore production. In the early post-war period, this technocratic ideology in French administration and industry came to be closely identified with a reverence for 'American' management methods, technical competence, and social science, which diffused through the powerful channels of U.S. influence in Europe (American foundations and the Marshall plan administration).<sup>341</sup>

Some of these modern economic practitioners had read Keynes, which the majority of the economics professors had not (the first translation of the *General Theory* in French, by Jean de Largentaye, a high level Treasury official, came out at the end of 1942). (Boyer, 1985, p81) As a matter of fact, Keynes in inter-war France was best known as the man who opposed German reparations than as the promoter of a new economic policy regime. (Sauvy, 1984, p394) The first supporters of Keynesianism in France were not university economists, but mainly higher civil servants, government officials, and a number of personalities in leftist parties and unions -in other words 'men concerned with practical affairs'.<sup>342</sup> The political and technocratic elite in the early post-war period thus started to envision expansion in a general, 'macroeconomic', conceptual framework, which remained largely foreign to the majority of university economists until

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*Économiques*. (Sauvy, 1984, p381) It published a monthly bulletin, which analyzed the current French economic situation.

<sup>341</sup> Boltanski (1990; 1987), has shown how the diffusion and implementation of this technocratic ideology from the mid-1930s to the mid-1950s came to be identified with a new social group ('les cadres'). Also see Djelic, 1998.

<sup>342</sup> Rosanvallon, 1989a, p181. Also see Boyer, 1985, p81-82.

the 1960s.<sup>343</sup> In addition, some of the most popular policy measures (e.g. the full nationalization program proposed by the left wing of the Resistance). conflicted with the 'libéral' (in the French sense) ideology prevalent among professors.

The combination of the 'demand' and 'supply' pushes for the renewal of economic expertise created the conditions for a massive inflow of engineers, mathematicians, and young law graduates with greater mathematical skills, into the field of economic management. (Levan-Lemesle, 1987) Newer institutional structures often closely connected with the administrative sector played a critical role in the intellectual training of this generation, providing a sort of 'on-the-job' training for new breeds of economic technocrats. Hence the *Institut de Conjoncture* and its successor organizations within the French central statistical office,<sup>344</sup> whose mission was to follow the domestic and foreign economic situation and inform public administrations with statistics; (Sauvy, 1954) The *Institute of Applied Economic Science* (ISEA), a mathematical economic research center directed by François Perroux, which was one of the main diffusers of international innovations towards the French context (most prominently national accounting and the work of Keynes)<sup>345</sup>; And, naturally the *Central Planning Agency* after its creation in 1946. (Fourquet, 1980)

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<sup>343</sup> Andrieu, Levan and Prost, 1987. See for instance a little textbook by two high functionaries, P. Mendès-France (later President of the Council) and G. Ardant, *La Science Economique et l'action* (Paris, UNESCO, 1954), which exposes the detailed policy implications of the Keynesian framework.

<sup>344</sup> The *Institut de Conjoncture* (Institute for the Study of the Business Cycle) was created in 1938 within the Ministry of National Economy, and integrated into the *Service National de la Statistique* (the French central statistical office) in 1941. It was finally replaced by an administrative direction in 1946. (Sauvy, 1954, p23)

<sup>345</sup> Fourquet, 1980; Abraham-Frois and Labre, 1998. Also, see ISEA board of foreign correspondents in Figure 4-4.

The growth of the public sector and of the state's involvement in the management of the economy after 1945 benefited first administrative institutions with an established technical and economic competence (most prominently the *Finance Inspectorate*, the recently created *École Nationale d'Administration*, the *Corps des Mines*, and the *Corps des Ponts*). (Kessler, 1986, p211-212) However, French public officials understood the post-war situation as creating the need for a new class of specialists in economic and statistical matters. Consistent with the tradition of higher level expert training, the state became rapidly involved in the manufacturing of its own elite economic administrators. Bureaucratic control over the production of economic knowledge increased considerably after 1945, through the creation of training institutions for economic expertise, the centralization of economic research around the needs of the public administration, and the expansion of the institutions of economic management. This led to the institutionalization of a rather autonomous class of economic specialists, educated in a highly specific framework, and dependent on the state for its status and career. In order to supply the country, and in particular the administration's planning and forecasting services, with specialists in economic and statistical matters, the government had established a small school for the purpose of elite economic and statistical training in 1942. (the future *National School of Statistics and Economic Administration*) The INSEE<sup>346</sup> was then established in 1946 as a central statistical administration for the collection and analysis of economic and social data, as well as the production of forecasts. As is common in French bureaucratic practice, the higher administrative levels

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<sup>346</sup> *Institut National de Statistique et d'Études Économiques.*

in these domains were to be filled by the members of an associated corps, the INSEE administrators. Finally, the Ministry of Finance created its own statistical and forecasting service, the SEEF,<sup>347</sup> which was later to evolve into the actual *Direction de la Prévision*.

The foundation of a *Center for the Study of Economic Programs*<sup>348</sup> in 1957, as well as the reorganization of the *National School of Statistics and Economic Administration*<sup>349</sup> in 1960 and the rapid expansion of its student body thereafter (see Figure 4-2), marked the development of a more mature and organized approach to higher level vocational economic training in France. Instead of the eclectic and informal training provided within the Central Planning Agency or the SEEF, economic administrations could now rely on specific educational institutions. The *Center's* purpose, for instance, was to provide continuing education to the technocrats and practitioners in the public administration, and 'turn them' into economists, or, more specifically, economic technicians.

'Political economy in those years was taught in the law faculties. It was not Keynesian, and not quantitative at all. A quantitative branch of economics had emerged with the establishment of national accounts. But there was still a deficit of people to occupy these posts (that is, people who would be able to do applied economics studies with a minimal Keynesian background), both in the corporate and administrative spheres. The CEPE's mission was to manufacture such people. We had to follow a very intense training, for a year. Naturally this does not produce people who know economics well, who have a broad culture in economics. That is a characteristic of French economists, at least the people from my generation.' (JPF, engineer-CEPE, CEPII, August 1995)

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<sup>347</sup> *Service des Études Économiques et Financières*.

<sup>348</sup> *Centre d'Étude des Programmes Économiques*, or C.E.P.E.

<sup>349</sup> *Ecole Nationale de la Statistique et de l'Administration Économiques* (ENSAE).

These educational and training organizations, which recruited among the most mathematically skilled cohorts of engineers and university graduates, consecrated the rise of a highly technical, and fairly autonomous, pole of economic knowledge production, as well as the further marginalization of the university. Economics courses there came under the control of state administrators and engineers (e.g. E. Malinvaud, R. Roy, J. Ullmo) -- rather than professors of political economy.<sup>350</sup>

### **The Rise of 'Engineers-Economists' in Research and Public Economic Expertise.**

The engineer-economist tradition of research began to take a more consistent shape in the 1970s, as a result of a number of processes. First, their designated areas of expertise (that is, the production of economic and statistical instruments available to the state in its economic management tasks) in the post-war years had become closely associated with the 'research frontier' in economics. Today the operations of national accounting, model-building, or forecasting, are regarded as routine, even boring, by economists working in government. In the 1970s, however, they constituted exciting new tasks. Accounts of the early years of national accounting and the Central Planning Agency tell a heroic story of intellectual pioneering.<sup>351</sup> My own interviews with the builders of macro-econometric models present the same retrospective enthusiasm.<sup>352</sup>

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<sup>350</sup> See Rosanvallon, 1989a, p185-6. There are, of course, a few exceptions, for instance Perroux or Prou --who were also economics professors. Perroux played a major role in the diffusion of Keynesian thinking at the university.

<sup>351</sup> see notably Fourquet, 1980.

<sup>352</sup> 'I think models are not a research topic anymore. People who want to innovate go elsewhere in the field. But I was very excited when I was a young model-builder. I saw it as a scientific exercise, not as something administrative. But

The first French large-scale macro-econometric models were built in the late 1960s, with a second important wave of innovation from the second half of the 1970s until the end of the 1980s --which is quite late compared to similar developments in countries like the United States, England, or the Netherlands (Tinbergen's model for the Dutch economy was built in the mid-1930s).<sup>353</sup> The practice, indeed, was largely imported from these nations. Contacts with the Anglo-Saxons (e.g. Richard Stone at Cambridge, U.K.) served to socialize a whole generation of practitioners trained at the *INSEE* or at the *Corps des Ponts* into modern economic analysis. An interesting point is that whereas elsewhere the activity of model construction relied on a fairly broad institutional base --usually associating universities, research organizations and public administrations--, in France it remained chiefly a technocratic enterprise, effected by the state (mostly at the *INSEE* and the *Direction de la Prévision*) and for the state. In addition, it was legitimated politically by its formal incorporation into an institutionalized framework of public policy decision: Forecasts served for the establishment of the five-year plan, which gave them, and the institutions that produced them, considerable visibility.

A second important change was the development, after the late 1960s, of an economic research sector within the public administration itself, rather incidentally at

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things have changed. When you want to present a paper at the *Econometric Society* today, you certainly don't do macroeconometric modelization. But at the time it seemed normal to everybody.' (JMC, *INSEE* administrator, BNP, August 1995)

<sup>353</sup> Courbis, 1991, p231. The first of these models were ZOGOL (short term), built in 1966, and FIFI (medium term), built in 1966-68, and used from 1968 to 1978, for preparation of the Sixth and Seventh Plans. (ibid.)

first, then in an increasingly systematic way. Government agencies and ministries inaugurated a policy of research contracts in order to channel social scientific research towards specific uses. Purpose-oriented research organizations were created —many of them under the authority of the Central Planning Agency, which assumed an important responsibility in the definition of research orientations and the distribution of funds. The C.E.R.M.A.P.<sup>354</sup> (later C.E.P.R.E.M.A.P.) was established in 1962 by the then Director of the Central Planning Agency, Pierre Massé, to serve as a sort of affiliated research consultancy group doing applied studies. Similarly, the CERC —another of Massé's creations, now past— was given the mission to analyze the repartition of revenues at a time when France was trying to set up an income policy.

Aside from the creation of new organizations by the central state, social-scientific research was promoted through the development of contracts for various ministries. The CORDES was set up in 1969 as a large distributor of funds whose mission was to coordinate contractual research projects in the economic and social domains. (see Table 4-3.)<sup>355</sup> In practice, the contract policy contributed to professionalize economic and social science research further around the state apparatus, and to reinforce the marginalization of the universities (Pollak shows that the share of research credits to the universities in the social sciences decreased during the 1960s (1976, p114)). The system, however, was dismantled in the late 1970s in the midst of widespread budget cuts. The

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<sup>354</sup> Literally, Research Center in Mathematics Applied to Planning. (Centre d'études et de recherches mathématiques appliquées à la planification)

<sup>355</sup> This complex research apparatus extended to many domains of the social sciences: similar organizations were thus affiliated to the Ministry of Education (e.g. C.E.R.E.Q.), the Ministry of Labor (e.g. C.E.E., or Center for the Study of Employment), the Ministry of Transportation (e.g. I.R.T.), and so on... For an exhaustive list, see Aliénor, 1980, p10-11.

CORDES itself, perceived as 'politically suspect' by the then right-wing government, disappeared in 1979.<sup>356</sup>

Finally, the last decisive trend was the emergence of an interest for scholarly economics among engineering-trained administrators (especially among members of the *Corps des Ponts et Chaussées* and the *Corps de l'INSEE*), partly as a result of the teaching of Allais, Malinvaud, Roy,... as well as through contacts with the Anglo-Saxon research community. In contrast to the community of university academics, which looked mostly inward after 1945, engineers and administrators-economists served as a critical linkage with foreign approaches and technical innovations, both in applied domains (e.g. national accounting methods, macroeconometric model-building) and theoretical economics and econometrics (through the participation in such prominent forums as the Econometric Society and the Cowles Commission).<sup>357</sup>

'If you take the 1970s, or even the 1980s, everything that was happening was centered on the INSEE. If you'd go to an international conference 15 years ago, 80% of the French participants came from that sphere.' (JMC, INSEE administrator, BNP, August 1995)

These international linkages became more active during the 1970s, when a number of '*corpsards*' and graduates of the *grandes écoles* went on to pursue graduate and post-graduate studies in economics in the United States. The first generations of these foreign-trained nationals came back with their Ph.Ds at the beginning of the 1970s:

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<sup>356</sup> Machin, 1984, p226.

<sup>357</sup> The Rockefeller foundation sponsored research and study trips to the United States, and recruited many of its grantees among engineers. For instance, both Debreu (Nobel prize 1983) and Malinvaud spent a year at the Cowles commission. (Bungerer and Joël, 1989)



**'At the time, there were a few eminent personalities in French economic research, like Allais or Malinvaud... Allais was very famous. But there was no school. Or there was just something that was the tradition of the French engineers-economists. Malinvaud had not created a school. What happened is that when I came back from the United States with my Ph.D. (in 1970), there was a small generation of people who, in spite of the French system, wanted to do research. It was located around the INSEE, and in a few other places. There was Laroque, there was Champsaur, there was Millerond, and Guesnerie... a few people like these. Laffont came in 1975. Benassy completed his dissertation at Berkeley in 1973, I think. So all of a sudden the 4 or 5 of us, some of whom had studied abroad, started to do research. Before that time, it was something people did not do.'**  
(JMG, researcher, CEPREMAP, August 1995)

The engineers' curriculum in social science, which had been completed for the most part outside the university, sometimes (as the previous interview states) even outside the country, did not give them easy access to teaching positions. In addition, public administrations and quasi-administrations (like the research organizations created in the 1960s) remained the most natural site for graduates of elite vocational training in France. The long French tradition of elite, specialized research organizations (disconnected from educational functions) also meant that these institutions fit in a well-established model of work and employment. As their members became increasingly socialized in the international academic community in economics, a number of public administration institutions thus started to evolve towards 'pure', speculative research, sometimes in spite –or against– the will of their providers, and moved closer to the group of university economists and the practice of academic economics. The most striking example of such a transformation is the CEPREMAP, which, without letting go of its formal affiliation with the Central Planning Agency, has moved away from its original function as a consulting bureau and become one of the main academic centers in French economics. Some of the most important intellectual advances in post-war French economics originated there, either in applied studies undertaken for the administration, or

in pure research endeavors accomplished by returning U.S.-trained engineers. This is the case, for instance, of the two main economic 'schools' of the post-war, the 'disequilibrium approach' and 'regulation' theory, which were both developed at the CEPREMAP and INSEE.<sup>358</sup>

This movement led to the rising influence of non-university practitioners within the traditional institutions of the academic field, in particular the *Revue Économique*, which the engineers-economists started to use as a forum.<sup>359</sup> Another important outlet were the reviews of the technical public administrations (INSEE and Direction de la Prévision), notably the *Annales de l'INSEE*. A 1982 bibliometric study thus found that their main publications (*Économie et Statistique*, the *Annales de l'INSEE*, and *Statistique et Études Financières-Série Orange*)<sup>360</sup> were routinely, if not 'zealously', cited by all the

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<sup>358</sup> A former member narrated to me the formative years of the regulation school:

'Aglietta comes back from the United States with his dissertation (which was to become A Theory of Capitalist Regulation: The U.S. Experience, 1976). Well, it is arcane and impossible to understand. Because nobody gets it, he wants to discuss it and he proposes to the fine flower of French Marxism at the time to organize a seminar at INSEE. So they meet every month. He's there, of course, but also Guibert, Cartelier, Benedetti, Suzanne de Brunhoff... And we decide that we should do something similar with the CORDES, a contract, but on France. (Bénassy, Boyer, Lipietz, Munoz, Ominami, Approches de L'Inflation: L'Exemple Français, Research contract, C.O.R.D.E.S.-C.E.P.R.E.M.A.P., 1977). And that is how we developed the classical form of the theory of regulation' (Researcher, CEPREMAP, August 95)

<sup>359</sup> Jeannin, 1996, finds that between 1980 and 1994, over 40% of the articles published in the *Revue Économique* came from non-university institutions.

