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**THE TRANSFORMATIONS OF  
MODERN CAPITALISM**

***BY THE LIGHT OF THE  
"REGULATION" APPROACH AND  
OTHER POLITICAL ECONOMY THEORIES***

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**A B S T R A C T**

This paper aims at understanding the long run transformations of capitalist institutions and explores their consequences for macroeconomic adjustments. It is argued that along with neo-corporatism and transaction cost theories, the "Régulation" approach could be a possible piece for a new political economy of institutions. The case studies dealing with systematic cross national comparisons of sector governance modes broadly confirm the structural and far reaching nature of current transformations and suggest that sonyism or toyotism could be one of the follower of fordism, and a brief characterization of its basic principles is provided. Nevertheless, the micro-meso-macro bridge has still to be conceived and implemented. In any case, the procurement of skills and even capital operates mainly at a localized level, which opens some role and degree of autonomy to political compromises and original institutions within a given territory (community, regions, nations, continental zones). Finally, even if internationalization is stronger and stronger, contrasted national trajectories seem to emerge from the last two decades.

**LES TRANSFORMATIONS DU CAPITALISME CONTEMPORAIN :  
L'ECLAIRAGE DE L'APPROCHE DE LA REGULATION ET AUTRES THEORIES  
DE L'ECONOMIE POLITIQUE.**