<sup>360</sup> The first two reviews are published by the INSEE. *Annales de l'INSEE* (called *Annales d'Économie et de Statistique* after 1986) and *Économie et Statistique* were started in 1969. The former is a fairly theoretical review, while the latter is more applied. *Statistique et Études Financières* (renamed *Économie et Prévision* after 1982) is published by the Direction de la Prévision (formerly SEEF). Malouin et Outreville, 1987, show that the *Annales de l'INSEE* remains the most cited French publication worldwide (see also Social Science Citation Index).

other French economic reviews. (Koen, 1986) Originally developed to publish 'data analyses' performed in the statistical administrations, and exerting a virtual monopoly on applied economics output in France,<sup>361</sup> these reviews started to take a more assertive research orientation during the 1980s and to edge towards the theoretical world of engineers. A 'pure' research pole emerged at INSEE during the late 1980s.<sup>362</sup>

'I think that the mathematical tradition in France, that of engineers was originally very much apart from the rest of the economics profession. The people at INSEE until a recent period did little mathematization, or they did very elementary mathematization. They used statistical tools, that is sure. The Walrasian tradition was never French, and Debreu had to find an exile in the United States. Of course, it was totally absent from the university and the CNRS. Thus the tradition of the engineers was very autonomous. Of course, people at INSEE were doing statistical and econometric techniques, but in the sense of 'operating' econometrics. It has only been during the last 15-20 years that INSEE started doing more sophisticated stuff.' (FJJ, IRES, August 1995)

This centralization of economic research around public administrations and their associated *grandes écoles* represents the most important change in French post-war economics. It had a profound intellectual effect on the field as a whole, notably by encouraging and legitimating the diffusion of highly technical norms. In addition to the ENSAE-INSEE and CEPREMAP, which have remained the main centers of the hard science tradition, the engineering schools themselves have also established their own economic research departments. The *École des Ponts* created the CERAS, theoretically for providing expertise in the field of transport economics, and de facto leaving quasi-absolute intellectual freedom to its members. An 'Econometrics Laboratory' was

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<sup>361</sup> I develop this point below.

<sup>362</sup> The CREST laboratory (*Centre de Recherche en Economie et Statistique*), filled with X-INSEE administrators, which is one of the most important centers of mainstream neoclassical economics in France.

established at *Polytechnique*. And the *École Normale Supérieure* acquired its own economics department, the DELTA. During the 1980s, economics became a central part of the curriculum at all these educational institutions, sometimes achieving the status of a 'major'. (e.g. 'Economics section' at *École Centrale*; 'Applied Mathematics and Economics' section at *Polytechnique*) (Schmidt, 1999, p132) Doctoral schools in economics were founded, which compete with the universities for elite students.

By far, however, one of the most important changes has been the establishment of an 'internationalized' and highly entrepreneurial organizational base within the institutional framework of the university, dominated by US-trained economists<sup>363</sup> yet outside the traditional framework of state departments and laboratories, in the provincial town of Toulouse.<sup>364</sup> Capable, thanks to the linkage with the faculties, of training large numbers of doctoral students for the academic market, the *agrégation* in particular, 'Toulouse' has had an important impact in the promotion of 'scientific professionalism' at the very heart of the academic system. The institution's associated CNRS-research center, the GREMAQ, also dominates 'scientific' production in internationally dominant reviews. (Combes and Linnemer, 1999)

These evolutions, combined with international trends of scientization in the field, have contributed to reinforce the legitimacy of the 'hard science model' established at top American universities, and to the profound transformation of the intellectual context of French economics. Mathematical techniques have become less contested and are

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<sup>363</sup> Jean-Jacques Laffont (ENSAE, Harvard PhD) and Jean Tirole (X-Ponts, MIT PhD).

<sup>364</sup> The IDEI (Institut d'économie industrielle) and the affiliated CNRS-sponsored research center, the GREMAQ.

increasingly integrated as routine elements of an academic production which appears more standardized and less eclectic than in previous decades. Since the 1970s, practitioners trained in the hard sciences have gradually permeated doctoral programs and the 'agrégation', thus gaining access to chairs and contributing to the 'scientization' of the university curriculum.<sup>365</sup> The 'econometrics major', for instance, has become the most selective and prestigious track almost everywhere. The *National School of Statistics and Economic Administration*, which trains the future INSEE administrators, now constitutes perhaps the core and most influential institution within this tradition, with a curriculum structured around mathematical and statistical techniques, and a strong theoretical (that is, microeconomic) component.<sup>366</sup> Today, the technical training received there resembles very much the standard graduate course taught at top North-American universities.<sup>367</sup>

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<sup>365</sup> See Lebaron, 1996, for an analysis of the mathematization of university curricula.

<sup>366</sup> An alumnus described to me his training there during the 1970s:

'If you go to ENSAE, you have no incentive to read Smith, or Marshall or Walras. What you learn is taken from current research. The history of ideas is not present. In the early 1970s the professor in the history of ideas was Gérard Maarek, who is now at the Crédit Agricole (a French bank). You just have to read his book to see how he approaches the subject. You learn the economics of Marx as an economist of today understands and modelizes it. You are being explained what Marx said in a Debreu-like framework. It's clear, it helps you have a model, but you really get no clue about class struggle.

At Polytechnique, economics was not so technical. It was much less hard science than at ENSAE. There was an urbane side to it, very economic policy, very énarque if you will. It was not very serious. But that has changed. It has become much more hard science.' (JMC, INSEE administrator, BNP, Aug. 1995)

<sup>367</sup> See Lebaron, 1995 and 1996 Chapter 3.1. 'Les Transformations de l'ENSAE'.

### **The 'Administrative Economists' and the Market for Economic Advice**

The production of policy-relevant economic knowledge in France is centralized around non-university public sector institutions and involves the universities and the private world only marginally. As we have seen, the state, for the most part, organizes the training of its own economic specialists in two main career lines: one for technical and research purposes (e.g. forecasting, national accounting ...) centered around the *National School of Statistics and Economic Administration*, and one for policy-making purposes centered around the *École Nationale d'Administration*. Whereas the two trajectories are often treated in the same movement as part of the administrative elite, they are in fact quite distinct, especially in the economic domain. The former dominates the production of economic information ('numbers') and the technical directions of the Ministry of Finance (e.g. the *Direction de la Prévision*, the *Direction de l'INSEE*), while the latter governs the production of economic ideas and advice and the key policy-making institutions (ministerial cabinets, Directions of the Treasury, Budget...).

#### **The Production of Economic Information.**

In contrast to Britain, the professional and intellectual projects of statisticians and economists in nineteenth century France were rather disconnected from each other. A few *Ponts et Chaussées* engineers advocated most forcefully the incorporation of statistical tools in the development of economic knowledge,<sup>368</sup> yet their influence on the 'field' of political economy remained relatively marginal. Resistance towards the use of statistical

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<sup>368</sup> Schweber for instance points to the role of Cheysson and Levasseur, two state engineers, in establishing a connection between statistics and political economy in France. (1996a, p591)

methods in economics not only came from liberal circles and the 'literate' economists issued from the law faculties, but also from pioneers in mathematical economics, like Cournot and Walras, who were principally interested in pure 'scientific' abstraction. (Ménard, 1987) The career of an Edgeworth, for instance, who held both the Drummond chair in economics at Oxford and the Presidency of the *Royal Statistical Society*, would have been very improbable in the French context.

Nevertheless, it is through the administrative channel and the 'social engineers' that the present-day synthesis between statistical and economic knowledge started to diffuse in France. In contrast to England (where statistical activities initially developed outside of state control among learned societies and social reform movements), in France they became closely associated with the state towards the end of the nineteenth century. In particular, officials from administrative bureaus played an important role in the diffusion of scientific innovations in mathematical statistics. However, the central statistical apparatus remained poorly developed and staffed during the inter-war. Sauvy (1984), for instance, compares unfavorably the 120 employees of the *Statistique Générale de France* at the end of the 1930s to the nearly 2,400 ones of its German equivalent. The general lack of interest for data among French governing officials, and their lack of knowledge about empirical facts, he argues, cost the country major economic policy mistakes.<sup>369</sup>

Like in many other areas, the development of a modern statistical information system owed a lot to the advocacy of modernizing currents within the administration and

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<sup>369</sup> p376-389. Sauvy speaks of 'the atrocities of the deflation of 1935, and the blind outburst of 1936'. In particular, he argues that the Blum government's decision to

elite engineers. While such movements started to come together in the 1930s, it is under the Vichy government that the post-war model of the French economic information system was really pioneered. The National Statistical Service came into being in 1941 as a new 'administrative body' of its own, whose elite was soon rooted in a specialized preparatory school and its associated 'corps' of administrators (*ENSAE* and *INSEE*, already mentioned).<sup>370</sup>

Interestingly, both institutions, especially after the creation of the SEEF with which they were closely articulated, came to embody a form of institutionalized embeddedness between the two functions of statistical recording, on the one hand, and the utilization of data for economic planning and management, on the other. (Desrosières et al., 1977, p517) This organizational design created the conditions of a nearly absolute monopoly of governmental organizations and their 'economists-statisticians' (as the *ENSAE* graduates came to be referred to) in economic diagnostics, forecasts, and in the production of policy-relevant economic information.<sup>371</sup> (Jobert, 1979) The technical-administrative pole centered around the statistical function of the state expanded considerably in the 1960s and 1970s, both quantitatively and qualitatively (we have already discussed its involvement in the production of economic science). The *INSEE*, for instance, went from a staff of about 2,500 in 1960 to 7,000 in 1974, (Lenoir and Prot, 1979, p16) which corresponds to the broadening of its role from statistics towards

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reduce the workweek to 40 hours contributed to destroy the coming recovery of the economy in 1936.

<sup>370</sup> These are the names they came to assume later.

<sup>371</sup> See Desrosières, 1994.



national accounting and economic studies.<sup>372</sup> The number of graduates produced every year by the *National School of Statistics and Economic Administration* grew from 60 in 1960 to over 300 in 1979. (ibid.; see Figure 4-2) In 1965, the Statistical Service at the Ministry of Finance (SEEF) was transformed into a full 'direction' (the *Direction de la Prévision*)<sup>373</sup>, designed to serve as a think tank for the cabinet of the Ministry of Finance. Finally, various ministries established their own statistical and economic bureaus (e.g. at the Ministry of Labor), which command important amounts of research. (INSEE, 1996, p124)

By the end of the 1970s, in a situation where 'numbers' and 'figures' were playing an increasingly central role in politics and the media, public administrations, which controlled their production, release, and interpretation, thus organized much of the discourse about the real world.

'At the time (1970s), when the INSEE said something, it was quite extraordinary: everybody, including the President himself, had to take a stance about it.' (INSEE administrator, August 1995)

This de facto INSEE monopoly became a concern during the 1970s, when the deepening economic crisis was creating frequent conflicts of appreciation between forecasters and politicians.<sup>374</sup> Ideological conflicts had also grown in the post-1968 years, and were rampant between the government and its administrations. During the earlier

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<sup>372</sup> In 1961, the INSEE, which until then had been confined essentially to statistical tasks, inherited parts of the responsibilities of the Statistical Service at the Ministry of Finance. (INSEE, 1996)

<sup>373</sup> Literally, Forecasting Direction.

<sup>374</sup> We should also not underestimate the personal rivalry between two of the most prominent economists at the time: Barre (then Prime Minister) and Malinvaud (then Director of the INSEE).

periods, public agencies such as the INSEE or the *Direction de la Prévision* had tradition of harboring a certain pluralism behind their walls, including avowed Marxists. The technicians working on national accounts and planning came from a wide variety of political horizons.<sup>375</sup>

By the middle of the 1970s, however, the ideological climate was changing. Across the Atlantic the popes of Keynesianism were under attack from the new classical macroeconomics of the Chicago school. At the same time, emerging liberal currents at the margins of the administrative field (partly in universities, the growing business schools, and at Sciences Po), were starting to contest the prevailing 'Keynesian' orthodoxy of the public economic management apparatus. Gathering around the label of 'new economists', they launched a somewhat successful media campaign which weighed on the political debate. The new President in power after 1974, Valéry Giscard d'Estaing, and especially his Prime Minister after 1976, Raymond Barre (a university economist) engaged in a new economic policy path, which introduced a dose of monetarism and attention to the supply-side of the economy in an otherwise traditional Keynesian framework. In this changing political climate the government set out to repudiate the 'gaullist-era' legacy of a hyper-centralized economic information system. An official commission set up to formulate propositions for reform stated that 'no team (outside the administration) has been able to attain a critical mass in order to have a weight in the debate'.<sup>376</sup> and recommended the creation of new economic research organizations in

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<sup>375</sup> Fourquet, 1980, p114. 'We were all more or less leaning towards the left, since you have to be Marxist to grant economic management techniques the weight we gave them... But our analysis was mainly technical.' (Gruson, 1976, p75)

<sup>376</sup> Lenoir and Prot, p139.

order to introduce 'pluralism'. They would be able to mobilize the INSEE's resources, but would be encouraged to provide alternative interpretations. The solution, patterned after the German model of six research institutes of comparable weight, and organized around both specific tasks and corporate affiliation, was implemented at the outset of the 1980s.

The government first established the *Observatoire Français des Conjonctures Économiques* (or OFCE), a rather large institution entrusted with the specific mission to 'liven up' the public debate. Designed as a scientific and academic center, it was also producing its own 'independent' economic forecasts (intended to compete with those of the INSEE). The rest of the system consisted of two smaller structures representing corporate groups: the IPECODE<sup>377</sup>, on the employers' side, and the IRES (established in 1982 after the constitution of the socialist government), supervised by the unions.

How much pluralism these institutional transformations really introduced in the economic information apparatus is a complex question. The administrative sphere in France still retains a unique position in the world as both producer and first user of primary data. This situation differs from most other countries where such a profound integration between official statistics and applied economic studies does not exist, and skills are more dispersed between the universities, the government, and the private sector. By contrast, the French system does not support alternative sources of financing, so that the organizations created at the turn of the 1980s have had to remain highly dependent on the state for resources, contracts, and skilled personnel. In contrast to the 'think tanks' created in the Anglo-Saxon countries around the same period, the French initiative was

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<sup>377</sup> Now merged with REXECO into a new structure (REXECODE).

largely organized from above –and has remained so to this day. Except for IPECODE, which was entirely private, the other structures were financed almost exclusively by public sources, via the Central Planning Agency.

More fundamentally perhaps, possibilities for staffing the new organizations remained fairly limited. Technical economic skills and competence are vested almost exclusively in public administrators –or even more precisely, among graduates from the *National School of Statistics and Economic Administration*. By intellectual tradition, and because of a lack of resources, the university does not serve as a training ground for applied economic expertise. This situation played out very obviously in the case of the *Observatoire Français des Conjonctures Économiques*, which became a refuge of economists-statisticians from the INSEE:

‘The ‘new economists’, they tried to use Barre so that he would set up these new structures. That was the plan for the OFCE: to give money to the National Foundation of Political Sciences so that they would produce a non-Keynesian counter-expertise to the INSEE. This plan was all over in a few days. Why? Because, of course, the state is not going to trust the ‘new economists’ to build the macroeconomic models. Rather, the state is going to trust people trained at Polytechnique, people from the INSEE. And all of these people were Keynesian at the beginning of the 1980s. Because you see, as soon as economics becomes technical, the new economists are powerless. They do not count the likes of Sargent (a well-known conservative academic economist in the United States) among their ranks, that is, people who are also excellent mathematicians.’ (AL, researcher, CEPREMAP, August 1995)

There is no doubt that the creation of quasi-public economic research institutes eroded the INSEE monopoly. But the new ‘pluralism’ actively promoted by public officials still remained under the tight control of administrative and, ultimately, political powers. An inescapable hiatus persists between financial dependence from the administration and the proclaimed mission of intellectual ‘independence’. For instance,

the *Observatoire Français des Conjonctures Économiques*, which is widely perceived as pro-socialist, found its budget sharply reduced during the first right-wing 'cohabitation' government (1986-1988).<sup>378</sup> And the institution's interventions in the public sphere prior to the 1993 legislative election caused a certain political agitation.<sup>379</sup> A similar hiatus was experienced quite unfortunately by an older, also left-leaning institution, the *Center for the Study of Revenues and Costs* (CERC), which was brutally dismantled by the Parliament on January 1, 1994.<sup>380</sup>

### The Production of Economic Policy.

Exclusive patterns of recruitment into the civil service have historically limited access of outside economic experts to formal positions in the French bureaucracy. There were exceptions to this pattern, notably during World War I,<sup>381</sup> and later during the interwar. Charles Rist, the expert par excellence, was appointed vice-governor of the Bank of France during the 1920s. After the Second World War, however, and the creation of the *École Nationale d'Administration*, such cases have been more rare. In

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<sup>378</sup> Source: Interviews.

<sup>379</sup> The *OFCE* published then a study supporting the position of the socialist party. Comparing the economic programs of the three main candidates, the study concluded that only a reduction in the work week (the socialist proposition, later implemented by the Jospin government) would contribute to significantly decrease the level of unemployment. Reflecting on the episode, an officer told me: 'we have the monopoly of independence. And it is sometimes difficult to manage'. (Interview, JL. August 1995)

<sup>380</sup> See for instance *Le Monde*, January 11, 1994, 'La Controverse sur la Disparition du *Centre d'Étude des Revenus et des Coûts*'.

<sup>381</sup> For instance, a hand full of university economics professors consulted in the Armament Ministry of Albert Thomas during World War I. (Levan-Lemesle, 1993, p660; Kuisel, 1981).

addition, France does not routinely authorize temporary internships and appointments in its economic administrations -in contrast to the Anglo-Saxon countries for instance. The practice of hiring 'irregulars', characteristic of the British public service, or the importance of 'political' appointments in American bureaucracy have remained foreign to the French state structure.

### The Economic Technocracy

The technocracy, which occupies positions at the Ministry of Finance, and the main institutions of economic advice (the ministerial cabinets), conceives of itself as a particular breed of 'economic specialists'. The motivation behind the institutions of the *Inspectorate of Finance*, the *École Libre des Sciences Politiques*, and the post-war *École Nationale d'Administration (ENA)* was the production of public experts in financial, and then economic, matters. *Sciences Po*, as we have seen, was originally a 'private' attempt to diffuse a liberal ideology among the higher civil service; the *ENA*, on the other hand, was partly created against the liberal orthodoxy of the high administration, which was held responsible for the economic disasters of the 1930s. In the words of De Gaulle, President of the Republic in the provisional post-war government, the new institution was to 'assist the state in its duty of economic direction of the country'. (Discourse in Front of the Consultative Assembly, March 2, 1945)<sup>382</sup>

The *ENA* initially played an important role in the diffusion of a modernist orientation within the Ministry of Finance in the immediate after-war, which had been until then dominated by a traditional 'financial' conception of the economy. The first teachers there

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<sup>382</sup> Cited in Kesler, 1985, p369.

were recruited among the group of technocrats who had become acquainted with Keynesianism and modern methods of public management during the war. (Boyer, 1985, p81) They 'stressed economics (...), taught it through case study, and made it more mathematical.' (Kuisel, 1981, p215) And indeed economics' place in the school's curriculum increased almost continuously throughout the post-war. (Kesler, 1985) However, a gap formed over time between the 'economic managers' and the 'economists' -between the public policy orientation of ENA training (dominated by higher civil servants and alumni who in course of their career inevitably 'lose touch' with the evolution of economic science), and the rest of the economics profession, which also claims jurisdiction on economic policy by virtue of its 'scientific' abilities (but is excluded from higher civil service positions). Thus while economics courses have become somewhat more technical, they are typically geared towards the practical and institutional knowledge of public policy making. And the competitive examination, which controls entry into ENA, typically rewards 'generalist' aptitudes and pragmatic knowledge, rather than specialist expertise.

'Courses at Sciences-Po have a practical orientation. They are less analytical and more literary than at the university. Theoretical reflection is systematically linked to problems of economic policy. It's quite frustrating. The main objective remains to enter the *École Nationale d'Administration*. And there, it's the same thing: it's literary talent that gets rewarded.' (CDB, Professor at the university of Paris I. July 1995)

In the French context an 'economist' in charge of public policy, or in an economic advice position (e.g. as head of a ministerial cabinet) is thus primarily a high ranking technocrat who received a fairly generalist education at *Sciences-Po* and *École Nationale d'Administration*, which includes economics. Yet 'specialized economists' (in the sense of members of a professionalized scientific corporation) possess only limited

institutionalized access to higher administrative and advice positions (e.g. at the Treasury and in the ministerial cabinets), in contrast to Anglo-Saxon countries where they are recognized a specialized formal role in most administrative agencies -for instance that of chief economist or economic adviser.

### Institutions of Economic Advice

The main institutions of economic advice within the governmental machinery are the ministerial *cabinets* affiliated with the various ministries (as well as the Presidency of the Republic), and the various heads of 'directions' at the Ministry of Finance, especially the Direction of the Treasury. All of these agencies, for the most part, represent a private ground of *ENA* graduates. For instance, the latter have held between 60 and 75% of 'directors of ministerial cabinets' positions from the mid-1980s to the late 1990s.<sup>383</sup>

Apart from the ministerial cabinets, the French government until 1997 possessed two 'centralized' formal structures of economic advice. A *National Economic Council* (ancestor to the actual *Social and Economic Council*) was created in 1925 as a consultative organ for the study and assessment of the economic situation in France. It was a large organization composed mainly of the representatives of various economic sectors and interest groups. It had no research staff of its own, and its reports were usually written by top civil servants. (Margairaz, 1991, p338; Hayward, 1966) In contrast, for instance, to the *British Economic Advisory Council* of 1930, it did not include any outside economic experts --such as university professors. The current *Economic and*

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<sup>383</sup> 'Les énarques omnipresents', *Le Monde*, June 27, 1997.



*Social Council* includes 40 members, but its composition reflects more complex negotiations between political and interests groups than a choice of specialists or experts.

In 1952 public officials established the *Commission des Comptes de la Nation* at the Ministry of Finance, which produces a yearly report on the country's economic situation –the so-called *Report on National Accounts (Rapport sur les Comptes de la Nation)*. The commission was designed as a rather large structure, composed mainly of economic experts from the public and private sector, representatives of corporate groups and members of parliament. However, its function remained limited, often confined to the production of a consensus on economic growth forecasts. It did not provide any advice to the executive (as the *Council of Economic Advisers* in the United States) nor was allowed to give a critical assessment of governmental policy (as the German *Sachverständigenrat*).

The traditional centralized structures of economic advice in France have thus been mainly large and politically heterogeneous organizations. Their affiliation is with the state, not the government, and their composition typically reflects the desire to represent and conciliate the diversity of political and social forces –sometimes at the expense of an incorporation of formal 'expertise'. Thus the conception of 'expertise' as embodied in the *Economic and Social Council* or the *Commission des Comptes de la Nation*, which mixes the 'technical and 'political' characters, may contrast with the narrow, American, sense of a professional capacity based on formal training.

In this perspective, the current French government's move away from this 'politico-corporatist' model appears all the more striking. Two steps have been recently taken to dissociate the provision of economic expertise to the government from the

process of political negotiation of economic objectives. The first one has been the establishment (in 1997) of a *Council of Economic Analysis* directly attached to the Prime Minister. The second step is the dismantling of the *Commission des Comptes de la Nation* which will be divided into two organizations: a political commission comprising representatives of the various administrations, parliament members and representatives of interest groups; and an expert organization (the *Commission économique de la nation*) composed mainly of economic specialists.<sup>384</sup> In many respects, these organizations represent an important symbolic and practical rupture with past practice, although several elements signal the continuity with previous institutions. On the one hand, their membership consecrates the institutionalization of 'professional economics' as a legitimate channel of economic advice and the rise of more narrow definitions of competence on economic matters. Both are composed almost entirely of formally trained 'economists' (either at the university or the *National School of Statistics and Economic Administration*). Nearly all of them are professors who publish regularly in professional outlets, rather than generalist administrators. The *Council*, for instance, includes only one *énarque* among 31 members –who has a *de jure*, not appointed, position. (See Table 4-4)

On the other hand, both organizations have been designed in a typically 'French' way as defined earlier, that is, with the concern to respect ideological diversity and represent the interests of the various administrations, political and interest groups concerned. Several members of the *Council* are associated with a political party, especially (though not exclusively) with those political organizations, which make up the

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<sup>384</sup> 'Dominique Strauss-Kahn s'entoure d'un nouveau groupe d'experts économiques'. *Le Monde*, April 12, 1999.

governmental majority. And the future *Commission* will also formally include spokespersons for interest groups.

### **The Impossible 'Private' Jurisdiction in French Economics**

The French corporate sector as a whole has historically shown little interest in making use of organized economic expertise, neither at the level of the enterprise, nor at that of the corporate group. Neither for immediate, utility-driven reasons nor for ideological ones. In part this is due to the fact that economic expertise is understood widely as a capacity of the state and its private jurisdiction. The administration's presence in the domain of economic forecasts and applied analyses drives out competition from the other sectors (university, private), both because of the magnitude of its influence and because of its distinctive competence: able, technically-trained economists in France have traditionally been state administrators –who were, until recently, ideologically suspect to employers. The university, on the other hand, has long remained at arms' length from the world of the enterprise in France. And in spite of a rapid expansion of 'management sciences' after 1970 in French universities, their disciplinary institutionalization is still fragile, except in elite business schools often modeled, or reformed, after the American model.<sup>385</sup> They are disregarded by administrative and research authorities, which 'treat them as a particular branch of economic sciences' (Perez, 1998, p595), and one with much lower prestige.

The function of the 'business economist' thus never institutionalized as well in France as in other countries. After World War II, only a few private corporations

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<sup>385</sup> E.g. INSEAD, HEC.

(typically, large oil firms) possessed in-house economic studies services, but those were small and rarely staffed by specialists. Sophisticated microeconomic work, however, was done in public monopolies such as the National Society of French Railways (SNCF) or the French electricity monopoly (EDF), where engineers developed economic tools for tariffs and the evaluation of return on investment. The 'Direction of General Economic Studies' at EDF, established at that time, was a prestigious department and a stepping stone for higher positions in the organization. (Boiteux, 1997) However, these developments were occurring for the most part in complete isolation from the rest of the business sector on which they had no impact. (EDF at the time was not even part of the Confederation of French Employers.) (ibid., p13)

The establishment of REXECO in 1957 marked the emergence of a desire of employers to participate in an economic debate largely monopolized by the state.<sup>386</sup> Corporations were also starting to manifest a greater interest for economic expertise. The establishment of the French Association of Business Economists in 1975<sup>387</sup> formally marked the emergence, in France, of a specific professional space for economists working in business. However, today it still counts less than 150 members. (compared to over 4,000 for the American equivalent, the NABE) AFEDE remains a 'traditional' association, in the sense that the bulk of its members work in the industrial sector, where trade associations and large public and private enterprises traditionally reserve a few formal appointments for sectoral 'economists', with highly specific professional expertise

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<sup>386</sup> The SEDEIS, created in 1948, was already an attempt to 'diversify' this debate. (see Merlin, 1997)

<sup>387</sup> *Association Française des Économistes d'Entreprise*. (or AFEDE). However, an earlier association had been created in 1953 to promote economics doctorates, and encourage their employment in the corporate sector. (the ANDESE, see note 2)

(e.g. on oil, chemistry, steel...). However, the long-term decline of industry and manufacturing and the comparative rise of financial services after the deregulation of financial markets in the mid-1980s have profoundly altered the composition of the business economics profession in favor of the banks (in France as elsewhere).

With the expansion of the financial sector during the 1980s and the 1990s, economic knowledge entered the banks. Following the American example, financial institutions (including the Bank of France)<sup>388</sup> set up economic research departments, a movement, which, interestingly, often benefited economists from the state administration and its affiliated institutions. Thus several high-profile INSEE-administrators provided the new 'chief economists', while the rank and file were disproportionately recruited among young graduates from *the École Nationale de la Statistique et de l'Administration Économiques*, and among university Ph.Ds, especially those with demonstrated mathematical abilities.<sup>389</sup> By contrast with British, U.S. or German financial institutions, however, the French banks are less in a position to sustain an important activity in this area due to their greater weakness and the comparative underdevelopment of the French financial system altogether.

### Economic Consulting.

Likewise, France does not possess a well-established commercial economic studies sector. In part this is due to the difficulty to support such activities in the context

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<sup>388</sup> The Bank of France has had an economic studies department since the end of the nineteenth century. However, the economic research one is a recent innovation.

<sup>389</sup> Source: Interviews. (at REXECODE, National Bank of Paris, Indosuez Bank)

of the public sector monopoly.<sup>390</sup> Some of the most important institutions in this domain have been in fact often closely linked to the state. During the 1950s and 1960s, research contracts with the Central Planning Agency supported not only the development of public sector institutions, but also a constellation of small private research organizations (e.g. CREDOC, CERFI), some of which disappeared after the dismemberment of the system already discussed. Another good example is the BIPE, a consulting firm specialized in sectoral studies, which was established in 1959 with the support of large public administrations (most prominently the *Caisse des Dépôts et Consignations* and the *Central Planning Agency*) in order to provide the business sector (both public and private) with technical expertise on specific markets. A public financial institution, the *Caisse des Dépôts*, remains its main shareholder. Public administrations are also closely connected to the organization through multiple personal interlocks. The first director of the BIPE was Claude Gruson, who created the Statistical Service of the Ministry of Finance (1952-1961) and later (1961-1967) became the head of the INSEE. Since then, high level public administrators have continued to occupy leading positions in the organization.

### The Absence of Independent 'Think Tanks'.

Corporate groups in France are not important consumers or producers of public economic knowledge. This is in part due to inherent fragmentation of both business and labor, which do not rely on powerful institutional structures, like the American think

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<sup>390</sup> 'You can do serious applied work only if your base activities are highly profitable. Since the public administration has a monopoly on these base activities, it becomes too expensive for us to do anything too specialized.' (business economist AFEDE/GIM, June 1996)

tanks or the German institutes. The largest trade unions (e.g. CGT, CFDT, FO) each entertain small teams of economic experts.<sup>391</sup> In principle, a state-sponsored research institute (the IRES), common to all union organizations, handles economic studies relevant to the labor movement. Similarly, the IPECODE (now REXECODE) theoretically represents the voice of organized capital. However, both weigh little in comparison with the corresponding German organizations (the DIW and the IFO) on which they are modeled.

**'Officially the main reason why the private sector in France does not finance economic research is fiscal. Tax payers are not encouraged to put their money in foundations. And there is a grain of truth to it... But I think that the main reason is the extraordinary polarization of French society. Everything is centered on the administration. I would go as far as saying that corporations are completely paralyzed by their face-to-face interactions with the administration. And in the end they prefer to act directly on political structures and the bureaucracy, rather than to try to produce a different vision. They prefer to lobby. Until recently, economic research was not part of their arsenal. What has struck me enormously over the years, for instance, is the extent to which many corporate executives do not believe in the price mechanism. They do not believe that if you increase supply, prices are going to drop. And the language of economic analysis is completely foreign to their world view. By contrast, they put a lot of trust in their agreement with a functionary on this or that point.**

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<sup>391</sup> e.g. The ISERES (for the communist union CGT) has a team of less than 5 people. The CFDT (socialist union) also recruits economic experts, often directly from the administration:

**'For instance, there has always been a lot of movement between the Central Planning Agency and the CFDT. This has been going on for at least 40 years. They often come from the INSEE. There are a lot of people who have gone from the CFDT to the Central Planning Agency, and from the Central Planning Agency to the CFDT, including people who are very bright and famous.'** (INSEE administrator, CSERC, August 1995)

People who live in an economy where administrative power is dominant do not believe in the pertinence of an analysis centered on the market. They simply do not see the usefulness of an economic discourse.

That said, there has been a change. In particular because the government, public administrations, are routinely confronted to people who speak the language of markets at the international level.' (Professor at university and Sciences-Po, July 1995)

### **Economists as Intellectuals, Intellectuals as Economists.**

#### **Is there an Orthodoxy in French Economics?**

Now we are left with the question of the implications of this 'statist' institutional pattern at the cognitive level: does the organization of knowledge affect its substantive content, that is, the economic ideas themselves? Is there a particular 'intellectual style' of French economics? Such a question, of course, may seem completely irrelevant given the previously discussed fragmentation of organizations and intellectual positions. However, opinion surveys conducted among French economists tend to suggest that the latter hold more favorable attitudes towards state intervention than practitioners in other advanced industrialized countries. (see Table 1-2.) Even among other European professionals, who reveal themselves to be more 'pro-government' than their American counterparts overall, the French stand out for their distrust of the price system and market competition and their support for a political control of economic institutions (the central bank for instance).

The other major fact, however, is the persistence of important lines of cleavage, intellectually, politically, and professionally. Bobe and Etchegoyen, in their 1981 opinion survey, noted the triangular opposition between the three poles of public administration,



the university, and the private sector. Lebaron (1996) makes a similar point by looking at the economists' social characteristics. Finally, intellectual attitudes constitute a powerful source of dissension, notably within the academic field. The use of mathematics, in particular, continues to divide economists to a degree unparalleled in the Anglo-Saxon countries. In this respect France resembles Germany, another country with a tradition of institutional embeddedness between economics and law.

The French field also supports numerous competing intellectual niches located in a large variety of organizations with hybrid institutional statuses, many of which share little but their 'heterodoxy' –that is, an outright rejection of (Anglo-Saxon) neoclassical theory (including its French disciples), and a claim to radical novelty. Such claims are often based on the establishment of new foundations for economic analysis, new concepts and vocabulary, which aspire to the status of legitimate alternatives to orthodox approaches.<sup>392</sup> The structuralist pole after the 1940s, the economic historians of the *Annales* school in the early 1950s,<sup>393</sup> the school of 'monopolist state capitalism' during the 1960s (born within the French communist party), the 'regulation' school during the 1970s and 1980s (developed by state administrators)<sup>394</sup> the 'economics of conventions'

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<sup>392</sup> See Weiller and Carrier, 1994, for a survey of French heterodox currents in this century.

<sup>393</sup> The *Annales* historians established their stronghold at the VIth section (Economic and Social Sciences) of the *École Pratique des Hautes Études*, which was to become the actual *École des Hautes Études en Sciences Sociales*. This interdisciplinary institution was founded in 1947-1948, partly thanks to a grant from the Rockefeller foundation. (Mazon, 1988)

<sup>394</sup> The regulation school was born at the beginning of the 1970s, and proposed an original analysis of the (then emerging) economic crisis. According to the 'regulationists', the 1970s crisis was due to the exhaustion of the main social compromise upon which the fordist 'mode of regulation' had been based since the 1930s, whereby

since then, (which draws from varied institutional sources),<sup>395</sup> and countless other original approaches, have all shared an ambition to profoundly reshape the intellectual framework of the discipline of economics. The new 'paradigms' proposed often insist on what Granovetter (1985) terms the 'embeddedness' of the economy in society, drawing on other disciplinary frameworks (sociology, politics) to criticize the reductionism of neo-classical economics. Thus whereas in the United States interdisciplinary integration was often initiated by sociologists (hence the term 'economic sociology')<sup>396</sup>, in France these boundary locations are mostly populated by economists. The "regulation school", for instance, has had an important following among U.S. economic sociologists.

### Economics and the Intellectual Field

These 'heterodox' approaches, notably the regulation school, which made a deliberate effort at popularization, also found some significant support among the larger public, via intellectual reviews such as the *Temps Modernes* or works directed at the general public. Contrary to the United States where the economist's identity is closely associated with a narrowly defined domain of expertise,<sup>397</sup> practitioners in France often adopt an "intellectual" attitude, whereby their competence is inherently linked to a broader political posture. Many have published bestsellers dealing with broad societal issues

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productivity gains were automatically transformed into salary increases. See Boyer, 1990; Boyer and Saillard, 1995.

<sup>395</sup> For an introduction, see *Revue Économique*, 1989; also Wilkinson, 1997, for a review.

<sup>396</sup> One (notable) exception in the United States is the work of Michael Piore. (See Piore and Sabel, 1984)

<sup>397</sup> except, perhaps, in the case of the supply-siders.

(from Attali and Guillaume's *L'Anti-économique* (1973)<sup>398</sup> to, more recently, Fitoussi and Rosanvallon's pamphlet on inequalities (1995), or Cohen's analyses of the third industrial revolution (1998, 2000)).

If economists may play an intellectual role, intellectuals are also authorized to speak about economic issues. Thus a vast array of individuals (directors of large enterprises and banks, higher civil servants, politicians, professors in other disciplines) and organizations (political parties<sup>399</sup>, clubs, associations, intellectual reviews) may claim legitimacy to speak on economic issues, and play an important role in the regeneration of economic discourse.<sup>400</sup> Certainly we should point out that this pattern is not exclusive to the economics profession, and relates to the particular organization and structure of the intellectual field in France, which, as Michèle Lamont has shown, emphasizes qualities of eloquence, general competence, *sens critique*, and capacity of abstraction (in contrast to the American valorization of factualism, efficiency, expertise, and pragmatism). (1992, p98) This fairly large understanding of competence and skills in the French context, rooted in an elite educational system which reveres bright 'generalists' (e.g. the 'Polytechniciens'), allows indeed for a very particular organization of intellectual life,

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<sup>398</sup> Jacques Attali and Marc Guillaume, Paris, PUF, 1990 (1<sup>st</sup> edition 1973). Jacques Attali is a high level civil servant (X-Mines-ENA). Marc Guillaume is an INSEE administrator with an *agrégation* in economics. Both were also familiar with advanced mathematical economics. (Sitbon, 1995)

<sup>399</sup> French political parties established 'economic commissions' of experts during the 1950s, which animated intellectual debates through economic reviews. (e.g. *Économie et Politique*, the 'first Marxist economic review published in France', affiliated with the Communist Party)

<sup>400</sup> Hence the Saint-Simon Foundation during the 1990s in France.

whereby specialized discourses, including in those fields where technical claims are traditionally strong (such as economics), are produced by a variety of authorized actors.

The other important reason for this characteristic “intellectual” or “societal” dimension of economic discourse in fact must also be put into historical perspective, and related, in particular, to the fact that economics in France has been understood as a fundamentally ideological endeavor for most of its history. As many scholars have noted, there exists a long historical connection between the higher education institutions –the law faculties and *Sciences Po* in particular–, and the field of politics in France. During the inter-war, it was not uncommon for economics professors to have a political career in the chamber of deputies or the senate.<sup>401</sup> In this context, the most prestigious career reward for a professor might not be to remain a professor, but to be elected or appointed minister.<sup>402</sup>

## **Conclusion: The Segmented Worlds of French Economics**

French ‘economics’ is the product of two distinct traditions. The first one emerged in the nineteenth century, largely outside of administrative institutions, as a ‘political’ movement associated with laissez-faire agitation. And indeed the political element remains important in the French context, where the principle that ‘all knowledge

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<sup>401</sup> For the 1900-1939 period, Levan-Lemesle shows that out of a total number of people teaching economics of 88, 12.5% were deputies and 7% were ministers. (1993, p728-9) Also see Charle, 1994, p286; Margairaz, 1990. Bourdieu, 1988, ‘The Conflict of faculties’ (on the more recent period). My own survey of post-1945 ministers shows a somewhat lower proportion. See ‘Additional Data’.

<sup>402</sup> See for instance the career of Edmond Alphandéry, University Professor, then Minister of Finance (1993-1995), and president of EDF, the national electricity monopoly (1995-1998).

is political' is more readily accepted than, especially, in the United States. The central division in the field today opposes 'Anglo-Saxon' approaches, (i.e. the neoclassical mainstream), and a network of local 'schools'. some of them quite influential, which see themselves as national bastions against the diffusion of neo-liberalism and professional scientism, and rely on a long cultural tradition of defiance towards American and British influences.<sup>403</sup>

The second tradition developed in the post-war period, although its roots date back to the nineteenth century. There, economics was associated with the economic management functions of the state and the occupational location of public engineers. Originally developed by these 'state managers' in a fairly idiosyncratic manner in the nineteenth century, it became institutionalized after World War II with the establishment of economic modernization instruments and organizations (such as the Central Planning Agency). Faced with the expansion of the state's involvement in the economy, French public officials responded by consciously designing an elite of economic managers and highly skilled economic technicians through the establishment of technocratic educational institutions. There is probably nothing further removed from the French organization of economic ideas, information, expertise and research, than the American ideal of a decentralized and competitive market, which often serves as a model for the analysis of professions. Instead, institutionalized administrative traditions of elite vocational training have been the most critical organizing mechanism for the French economics profession in the post-war era. In turn, professionals working in these

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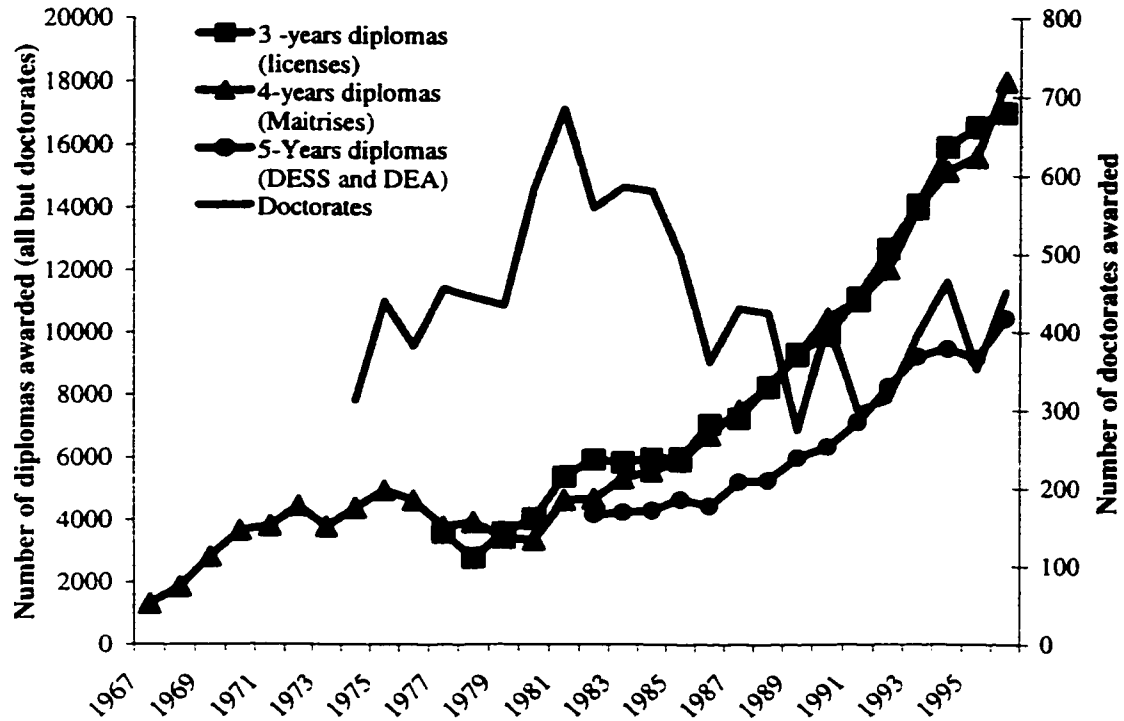
<sup>403</sup> An American (Marxist) economist thus said: 'France was the only country I ever traveled in where people would say I was an Anglo-Saxon'. (Professor, Harvard University, May 1997)

organizations developed their own interests (in scholarly research notably) –all of which came to have a profound impact on the ‘discipline’ and French ‘academic’ field of economics.

Because of the stability of careers, the different ‘worlds’ of economics practice in France since World War II have remained fairly compartmentalized, between: (1) university professors who control mass education and the main academic institutions, and often have a close linkage with politics (but are excluded from positions of administrative power, both in policy and in the economy); (2) Technical administrators such as engineers-economists and economists-statisticians, who oversee the production of economic information and applied work, as well as a large section of theoretical research; (3) And, finally, civil administrators (ENA graduates), who have a near monopoly on economic advice and policy design. As a result, ‘being an economist’ is more contentious than in the two previous cases, and embedded in conflicts over the legitimate definition of what the practice of economics is all about: traditional theory; statistical and econometric technique; mathematics; or policy.

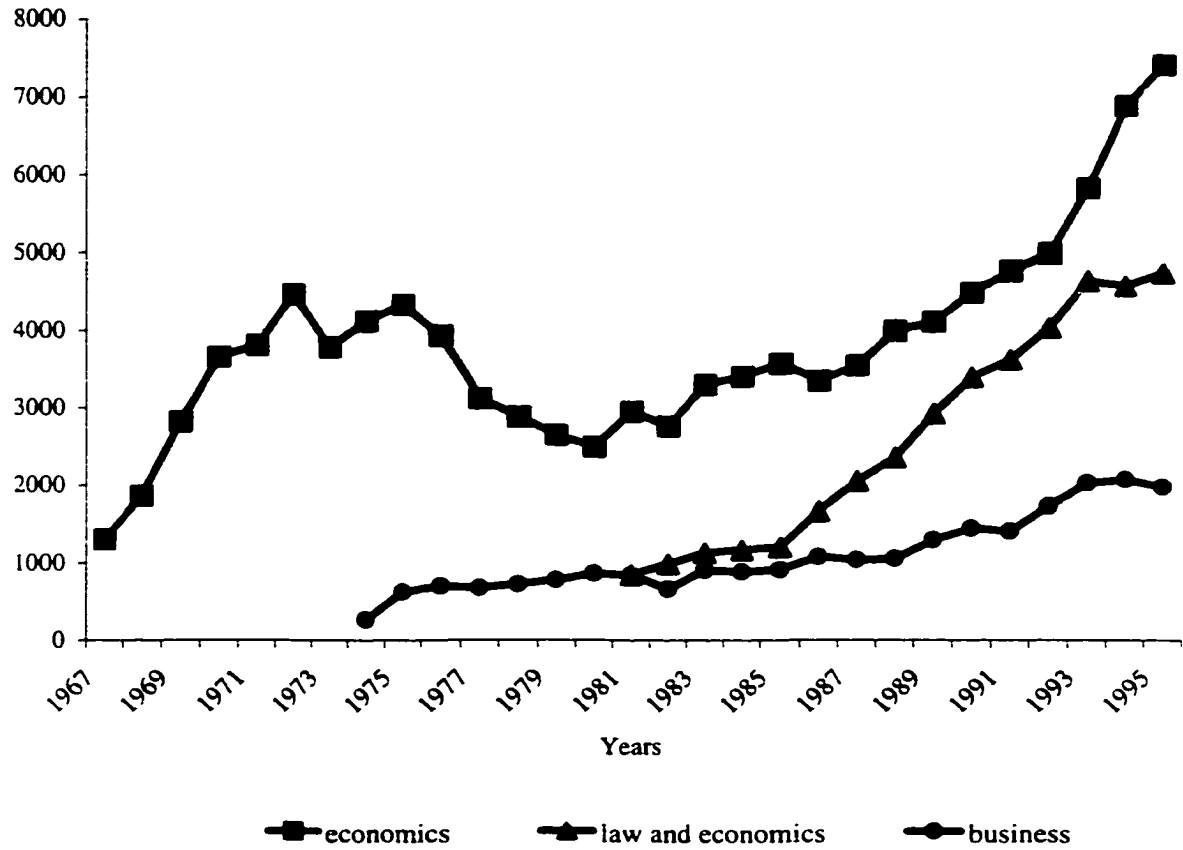
## Tables and Figures for Chapter 4

**Figure 4-1.a: Economics and Business Diplomas, France, Total Numbers, 1967-1996.**



Sources: Direction de l'évaluation et de la prospective, Ministry of National Education, France. INSEE, *Annuaire Statistique de la France*, 1999.

**Figure 4-1.b: 4-years diplomas (Maîtrises),  
Economics and Business, France, By Focus, 1967-1995.**

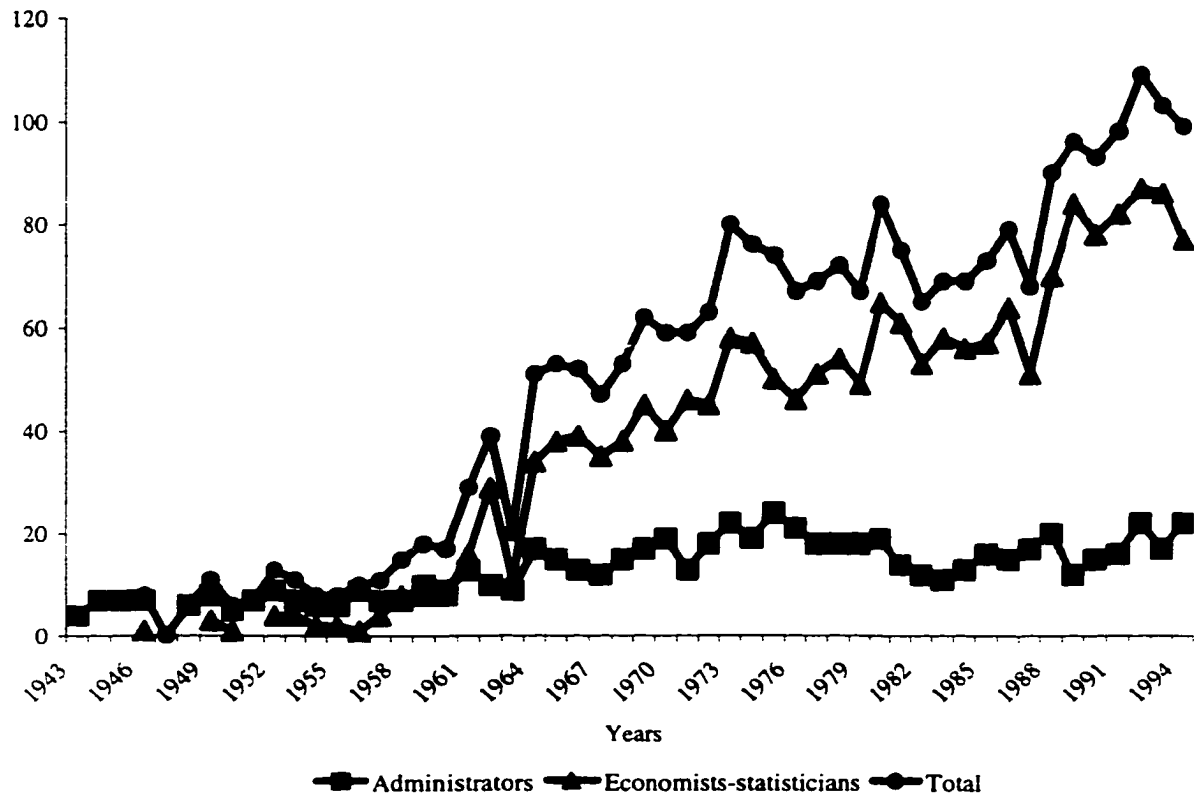


**Source:** Direction de l'évaluation et de la prospective, Ministry of National Education, France.



**Figure 4-2: Students at the National School of Statistics and Economic Administration 1943-1994**

(*École Nationale de la Statistique et de l'Administration Économiques* or ENSAE)



Source: Desrosières, 1995.

**Table 4-1: France, Main Institutions of Economic Research**

Date created	Acronym	Full name and purpose
1937-	ISRES	Private institute. Established on a Rockefeller grant at the <i>École Libre des Sciences Politiques</i> .
1944	ISEA (later ISMEA)	Institute of Applied Economic Science (later Institute of Sciences and Applied Economic Mathematics) Directed by F. Perroux
1946	INSEE	<i>Institut National de la Statistique et des Études Économiques</i> . National Institute of Statistics and Economic Studies. Dependent from the Ministry of Finance.
1946	CGP	<i>Commissariat Général au Plan</i> (Central Planning Agency)
1948	SEDEIS	<i>Société d'Études et de Documentation Économiques, Industrielles et Sociales</i> . (private)
1952-1965	SEEF	Statistical Service of the Ministry of Finance.
1953	CREDOC	Semi-private, works mostly with the Central Planning Agency at the beginning, then diversification.
1957	REXECO	Created as an association for the benefice of affiliated enterprises. Business cycle watch.
1957-	CEPE	<i>Center for the Study of Economic Programs</i> .
1957	COE	<i>Comité d'Observation Économique</i> . Research Institute, financed by the Paris Chamber of Commerce.
1958	INSEAD	<i>European Institute of Business Administration</i>
1959	BIPE	Public-Private partnership Mission: Sectoral studies.
1959-1968	CERMAP	Affiliated with the Central Planning Agency. Mission: Mathematical Studies for Planning.
1960s	CEE	<i>Center for the Study of Employment</i> (Affiliated with the Central Planning Agency)
1964-1994	CERC	<i>Centre d'Études des Revenus et des Coûts</i> , affiliated with the Central Planning Agency. Created by P. Massé.
1965	DP	<i>Direction de la Prévision</i> , Statistical and Economic Service at the Ministry of Finance. (replaces SEEF)
1968	CEPREMAP	Academic research center. Affiliated with the Central Planning Agency. (replaces the CERMAP)
1969-1979	CORDES	<i>Comité de Coordination et d'Orientation des Recherches sur le Développement Économique et Social</i> , affiliated with the Central Planning Agency. Finances projects in social science research.

1978	CEPII	Specialized research center providing expertise in the domain of international economics. Financed and controlled by the Central Planning Agency.
1980	IPECODE	(now REXECODE) Research Institute, financed by the Confederation of French Employers.
1981	OFCE	<i>Observatoire Français des Conjonctures Économiques</i> . French Observatory of Economic Business Cycle.
1982	IRES	<i>Institut de Recherches Économiques et Sociales</i> . Institute of Economic and Social Research. Financed by the Central Planning Agency, supervised by the Unions.

**Table 4-2: Leading Journals in French Economics, 1841-present**

Dates	Name	Affiliation
1841-1940	<i>Journal des économistes</i>	
1887	<i>Revue d'Economie Politique</i>	Mostly university
1948	<i>Economie appliquée</i>	ISEA
1950	<i>Revue économique</i>	Mostly university
1954	<i>Economie et Politique</i>	French Communist Party
1967	<i>Economies et Sociétés</i>	ISEA
1969	<i>Annales de l'INSEE (later Annales d'Économie et de Statistique)</i>	INSEE
1980	<i>Revue française d'économie</i>	

**Table 4-3: Research Contracts with the C.O.R.D.E.S. and the Central Planning Agency**

(Millions of current francs)

Years	1972	1973	1974	1975	1976	1977	1978	1979
Program authorizations	7.15	5.686	6.454	7.703	6.393	8.582	3.585	NA
Annual spending	6.94	5.58	6.07	6.358	7.155	7.508	6.7	NA

Years (continued)	1980	1981	1982	1983	1984	1985
Program authorizations	NA	6.94	5.95	4.59	7.56	9.5
Annual spending	NA	2.29	5.26	6.19	6.04	7.9

**Table 4-4: Council of Economic Analysis. List of Members (as of 2000)**

<b>Name</b> * : member of the permanent council	<b>Education</b>	<b>Principal other function</b>
Pierre-Alain Muet*	X-INSEE	Economic Adviser of the Prime Minister
Hélène de Largentaye*	IEP, Ph.D. economics (Cambridge, U.K.)	
Dominique Bureau*	X-Ponts	
Gilbert Cette*	Doctorate, economics (France)	
Michel Aglietta	X-INSEE, Ph.D. economics (U.S.)	Professor, University of Paris
Patrick Artus	X-INSEE	Director of Economic Studies, <i>Caisse des Dépôts et Consignations</i>
Anthony Atkinson	BA, University of Cambridge (U.K.)	Professor, Oxford University
Olivier J. Blanchard	Ph.D. economics (MIT)	Professor, MIT
Christian de Boissieu	Doctorate, economics (France)	Professor, University of Paris
François Bourguignon	ENSAE, Doctorate, economics (France / US)	EHESS
Robert Boyer	X-Ponts, IEP	CEPREMAP, EHESS
Daniel Cohen	ENS, Doctorate, economics (France)	Professor, ENS
Élie Cohen	IEP, Doctorate, organizations (France)	CNRS, FNSP
Olivier Davanne	X-ENSAE	Professor, University of Paris-Dauphine
Michèle Debonneuil	INSEE	Director of Economic Studies, Central Planning Agency
Michel Didier	X-ENSAE	Director, REXECODE
Yves Dimicoli	Doctorate, economics (France)	Economic Commission, French communist Party
Jean-Paul Fitoussi	Doctorate, economics (France)	Professor, IEP and President. OFCE
Jacques Freyssinet	Doctorate, economics (France)	Director, IRES
Annie Fouquet	?	Director, CEE
André Gauron	École Centrale	Cour des Comptes, ex-head of cabinet
Claude Henry	ENSAE, Doctorate, economics (Belgium)	Professor, X

Philippe Herzog	X-INSEE	Professor, University of Paris
Pierre Jacquet	X-Ponts	Vice-Director, French Institute of International Relations
Jean-Jacques Laffont	ENSAE, Ph.D. Economics Harvard	Professor, University of Toulouse
Alain Lipietz	X-Ponts	CEPREMAP, Green Party
Jean-Hervé Lorenzi	Doctorate, economics (France)	Professor, University of Paris
G�rard Maarek	X-INSEE	Director of Economic Studies, CNCA (Bank)
B�atrice Majnoni d'Intignano	Doctorate, economics, France	Professor, University of Paris
Edmond Malinvaud	X- INSEE, Doctorate, law/economics (France)	Professor, College of France
Fran�ois Morin	MA, economics (France)	Professor, University of Toulouse
Michel Mougeot	Doctorate, economics (France)	Professor, University of Franche-Comte
Fiorella Padoa-Schioppa-Kostoris		President of the 'Istituto di Studi e Analisi Economica' (Italy)
Thomas Piketty	ENS (Maths). Ph.D., LSE	CEPREMAP
Jean Pisani-Ferry	Engineer (Supelec)-CEPE	Cabinet head, Ministry of economics and finance.
Jean-Jacques Rosa	Doctorate, economics (France)	Professor, IEP
Dominique Taddei	Doctorate, economics (France)	Professor, University of Paris
Jean Tirole	X-Ponts, Ph.D. MIT	Professor, University of Toulouse
Laurence Tubiana	IEP, Doctorate, Economics (France)	INRA
Jacques Valier	IEP, Doctorate, economics (France)	Professor, University of Paris
Charles Wyplosz	�cole Centrale, Ph.D. Harvard	Professor, University of Geneva

### De jure members

Jean-Michel Charpin	X-INSEE, IEP	Director, Central Planning Agency
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Paul Champsaur	X-INSEE	Director, INSEE
Mireille Elbaum	?	Director, DREES (Statistical Agency of the Ministry of Labor)
Jean-Philippe Cotis	ENA, ESSEC	Director, Direction de la Prévision
Claude Seibel	X-INSEE	Director, Statistical office, Ministry of Labor (DARES)

Key:

X : graduate of *École Polytechnique*

ENSAE: graduate of *École Nationale de la Statistique et de l'Administration Économiques*.

IEP : graduate of 'Sciences-Po'.

ENS : graduate of *École Normale Supérieure*.

ESSEC: graduate of *École Supérieure des Sciences Économiques et Commerciales*.

ENA : graduate of *École Nationale d'Administration*.

INSEE : member of the administrative corps associated with the *Institut National de la Statistique et des Études Économiques*.

CNRS : National Center of Scientific Research

## **Additional Data**

**Professional background of 162 ministers and secretaries of state for: economy, finances, budget, planning, labor and/or social affairs, industry, commerce, public works and European affairs, 1946-1999.**

-1946-1958 period (IVth Republic):

2 of 70 ministers and secretaries of state examined were 'Professors of Economics': A. Philip and de Menthon.

-1959-1999 period (Vth Republic):

6 of 92 ministers and secretaries of state examined were 'Professors of Economics': Jean-Marcel Jeanneney, Raymond Barre, Lionel Stoléru, Edmond Alphandéry, Dominique Strauss-Kahn, Christian Sautter.

Jeanneney held repeated ministerial appointments between 1962 and 1968 (industry and social affairs) and was the architect of the Grenelle agreement in 1968. Barre was Prime minister (1976-1981); Alphandéry and Strauss-Kahn were ministers of Finance and the Economy (respectively, 1993-1995, and 1997-1999). Stoléru has had various ministerial responsibilities at the Ministry of Social Affairs and the Central Planning Agency. And Sautter has been the Minister of the Budget before taking charge of the Ministry of Finance (1999-2000).



Figure 4-3: National Curriculum for the 'Licence de Sciences Économiques' in French law faculties, 1957.

**APPENDIX**  
**Curriculum of Courses for the Licence de Sciences Économiques**

Economic Subjects		Non-economic Subjects	
	No. of semesters. <sup>1</sup>		No. of semesters. <sup>2</sup>
<i>First Year :</i>			
General Economics (I)	2	Private Law and Legal Institutions	2
Financial Institutions	1	History (social and legal)	2
		Political Science and Constitutional Law	2
		International Institutions	1
Total for the year: 10 semesters, <sup>1</sup> or 15 hours of lectures per week.			
<i>Second Year :</i>			
General Economics (II)	2	Private Law	2
Labour Legislation	1	History (social and legal)	2
		Administrative Law	2
		Criminal Law	1
Total for the year: as before.			
<p>During the first and the second year, economics represents hardly one-third of the <i>ex cathedra</i> teaching. But students may choose seminars in economics and written examinations in economics. Practically, this amounts to devoting half of the time and energy to economics.</p>			
<i>Third Year :</i>			
History of Economic Thought	2	Business Law	2
Statistics and Methods of "Observation"	2	History of Political Ideas	1
Taxation	1		
Economic Fluctuations	1		
Social Security	1		
<i>Fourth Year :</i>			
Economic Systems	2	Optional	2
International Economics	1		
Management of the Firm and Accounting	1		
Economic Geography	1		
Fiscal Policies	1		

*Notes.* It should be remembered that when entering the *Faculté de Droit* the student, aged about nineteen, has a bachelor's degree, which requires a considerable amount of knowledge, including mathematics and/or philosophy. The new *licenciés de sciences économiques*, when he emerges after July 1959, will have a wide education outside economics and will be better acquainted with economics than the former *Docteur es-sciences économiques*. The annual output of such *licenciés de sciences économiques* may be well over five hundred a year (this is a very conservative estimate).

Source: Mossé, 1957.

Figure 4-4. Foreign linkages, ISEA, 1950s

## Institut de Science Économique Appliquée

*Directeur :*

**François PERROUX**

*Directeurs adjoints :*

**Jean LEHOMME et Yves MAINGUY**

*Secrétaire général :*

**Pierre PUJADE**

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- ADAM ROSE, Ancien Professeur à l'École Polytechnique de Lwow, Pologne.
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- RICHARD STONE, Director of Institute of Applied Economics, Cambridge, Grande-Bretagne.
- JACOB VINNER, Professeur à Princeton University, U.S.A.

## **Chapter 5. The Production of Economics in Comparative Perspective**

'Being an economist' in the United States, Britain or France stands for quite different institutional and intellectual realities. In each of these three countries, early political and economic histories have launched the professional and intellectual forms of economic knowledge production on particular paths, which, in spite of the many transformations that have affected them over time, we may still identify as long term, and relatively coherent, 'traditions'. The present research represents an attempt to understand these traditions in relation to the national 'polity structures' they are embedded in. I approached the question through an analysis of the interaction between economic knowledge production and a number of key (in this context) mediating institutions: the higher educational system, the structure of the state, and the organization of the economy. I then articulated, for each case study, 'elective affinities' between these aspects of the polity structure, the organization of the economics profession, and the intellectual form of economic discourse. In doing so, I tried to show that such structural elements affect not only the way in which economists interact with other groups and institutions in society, but also, at a deeper level, what we may call their 'identity': the way in which they think about themselves, the way in which others think about them, and, in the end, the way they think altogether.

The centrality of economic knowledge to the organization of modern states and societies, and its situation at the crossroads between discipline, science, and profession made it a particularly worthy object of study. Thus in all three cases, governments came

to be actively involved in the management of economic knowledge production, and were often instrumental (both directly and indirectly) in shaping its methodological and substantive orientations. Business and labor played an important role too, although more unevenly across the three cases. Because the legitimacy of modern states has lied partly in their ability to 'steer' the economy on a growth path, and because the policy choices therein also affect the relative power of groups in society (e.g. consumers vs. producers; business vs. labor; different economic sectors against each another), economic questions constitute definitional objects whereby societies articulate their conceptions of themselves, as well as their relations to others in the international arena.

Second, the presence of coherent and identifiable 'disciplinary' discourses, rooted in a large academic literature, which understands itself as science, places economics in an interesting position relative to traditional studies of professional development. Most of these works, indeed, have focused on the 'external' forms of professional organization and existence, as opposed to the 'internal' content of the knowledge produced. In the present research, by contrast, I have sought to describe and understand the interaction between these internal and external aspects in a single movement, by establishing a constant dialog between the transformation of intellectual forms and the transformations of the profession itself. This final chapter represents an attempt to draw the theoretical implications of this position, by reflecting on the three case studies presented in the preceding part of the dissertation. Table 5-1 presents a summary of the main findings of this research. The section below proposes of model of interpretation, which articulates the three national patterns discussed in the empirical chapters.

**Table 5-1. Summary of the case studies.**

		<b>United States</b>	<b>United Kingdom</b>	<b>France</b>
<b>A c a d e m i a</b>	<b>Institutionalization in the higher education system</b>	Contemporaneous to the rise of the modern university, extensive	Late (relative to academic institutions), yet extensive	Late and limited
	<b>Formalization of the training process</b>	High: Ph.D.	Low	Segmented
	<b>Organization of research</b>	Diversified basis, but important role of the market	Mostly state, but at arm's length (administered by academic guilds)	State
	<b>Intellectual patterns</b>	Professional scientism	Science / policy	Organized around relatively exclusive networks / more 'statist' beliefs than the other two
<b>P o l i c y / P o l i t i c s</b>	<b>Civil Service</b>	Specialists trained in universities	Generalist administrators, but specialists increasingly	Generalist (administrative) and specialist (technical) 'corps'
	<b>Economic advice</b>	Numerous formal channels of advice / information	Informal networks and temporary positions.	'Cabinets ministériels': 'corps'
	<b>Think tanks</b>	Numerous, powerful, and institutionalized	Important, but weaker and less institutionalized	Limited, mostly linked to the state
	<b>Public Sphere</b>	Important role of economists – incorporated as experts– yet no columnist tradition	Important role of both columnists and economists: 'clerisy' ideal?	'Generalist' public sphere. Limited incorporation of both economists and economic columnists.
<b>B u s i n e s s</b>	<b>Private Jurisdiction</b>	Very well developed	Important, especially in finance	Limited

There are several ways in which we may understand the three 'national patterns' formed by the set of characteristics identified in this table. A first line of explanation, which we may call 'culturalist', emphasizes the existence of nationally constructed 'cognitive frameworks' whereby individual actors apprehend the world around them, and which they rely upon to build their models of professional and intellectual engagement. In this sense, the formation of the 'identity' of economists in each national context would simply represent the 'enactment' of some preexisting scripts for action and thought. A second type of analysis, which we may characterize as 'institutionalist', points towards the importance of some selective institutional or organizational arrangements, which orient the formation and societal incorporation of economic knowledge in some particular (but typically unknown *a priori*) directions.

My suggestion is that both explanations should be used in a complementary, rather than antagonistic way. One way to think the interaction between them is to study *how broad cultural patterns are embodied in specific institutions that appear empirically relevant to study the problem at hand*. In the case of economics, I identified the state, the economy and the higher education system as central loci for understanding the modes of production and incorporation of knowledge. (See Chapter 1)<sup>404</sup> I then argued, for each case study, that such institutions define the framework within which the economics professions came to form and expand in each national context –yet I have also tried to describe the intersection between these three elements, that is, the way in which they fit together to form a 'coherent' or 'national' pattern. In this perspective, it is the dynamic

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<sup>404</sup> Studying other objects, including disciplinary ones, might necessitate a reference to different variables (I believe, nonetheless, that these three particular ones provide a general framework that is also applicable to other professional enterprises).

combination of these institutions, not their juxtaposition independently of one another, which is inherently constitutive of 'what being an economist means' in different nations.

## **Culture, Institutional Structures and Knowledge: The 'Cultural Logic'**

As pointed out by Meyer et al. (1987), broad, 'cultural' characteristic of the polity are routinely constitutive of institutionalized models of social action. Following their analysis, we may think of 'culture' as an ontological mechanism, which simultaneously defines the value and legitimacy of actions and hence, also that of the actors which perform them. Thus on the one hand, institutionalized rules (e.g. legal frames, political systems, forms of economic organization...) are actively, and sometimes intentionally, engaged in the continuous creation of the social order (as well as of the individual actors within it). On the other hand, these rules are also an enactment of underlying understandings of that same social order, and a product of actors' interpretations of it.

This grounded, institutional interpretation of what culture is differs quite markedly from more 'subjective' definitions in terms of values and beliefs.<sup>405</sup> Instead, this explanation sees culture as profoundly embedded in social structure and institutions, and 'meaning' as defined by its relation to the specific context where action takes place. Political, economic, and intellectual institutions thus not only *shape* what 'being an economist' means in different nations, they are constitutive of it.

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<sup>405</sup> See Wuthnow, 1987, for an analysis of the different 'theories of culture'.

How does this conceptualization enable us to understand specific empirical phenomena, for instance the professional and intellectual shape of economics in three different countries? In general, the answer has been to look at *how socially constructed practices rooted in history shape the cultural availability of certain institutional arrangements*. Thus Dobbin (1994), in his work on industrial policy, emphasizes the isomorphism between economic institutions and political institutions, which, according to him, reflects the way culture-embedded actors understand the question of order. Similarly, the work of Jepperson and Meyer (1991) establishes affinities between broad patterns of political organization and models of formal organizing. The present research has attempted to link national cultural logics as they operate in three institutional domains (education, politics and economy) to certain professional and intellectual forms.

### **Understanding the Professional Form: Modes of Knowledge Production**

Below is a schematic representation of the way in which we may articulate the three variables used in this study in order to understand patterns of economic knowledge production. On the first dimension, countries differ in their cultural (but also institutionalized) economic arrangements, which oppose, broadly speaking, the market to the state as the main organizing principle of economic regulation. On the second dimension, I refer to one specific institutional mechanism –the ‘degree to which higher education institutions are articulated with elite status in the state administration’. The two are often intimately connected (e.g. the *grandes écoles* in France, Oxbridge in the United Kingdom, Tokyo University in Japan). But this is not always the case: Germany, for instance, has a mass higher education system which does not, in itself, confer elite status, yet the civil service remains a highly prestigious function.



**Table 5-2: Modes of Knowledge Production/Incorporation**

<b>Market (Vs State) Organization of the Economy</b>	<b>Degree to which higher education institutions are articulated with elite status in state administration</b>	
	<b>Low</b>	<b>High</b>
State dominant	(Germany)	France : 'statist'
Market dominant	United States : 'professional' ←	United Kingdom : 'civil society'

In this model, the three countries represent three different 'ideal types' of knowledge organization, which correspond to the patterns described in the preceding chapters. I would like to make two remarks: first, this typology enables us not only to make sense of the differences between the three nations, but it also accounts for dynamic evolutions within each country. Thus for instance, the weakening of the linkage between higher education and government service in the British case helps explain the move towards the American model. Second, it is interesting to notice that, from this perspective at least, a country like Japan would appear to be closely connected to the French model (although it is traditionally understood as a 'corporate' country, more like Germany). Yet available studies of post-war Japanese economic policy (for instance Gao, 1997) emphasize a model of knowledge production much more similar to that of France –with, in particular, a strong disconnection between the universities (essentially dominated by a Marxist perspective) and a highly technocratic state administration, which was also the main proponent of Keynesian economics and then developed into a full fledged school of 'government economics' (*kanchō ekonomikusu*). (p241)

## **Understanding the Intellectual Form: Models of the Economy and Economic Models**

Economists are supposed to derive their models in a deductive manner, from 'universal' assumptions. There has been indeed surprisingly little effort to understand economic knowledge products in relation to particular cultural and institutional contexts. Yet the analysis of the American, British and French economics in the previous chapters, as well as that of Japan briefly alluded to, suggest that economic theories, far from being the simple product of the cumulative development of a science, are also 'situated knowledge', deeply embedded in culturally specific notions about economic and political order. 'Meaning systems' embodied in material institutions provide the cognitive framework and references with which economists in different nations come to apprehend their own object of investigation -the economy.

At the deepest level, we may argue that to the extent that economic ideas are predicated on a dominant representation of society, we should find some 'elective affinities' between broad, socially constructed cultural representations, and cognitive frameworks in economics. Frank et al. (1995), for instance, find that political-cultural individualism at the country level is associated with a greater prevalence of the practice of professionalized psychology and economics.<sup>406</sup> And indeed American and British scholars simply 'produce' more economics (at least in the dominant journals, which are both English-language and neoclassical) than their counterparts elsewhere in the

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<sup>406</sup> The article is about psychology. On economics, see p369, note 12.

world.<sup>407</sup> Although this fact might be partly a result of their greater 'scientific edge' and ability to publish altogether, we might also understand it from a cultural point of view.

It has been often pointed out that the neoclassical representation of the economy as a constellation of atomized actors is cognitively isomorphic to the democratic ideal of a society seen as an ensemble of interacting, purposeful, individuals. The argument about the embeddedness of modern economics into the liberal political culture which has made the 'market', in its modern form, possible, has been stressed repeatedly, for instance by Dumont (1986, p105) and Hirschman (1977). Also, the common 'liberal' creed of both democracy and the market, both of which are rooted in the defining idea of Western culture throughout its entire history –freedom– (Patterson, 1991), helps account for the intellectual closeness between British and American representations of the economy. In this respect, we may understand economic ideas and models as 'rationalizations' of an existing economic order. For instance, Dobbin and Dowd (1999) suggest that modern analytical frameworks in American industrial economics are 'predicated on the existence of some form of antitrust law'. They then speculate that the antitrust legislation passed at the end of the nineteenth century in the United States shaped not only the American economy towards a very peculiar model of competitive organization, but also influenced the way American economists came to view the world and consequently, produce a 'discourse' about it.

Similarly, we may suggest that developments in French economics might be understood in relation to broader patterns of polity organization. Porter (1995), for

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<sup>407</sup> The journals are the ones in the SSCI database. Also see Elliott, Greenaway and Sapsford, 1997, for an analysis of the domination of American scholars over the main outlets of European academic production.

instance, correctly suggests that the French engineers' view of their task has long been characterized by the calculation of optima, the discovery of definite solutions to complex, often abstract, problems –as if acting on behalf of a benevolent and all-powerful (state) actor. What individuals perceive as an exciting intellectual problem, therefore, might depend on cognitive frameworks and a web of social experiences, both of which are in great part defined within a particular national culture. After all, game theory, which institutionalized so successfully in the United States, and general equilibrium theory, which was developed in great part by French economists, propose two very different visions of society.<sup>408</sup>

### **The Social Organization of Economic Knowledge: The 'Institutional Logic'**

Now individuals are also embedded in a vast array of institutions, which support, reinforce, or reject these conceptual frames, which validate certain questions, and make others illegitimate. Beyond the correspondence between broader models of societal organization and institutional and intellectual patterns of knowledge production in economics, this research has also emphasized organizational logics and structures as useful middle-range analytical tools for exploring the construction of intellectual and institutional identities in economics. Below is an exploration of the theoretical

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<sup>408</sup> Post-war Germany represents another interesting case, with the influential analytical framework of 'ordoliberalism' (known, in its policy applications, as the 'social market economy') fitting in well with a corporate model of social and economic organization where the state stands as the guarantor of a proper economic 'order'. (W. Eucken, *Die Grundlagen der Nationalökonomie*, Jena, 1940)

implications, for each of the domains explored in this study, of the kinds of questions raised by the empirical cases.

### **Academic Structures and the Shaping of Disciplines**

The structure of the academic system has been generally overlooked as a strategic site for understanding patterns of professional development. As a matter of fact, 'academic professions', such as the one investigated here, have rarely attracted interest as such.<sup>409</sup> From the point of view of my own study, however, the educational system seemed like a natural starting point for researching a set of actors whose expertise is firmly grounded in a disciplinary framework. Perhaps another reason for the relative neglect of education is that studies of professionalization were often derived from the German and American models -two countries with a decentralized and relatively poorly stratified university system-, so that the educational factor is taken-for-granted and not seen as a source of variation. The demonstration I have conducted on France, with its two (or more) tracks system, and on England, with its powerful inter-institutional hierarchies, however, hopefully makes a convincing case for the contrary assumption. First, I have recognized that jurisdictional claims on the economic domain are indeed firmly grounded in the educational system, whether the Ph.D. (in the United States), the passage by an elite undergraduate institution (in Britain), or by a selective school (in France). I also showed the importance of educational variables for understanding the *transformations* of the economic knowledge field over time, as well as the intellectual orientation and professional location of economists. In particular, I argued that differences in the *timing*

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<sup>409</sup> But see Clark, 1987.

between the institutionalization of social scientific discourses and the transformation of universities account for different paths of professional development. In the United States, the simultaneous occurrence of both installed educational criteria at the center of professional definitions, whereas in Britain a more 'amateurish' (from the point of view of the training received) tradition prevailed.

Second, I have also argued that the way in which higher education routinely 'produces' communities of 'specialists' differs widely across nations, depending on the structure of the academic system and its articulation with the political and economic realm. My preliminary observations on the fieldwork I accomplished in Germany are consistent with this assumption, and place (for instance) such aspects as the 'mandarin' tradition in universities and public life at the center of any explanation of the fragmented structure of the economic knowledge-producing field. It is interesting to point out that federalism and the relative absence of stable institutional stratification among universities gave very different results in Germany than in the United States. In the latter setting, their combination with a high degree of inter-institutional mobility and a (relative) reliance on market regulation for the management of the academic profession, have led to a relatively high degree of intellectual homogeneity as well as a strong formalization of professional standards based on technical criteria. In Germany, by contrast, federalism combined with a fairly rigid and hierarchical structure within universities accounts for the economic field's intellectual organization around decentralized groups, working quite independently from each other. University curricula were thus structured around the individual interests of professors, rather than around the unifying notion of a 'core' body of knowledge.

An interesting extension of this discussion suggests that national institutions shape general patterns of intellectual organization in important ways. In a breathtaking study of world philosophy since Antiquity, Collins argued that intellectual life is constrained by what he calls the 'law of small numbers', which postulates that 'the number of contemporaneous creative schools successfully propagating their ideas across the generations is between three and six'. (1998, p380) While the present research does not in any way constitute a 'test' for this proposition, it nonetheless suggests that certain institutional arrangements (in the educational system in particular) might be more prone to intellectual fragmentation and others more susceptible to homogeneity. As a matter of fact, there *is* a considerable difference between three and six. Thus the institutional fragmentation of the educational and research systems in France is also reflected in a fairly high degree of intellectual (and especially methodological) diversity. In the United States, diversity was eliminated by a competitive academic environment highly sensitive to matters of political partisanship, and committed to the ideal of scientific positivism. As a result, the American field has been the main promoter of a paradigm, whose homogeneity, universalism and relative intellectual monopoly are also among the main elements of its worldwide success. In the United Kingdom, the overarching authority of the oldest and most powerful institutions first ensured homogeneity, but, once international leadership in the field of economics moved away from the country, this authority also became the reason why non-orthodox approaches were able to persist so long at the center.

## **Political Structures and the Shaping of Policy**

This dissertation has also demonstrated the role of political institutions in shaping the economists' professional enterprise. I have shown for each national case how state action and state structures enter the processes whereby corporate actors (such as professions) are routinely constructed. (Skocpol, 1985) In other words, I have argued that *the nature of political institutions and the policy-making process are themselves constitutive of the economists' attitudes towards their own professional jurisdiction, as well as their intellectual attitudes towards particular analytical frameworks in economics.* Among these processes, the formal channels of incorporation of expert advice into policy-making are perhaps best known. As Rueschmeyer and Skocpol argue, 'the social composition, ideas, and favored modes of research and argument of knowledge-bearing groups are profoundly influenced by the social status arrangements and the political institutions of their respective societies. In turn, these larger contexts influence whether and how policy-oriented intellectuals can have influence within national politics.' (1996, p10) Many fine empirical studies, for instance, recognize and articulate the role of the state in professional development, either through the authoritative manipulation of curricula, credentials, accreditations and careers (as in France, or Germany), or the provision of specific avenues for the exercise of expertise. (as in the United States)

In the United States the role of the economist has been explicitly formalized within the governmental structure, both at the lower and higher levels. Economists enter the realm of the state as skilled specialists, whose specific contribution is acknowledged explicitly by the various administrations, which employ them, and by the existence of



professionally 'exclusive' agencies, such as the Council of Economic Advisers and the Congressional Budget Office.

In the United Kingdom, an official body (the Government Economic Service) also recognizes 'economists' as a distinct expert group, yet there remains a sharp status distinction between 'specialist' and 'administrative' grades, which top the hierarchy and until recently were the province of elite amateurs trained in 'arts'. On the other hand, public officials and politicians routinely relied on long informal acquaintances for advice, and on the authority of professors at elite institutions. Those same professors, along with a large number of 'interested' and competent personalities also offer advice (sometimes unsolicited) through decentralized mechanisms in civil society –the press, pamphlets, the parties.

Finally, the organization of economic policy-making in post-war France has relied on a highly stratified labor market, with separate training and career lines for economic decision-making, technical tasks, and academic production. As a result, generalist technocrats, whose value comes not from specialized qualifications but from an elite status conferred by education, constitute the main purveyors of economic advice.<sup>410</sup> The fact that state administrations recruit their 'economists' through exclusive training avenues –thereby disregarding the legitimacy of other societal sectors (the universities in particular) to offer advice or design policy– has been a powerful force shaping the entire field and introducing a deep intellectual rift in its middle.

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<sup>410</sup> This statement goes with precautions, naturally. In particular, the most 'internationalized' sector of the French economics profession shares with its American counterpart strong reluctance against generalist understandings of competence.

How governments incorporate economic knowledge is part of the processes, which construct the field's social purposes, and the distinctive 'identity' of its practitioners. In France, economics was developed within the institutional framework of the state after World War II, as an integral part of the expansion of economic management capabilities. As French public officials saw it, the organization of France's economic modernization required the construction of a new elite in the economic domain, and the traditionally weak and 'peripheral' universities could not be trusted with the task. Economics was thus incorporated into the government profession itself, as an element in the training of generalist administrators (the *Sciences-Po* students, *énarques* and members of the *grands corps*), and as a basis for the development of a new, specialized, *corps* of technical administrators (the *INSEE* administrators). In Britain and America, on the other hand, economic knowledge production possessed more autonomy, its 'center' continuing to be located outside of political institutions. Therefore, the legitimacy of economists in government relied on the '*professionally functional*' character of their knowledge for the state. The United States, with both its civil service organization and its administrative structure strongly articulated around specialist functions, best exemplifies this model. Britain represents a mixed case due to the presence of a class of generalist, and purposefully so, civil servants. Yet in contrast to France, the latter is sufficiently permeable to authorize specialists to 'swap' into administrative (i.e. decision-making) functions.<sup>411</sup>

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<sup>411</sup> Nettl's argument about the different role of the legal profession in continental Europe and Anglo-Saxon countries has been an important inspiration for this paragraph. (1968, p584-585)

Whatever its forms, incorporation of economic knowledge into the state apparatus stimulated technical evolutions in the field, especially from World War II to the late 1960s when the 'Keynesian' paradigm was in full swing. The articulation of policy-making as objective, quantifiable expertise working towards the attainment of well-specified goals encouraged such a development in all three countries. Yet within this common 'technocratic' framework, idiosyncratic factors at the national level still encouraged certain intellectual styles over others, as each economics profession became embedded in different political projects, different ideas about what the legitimate economic goals are, and the best ways to achieve them. These projects, and the policy frameworks they support, encouraged the development of certain particular skills with which economists came to be identified. For instance, we may identify, among the skills promoted by the competitive nature of the American political process, the practice of 'experimentation' as a means to discriminate between policy options. The latter is non-existent in France, where, by contrast, the 'technocratization' of economic policy took the form of national planning, and economic knowledge and research came to be mobilized as an element for the achievement of centrally defined national objectives.

### **Market Structures and the Shaping of Jurisdictions**

The organization of the economy has been often ignored as a factor shaping the domain within which professions define and construct their jurisdictions. The subject as such created a self-evident focus on this aspect: since economics is a *discourse* on the economy, and economic policy is an *action* on the economy, it is only normal to draw attention to the latter. Although the economy is perhaps the less articulated factor in my study, it is a deeply interesting one.

In the preceding chapters, I have called attention on the processes whereby economic organization routinely shapes the structure and working of a profession such as economics. The ecology of American professions, including the academic one, is organized on a market basis. And indeed the higher 'price' of economists in academic and other societal sectors reflects more or less the interaction between demand and supply, in a market shaped by the high premium accorded to economics' multiple commercial uses (in finance and consulting especially). Britain and France, on the other hand, represent more publicly managed economies: the price of academics is fixed centrally, with little interdisciplinary or inter-institutional variations. What is interesting, however, is that British economists seem much more susceptible to act on market signals and desert the public sector altogether (both academia and government) when these 'prices' (e.g. salaries) drop, than the French ones. (It is also true, however, that the latter's opportunities in the private world are much less attractive) Thus when French economists 'swap' into the private world, they often do so in managing positions, on the basis of their status in the higher civil service or the political elite rather than as providers of a specific service and competence.

This warrants a more general argument about the implications of this study for the study of professions, in relation to Abbott's book in particular. On the one hand, his central assumption that professions exist in a competitive ecological system, and evolve in relation to the outcome of inter-professional competition, is indeed illuminating when applied to the American system, and to a lesser extent the British one. However, I find its application to other national settings much more problematic. Indeed, in countries where the market plays a lesser role in the regulation of economic activity, it is also likely that

inter-professional relations will take a different, non-competitive shape. The same reason might also explain why the practice of economics is largely confined to the non-commercial sector in France: economists simply do not see themselves (and are not regarded) as 'professionally relevant' to other economic sectors, whether in the legal, financial, or corporate systems. In this context, the 'competitive' metaphor may not be the most appropriate to understand the relationship of economics to other professional groups.

### **Post-Scriptum: The International Reconstruction of the Economics Profession**

What does the future hold? In lieu of a conclusion, I would like to reflect upon the ongoing process of internationalization of the 'national' professions I have explored in this study. In each of the three case studies, I mentioned the importance of international influences in shaping each of the national fields. Let me recall a few examples here. In the chapter on the United States, I showed that German economic research in the nineteenth century provided an influential model for the nascent professional enterprise of American economics, and profoundly affected the way in which American economists came to think about the economy, and about their role in society. In the chapter on Britain, I have mentioned the important role of American philanthropy in fostering an applied, quantitative orientation among British economists during the inter-war. In my analysis of the French case, I stated that the Marshall Plan played an important role in promoting a technocratic, modernizing orientation among the higher civil service, which contributed to reshape the practice of French public policy-making.

### **Paths to internationalization**

Certainly it is worth thinking about these mechanisms as a process of globalization whereby the relatively uniform professional, scientific and political culture of neoclassical economics spreads via interpersonal networks, international institutions and organizations, in other words 'professions at work'. The material presented in the case studies, however, suggests a much more complex story, where both the fact and processes of international diffusion appear quite differentiated across nations. Certainly the small number of case studies is a limitation here, as is the cultural proximity between the United Kingdom and the United States, which share both a language and a strong neoclassical tradition in economics. Yet even then, I have pointed out that American influences diffused through widely different networks in the United Kingdom and in France. In the former, academic communities located in the core institutions of the system (Oxbridge and, especially, London) provided important points of contact with the American scientific elite. Yet because of the higher profile of these institutions, however, American-style professionalization remained slow there (except in London, which has always had a very cosmopolitan tradition). On the other hand, peripheral and newer universities, which did not possess an established status, came to see such alignment on American scientific and training norms as a way to enhance their position within the local field.

The case of France is more complex. In this country, American-style professionalization has come almost exclusively from the engineering tradition and has proceeded in a piecemeal fashion, more as a result of the interest of individual persons than as the outcome of an organized policy. Certainly the *Corps des Ponts et Chaussées*

has been particularly accommodating in facilitating the development of a pure economic research orientation among its members, although the latter often does not appear directly relevant to its administrative mission. Other 'Corps' (e.g. the *Corps des Mines* in the recent period, the *Corps de l'INSEE*) have been much less welcoming.

Academic communities and elite 'corps' are not the only possible patterns of internationalization. Other countries have had distinctive patterns too. The 'modern' Italian school in economics, for instance, which stands as a well organized community of U.S. trained scholars (with, even, a separate professional organization), was in large part produced by the sponsorship of the Bank of Italy, through a close connection with a famous Italian émigré scholar, Franco Modigliani at the Massachusetts Institute of Technology.<sup>412</sup> Students of Latin-American economics have shown the importance of political parties in channeling the role of U.S.-trained economists towards positions in the state administration.<sup>413</sup> Finally, international organizations have generally played a considerable role in the socialization of national communities of economic experts (from both developing and developed countries) in the professional and intellectual norms of the West.

In all these cases, however, foreign linkages were used to enhance credibility, and convert them into valuable 'capital' in the local struggles over the definition of what economics is. In the United Kingdom, internationalization was a somewhat natural move, due to the cultural and scientific closeness between the American and British traditions. In France, however, the polarization between the international and national orientations

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<sup>412</sup> Source: Interviews.

<sup>413</sup> E.g. Centeno (1994) and Babb (1998) on Mexico; Valdes (1995) and Montecinos (1998) on Chile.

has been much greater, partly because international hierarchies are much less easily accepted there. A recent study showed the nearly complete concentration of French publications in top economics journal (Combes and Linnemer, 1999) among a small group of US-trained scholars, many of them from the *Corps des Ponts et Chaussées*, and many of them living abroad.

Scientific and intellectual internationalization is often seen as involving relatively passive and homogeneous 'core institutions' transforming a no less passive and homogeneous 'periphery'. As pointed out above, however, these diffusion processes remain highly dependent upon 'mediating' national structures. (Guillén, 1994) Thus on the one hand, credibility gained in the American field may constitute a precious asset for the assertion of intellectual claims 'back home'. In many Latin-American countries, for instance, U.S.-trained Ph.Ds have come to occupy central positions, not only in the academic world, but also in the political sphere.<sup>414</sup> On the other hand, in traditionally less 'dependent' academic fields, where mechanisms for intellectual and institutional legitimization differ widely from the U.S. ones. (Lamont, 1987) the position of such 'outsiders' might remain marginal longer. France, where U.S. Ph.Ds have long experienced difficulties to enter a local academic domain protected by the 'agrégation' diploma, is a good case in point.

### **The 'American' Shape of European Economics.**

In order to assess the nature of the internationalization process in economics, I collected data on economics associations throughout the entire world, which are reported

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<sup>414</sup> Markoff and Montecinos, 1993.



in Figure 5-1.<sup>415</sup> The expansion of these organizations exemplifies an interesting pattern of institutionalization. Earlier associations were of general purpose, and mostly centered on the national community (e.g. *Economic Society of South Africa*). As the national fields grew in size, they became more specialized (which is indicated by the 'national-topical' category in the graph, for instance *French Association of Economic Historians*). After World War II, associational founding patterns also became more international in scope and purpose, although international associations often remained based in the United States, and hierarchically dominated by scholars established there. Since the 1980s, however, a third phase seems to be unfolding, with the worldwide emergence of a regional pattern of organization. In many instances, these new organizations host disproportionate numbers of members educated in the core institutions of world economics (most prominently in America), but who have returned to their home countries, and as such they play a critical role in the socialization of peripheral economics communities into the norms of professional scientism, as well as in its intellectual frameworks.<sup>416</sup>

Up until the mid-1980s, European economists socialized in American scientific norms met in the United States rather than in Europe. However, a 'Europeanization' trend started at the beginning of the 1980s, led by US-trained economists. The *European Economic Review* and the *European Economic Association* (both of them created during

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<sup>415</sup> See Fourcade-Gourinchas, 1999, for a closer exploration of internationalization processes in economics.

<sup>416</sup> Williamson (1996) notes for instance that the Latin-American Econometric Association played a critical role in diffusing Anglo-Saxon approaches among local economists and establishing linkages with international models and references. Also see quote above about the European Economic Association.

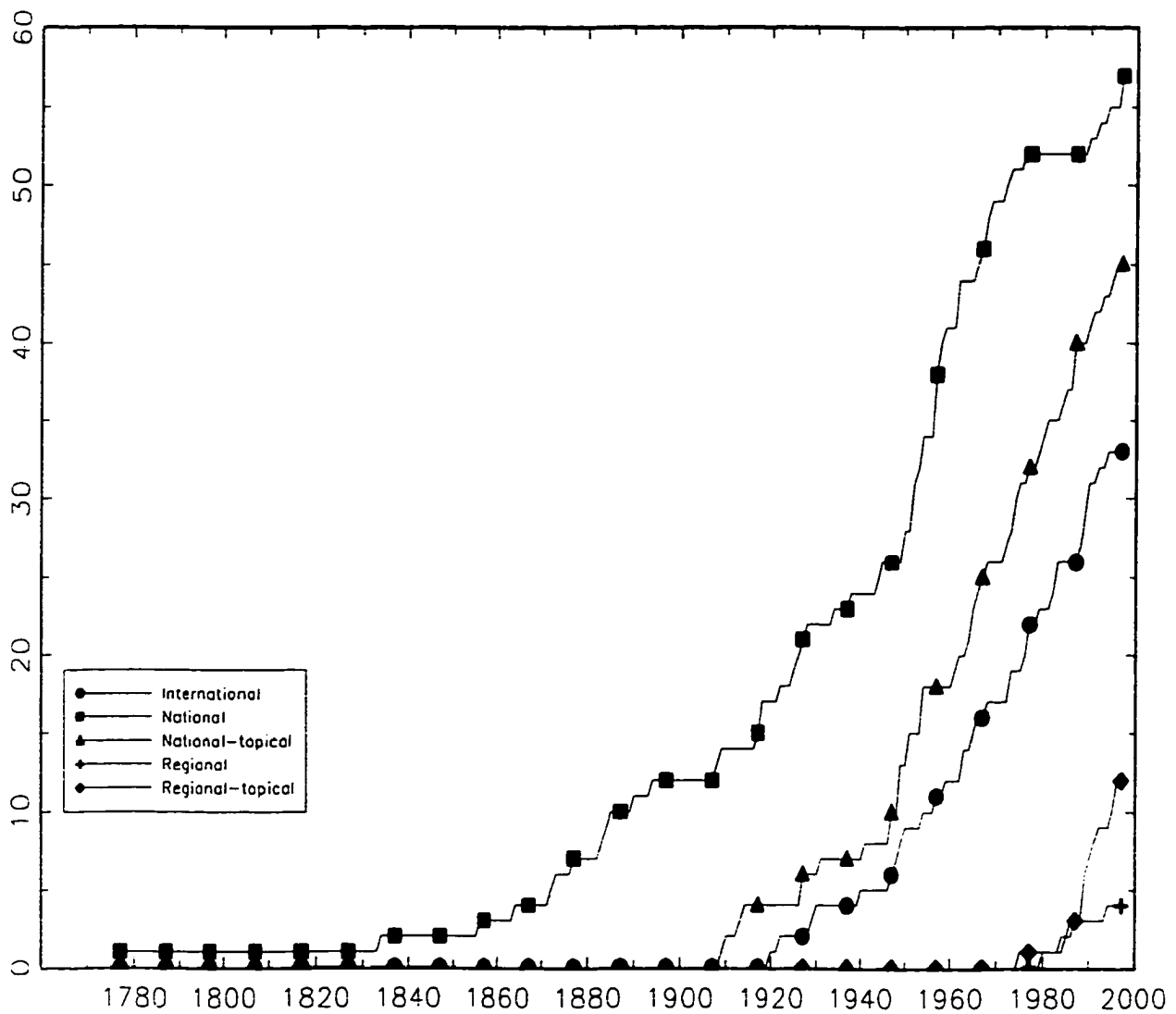
the mid-1980s) are strongly based in transatlantic networks, and provide the main points of contact with the scientific community in the United States, both 'exiled foreigners' and indigenous scholars. The building of the European Community has relied heavily on such networks for its expertise (notably the CEPR)<sup>417</sup>, thereby promoting the 'international' segment of the national economics professions.

It would be mistaken to understand the 'regionalization' movement described above as a reconstruction around the local economics communities of Europe. I would indeed argue that internationalization has led regionalization (rather than the other way around). As national economies are being rebuilt around transnational models, it becomes increasingly difficult for economic practitioners to stand outside the international scientific community centered on the United States. With the effacement of the nation-state as the locus of economic sovereignty and activity, what it means to be an 'economist' is now increasingly directly constituted and defined within an 'international' context, which is not uniform but clearly organized and hierarchized according to 'global' mechanisms of intellectual and professional stratification.

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<sup>417</sup> See Chapter 3.

**Figure 5-1. Cumulative Foundings, Economics Associations, by focus.**



Sources: *World Guide to Scientific Associations and Learned Societies*, Saur, 1997 edition; and 'Economics Associations and Learned Societies' on Christian Zimmermann's homepage at <http://netec.wustl.edu/EDIRC>.

## Appendix

### 'Measuring' the Economics Profession?

Practically the task of appraising the size and boundaries of an 'economic profession' is a very arduous one, especially since the few existing national quantitative studies differ in the prevailing criterion they use for identifying individuals as 'economists' --which makes any sort of cross-national comparison of size hazardous. Blaug and Towse's study for Britain, for instance, relied essentially on an educational criterion (the possession of a post-graduate degree in economics) (1988:16) --a *parti-pris* which aroused a storm of controversy in a country where, until recently, such a degree was not even a requirement for an academic job. On the other hand, the *National Science Foundation* surveys in the United States have used a rather loose form of self-identification: hence about 160,000 people in this country call themselves 'economists', although this denomination does not necessarily match their job title nor their educational background<sup>418</sup>. One last possible path is to use professional associations' data, yet this is not satisfying either: first, countries differ markedly in their degree of professional organization, a quite obvious fact in Table 6-1. The French economics association, for instance, was created quite late, never played a significant role, and was almost moribund until it suddenly came back to the surface in the 1990s. Second, such associations often

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<sup>418</sup> Source: NSF, 1988. There is, however, a considerable discrepancy between the NSF figures and those from individual organizations. For instance, the series by the U.S. Office of Personnel Management (*Characteristics of Federal White-Collar Workers*) gives much lower figures concerning the number of economists in the federal government (5,707 in 1989 as opposed to about 13,000 in the NSF survey). Similarly, the number of business economists, as estimated from the membership in the National Association of Business Economists, is only 3,500 (compared to 102,000 in the NSF data).

represent only an occupational 'segment' of the economics profession: hence the existence of parallel organizations for academic, government, or business economists<sup>419</sup>, or for specialized topics within each sub-field of economics (e.g. the *Econometrics Society*).

**Table 6-1: Size of the main professional organizations for economists in different sectors of employment**

	United States		Britain		France	
a c a d e m i c	American Economic Association (1885)	23,000	Royal Economic Society (1890)	3,200	Association Française de Sciences Économiques (1950s)	800
b u s i n e s s	National Association of Business Economists	3,500	Society of Business Economists	630	Association Française des Economistes d'Entreprises	<200
g o v e r n m e n t	Society of Government Economists	?	Government Economic Service (administrative body)	ab. 600	Associations linked to 'corps': INSEE alumni ENA alumni	

Finally, ready-made classifications, such as those found in national employment statistics, are also a poor indicator to use in a comparative context, since some important

<sup>419</sup> One should note, though, that academic associations also traditionally serve as forums for the entire profession. In 1993, about 52% of the members of the American Economic Association were non-academic, as well as 36% of the members of the Royal Economic Society. (*American Economic Review*, 1993, p635; Royal Economic Society, 1994, p186)

discrepancies remain in the level of institutional recognition of an occupational category for economists. Civil service statistics in different countries are a good illustration of this. While the U.K. and the U.S. statistics clearly acknowledge the existence of a special class of civil servants under the 'economist' denomination, France provides a very different model, with individual workers being designated by their position as members of certain status groups and administrative bodies (the various 'corps de l'Etat'), rather than by their effective occupational capabilities and / or educational training.

## Data and Interviews

Data for this research consist mainly of interviews, statistical data on economics education and the labor market for economists (both current and past), and a large a variety of primary material ranging from personal memoirs, government reports, newspaper and magazine articles, information obtained from professional associations, individual corporations and state agencies. Finally, I also used a large amount of historical sources, both scholarly studies relating to my subject and primary accounts from witnesses at different points in time.

The data contain a bias in favor of academics, although I have tried to interview people from business and government in each country as well. Among academics, I have also interviewed mostly people who are active in the 'macroeconomics' sub-field (broadly conceived), because the latter often represents the most visible element of the profession.

The following is the list of the 92 interviews I conducted in France, the United Kingdom, Germany and the United States between June 1995 and November 1999. Interviewees were selected on the basis of their professional qualifications and age. My principal concern was to meet economists who had diverse professional experiences (in academia, government, business, or the think tanks), and would also represent a variety of generations. I proceeded by constructing a series of networks. I directly contacted a first group of people, basing my selections from various directories of professional associations and from my own assessment of who would be a good 'point of entry' into a particular segment of the profession. Most of the following interviews, in turn, were the

result of individual recommendations from these first contacts. The larger number of interviews in France corresponds to the necessity to make up, to a greater extent than in the other two countries, for the absence of a relevant literature on economists.

Interviews lasted between one-half hour and five hours, with a majority around one hour and one half. All were taped, but almost always under condition of anonymity. I met some people twice.

Except where indicated, interviews were conducted at the site of the main professional function.

Except where indicated, the title 'professor' means 'professor of economics'.



Table 6-2: List of Interviews

Date		
<b>FRANCE</b>		
June 1995	Director, Economic Studies, Indosuez Bank	
	Ph.D. Student, University of Paris X	
	Researcher, OFCE	
	Director, Economic Studies, IFRI	
	Director, CSERC	
	Director, Department of Economic Studies, OFCE	
	Assistant, Euro 92	
	Professor, École Normale Supérieure and University of Paris I	
	Economist, Direction de la Prévision	
	Researcher, CREST	
	Direction de la Prévision	
	Economic Studies, INSEE	
	Director, Economic Studies, Bank of France	
	Professor, University of Paris I	
	President, AM Conseil	
	July 1995	Director, OFCE
		Bank of France
Director, Macroeconomic Studies, BIPE		
Director, Economic Studies, National Bank of Paris		
French Confederation of Insurance Companies		
Vice-Director, REXECODE		
Cour des Comptes		
Director, COE; Professor, University of Paris I (2 interviews)		
Director, CEPREMAP		
Director, Euro 92		
Professor, Sciences Po		
August 1995	Director, IRES	
	University of Aix-Marseille	
	Director, CEPII	
	Researcher, CEPREMAP	
	INSEE	
	Professor, INSEAD (interview conducted by phone)	
	Researcher, CEPREMAP (2 interviews)	
	Researcher, CEPREMAP	

June 1996	Secretary, French Association of Business Economists Director, SEDEIS
<b>UNITED KINGDOM</b>	
June 1997	Professor, University of Oxford Professor, London Business School and Director, CEPR Professor, University of Cambridge 2 Economists, Department of Trade and Industry Journalist, <i>Financial Times</i> Professor emeritus, University of Cambridge Professor, University of Cambridge Professor, De Monfort University Professor, University of Oxford 3 Business Economists, on the board of the Society of Business Economists. Professor, London School of Economics Professor, University of Oxford Professor, University of Sussex Professor, University of Bristol Professor, University of Birmingham Professor, University of Cambridge
<b>GERMANY</b>	
June 1997	Professor, business administration, University of Mannheim Professor, University of Stuttgart-Hohenheim
July 1997	Ph.D. Student, Free University (Berlin) Director, Economic Research Department, Bundesbank Researcher, Bundesbank Professor, Humboldt University (Berlin) Professor, University of Mannheim Researcher, IFO Director, DIW, Berlin Economist, Ministry of Finance Professor, Free University (Berlin) Librarian, Kiel Institute of World Economics Researcher, Kiel Institute of World Economics Professor, University of Mannheim and Director, ZEW Professor, University of Hamburg Professor, University of Frankfurt Professor, University of Tübingen Economic Studies, Westlandes Bank Director, Economic Studies, Deutsche Bank Assistant Professor, University of Munich

January 1998	Professor, University of Mannheim (interview conducted at the AEA meeting, Chicago)
<b>UNITED STATES</b>	
December 1996	Assistant Professor, Harvard University and NBER.
January 1997	Professor, University of Wisconsin (interview conducted at the AEA meeting, New Orleans) Secretary, National Association of Business Economists (interview conducted at the AEA meeting, New Orleans)
April 1997	Professor, MIT Professor, Harvard University Professor, Emeritus, Harvard University
January 1997 and April 1997	Professor, MIT (first interview conducted at the AEA meeting, New Orleans; second interview conducted at MIT)
January 1997 and January 1998	Professor, University of Iowa (first interview conducted by email; second interview conducted at the AEA meeting, Chicago)
May 1999	Economic Journalist / Essayist (interview conducted by phone) Professor, Harvard University, and NBER.
July 1999	Professor, Princeton University
August 1999	Economic Consultant, Washington Economist, US government (Small Business Administration) Senior Fellow, Brookings Institution Economist, Congressional Budget Office Senior Fellow, American Enterprise Institute Economist, Congressional Budget Office
October 1999	Professor, NYU
November 1999	Professor, Princeton University

## Nobel Prizes in Economics

**Table 6-3: Nobel Prizes in Economics**  
(by country of citizenship -or birth if not US or UK citizens)

Year	Nobel citation for:	Name	Taught in US	US cit.	UK cit.	Country of birth
1969		<del>Jan Tinbergen</del>	X			Norway
		<del>Jan Tinbergen</del>				Netherlands
1970	Static and dynamic economic theory	Paul Samuelson	X	X		
1971	Growth theory	Simon Kuznets	X	X		Russia
1972	General equilibrium theory and welfare theory	Kenneth Arrow		X		
		John Hicks			X	
1973	Input-output method	Wassily Leontief	X	X		Russia
1974	Theory of money and economic fluctuations	Friederich von Hayek	X		X	Austria
		Gunnar Myrdal	X			Sweden
1975	Theory of optimum allocation of resources	Leonid Kantorovich				Russia
		Johannes Koopmans	X	X		Netherlands
1976	Consumption analysis, monetary history and theory, stabilization policy	Milton Friedman	X	X		
1977	Theory of international trade	James Meade			X	
		Bertil Ohlin				Sweden
1978	Decision-making process within organizations	Herbert Simon	X	X		
1979	Economic development	Arthur Lewis	X		X	St Lucia
		Theodore Schultz	X	X		
1980	Econometric models	Lawrence Klein	X	X		
1981	Analysis of financial markets	James Tobin	X	X		
1982	Industrial structure / regulation	George Stigler	X	X		
1983	General equilibrium theory	Gerard Debreu	X	X		France
1984	National accounts	Richard Stone			X	
1985	Savings and financial markets	Leif Johansson	X	X		Italy

1986	<i>Economic and political decision-making theory</i>	James Buchanan	X	X		
1987	<i>Growth theory</i>	Robert Solow	X	X		
1988	<i>Theory of markets and efficient utilization of resources</i>	Maurice Allais				France
1989	<i>Probability theory foundations of econometrics</i>	Frygve Haavelmo	X			Norway
1990	<i>Financial economics</i>	Harry Markowitz	X	X		
		Merton Miller	X	X		
		William Sharpe	X	X		
1991	<i>Transaction costs and property rights theory</i>	Ronald Coase	X		X	
1992	<i>Economics of human behavior</i>	Gary Becker	X	X		
1993	<i>Economic history</i>	Robert Fogel	X	X		
		Douglass North	X	X		
1994	<i>Game theory</i>	John Harsanyi	X	X		
		John Nash	X	X		
		Reinhard Selten				Germany
1995	<i>Rational expectations and its application to macroeconomics</i>	Robert Lucas	X	X		
1996	<i>Theory of economic incentives under asymmetric information</i>	James Mirrlees			X	
		William Vickrey	X	X		Canada
1997	<i>Determination of the value of derivatives</i>	Robert C. Merton	X	X		
		Myron S. Scholes	X	X		
1998	<i>Welfare Economics</i>	Amartya Sen	X			India
1999	<i>Policy under different exchange rate regimes / Optimum currency areas</i>	Robert Mundell	X	X		

Source: Middleton, 1998. Also, see Nobel Prize Internet Archive at:  
<http://nobelprizes.com/nobel/economics/economics.html>

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