Robert BOYER

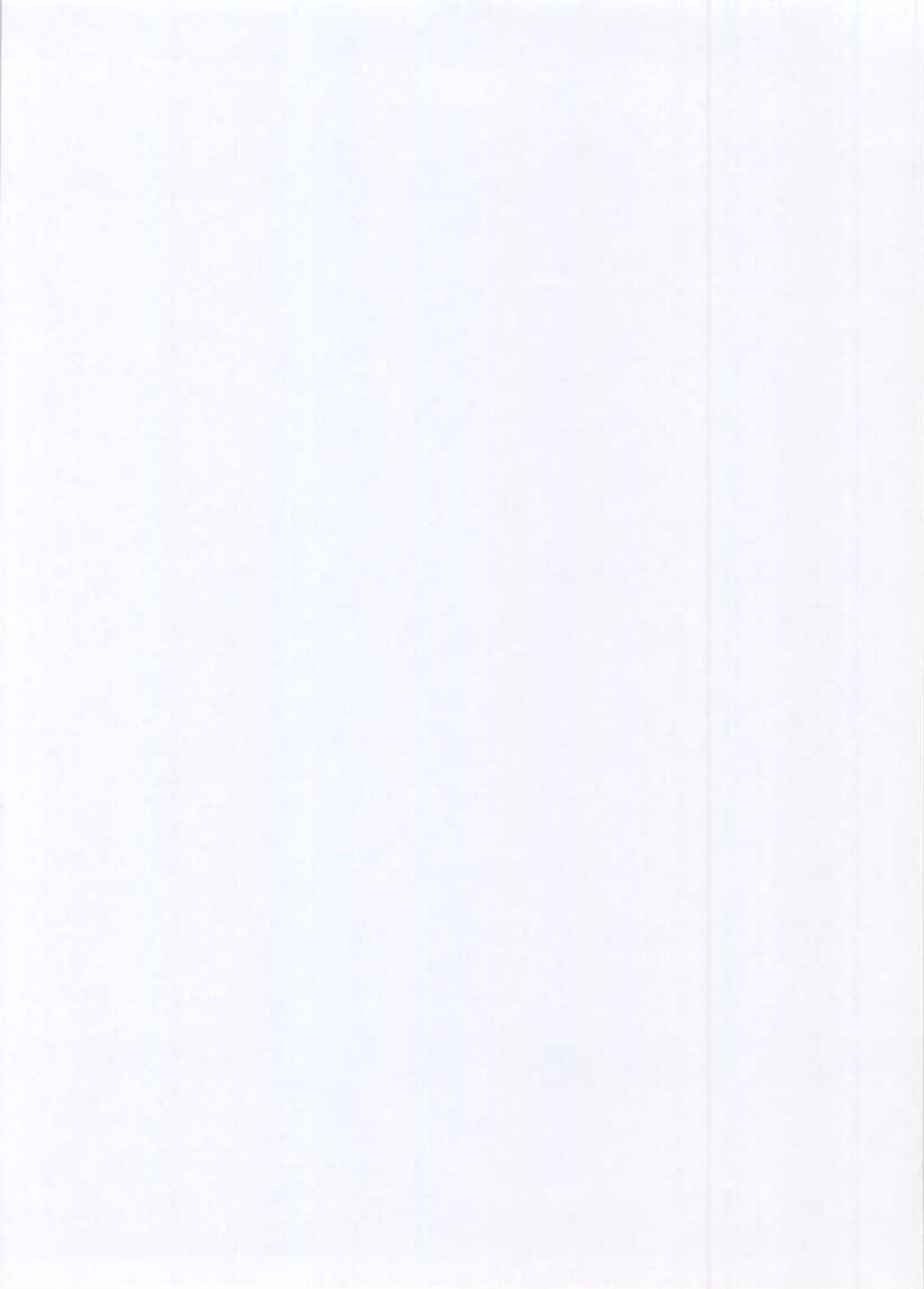
**R E S U M E**

En vue d'interpréter les changements institutionnels en cours dans les économies capitalistes, il est avancé que l'approche de la régulation pourrait être l'une des composantes d'une nouvelle économie politique des institutions, en parallèle ou en concurrence avec les théories du corporatisme et des coûts de transaction. Une série de comparaisons internationales concernant les modes sectoriels de gestion confirme le caractère structurel des transformations en cours et suggère que des principes alternatifs au fordisme ont d'ores et déjà émergés, qualifiés de sonyisme ou toyotisme. Reste à résoudre le passage du micro au macro, qu'une approche sectorielle peut précisément éclairer. Comme l'alimentation en travail qualifié et capital continue à s'effectuer sur une base locale (la ville, la région, la nation, voire un espace de libre échange), demeure possible une certaine autonomie des compromis et institutions. Même si l'internationalisation est de plus en plus pressante, des trajectoires nationales contrastées émergent de l'observation des deux dernières décades.

**Mots clés :** Théorie de la régulation, Coût de transaction, Corporatisme, Nouvelle Théorie des Institutions, Modes sectoriels de gestion, Changement structurel.

**Keywords :** "Régulation" Approach, Transaction Costs Economics, Corporatism, New Theory of Institutions, Sectoral Governance Modes, Structural Changes.

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*It has generally been the fate of economic theory to run a losing race against the course of history, and never to have completed the analysis of one phase of economic development before another takes its place.*

Joan ROBINSON.

## **I - INSTITUTIONAL CHANGES, INERTIA OF SOCIAL RESEARCHES.**

The current period is interesting indeed, since it brings fresh air into most of previous theories about modern societies. From an economist's point of view for example, not any old, rejuvenated or brand new analysis seems to be able to explain the major stylized facts exhibited by the last two decades. The slowing-down of growth and the rise in unemployment, the diverging patterns between Japan, US and Europe, the reasons and the consequences of the Wall Street crash, the paradoxical state of international relations, split between laissez-faire statements and a creeping protectionism, the uncertain prospects about growth and inflation define as many puzzles for orthodox theorizing.

Basically, such a flux might well derive from the previous disconnected approaches followed by the political scientists, sociologists, economists and historians. During the roaring Sixties for example, the economists used to adopt a very disembodied approach about the basic institutions of modern capitalism, as well as a very rationalistic and probably naïve view of the political process. After all, were not the politicians convinced to apply the optimal policy designed by the economists ? In the Keynesian system, public spending and tax rate, as well as monetary policy, were seen as pure instruments in order to achieve full-employment without inflation and external disequilibrium. In the short and medium run macroeconomic models, all the institutions were hidden into a very limited number of parameters. As far as long run trends were concerned, neo-classical growth theory was totally abstracting from any form of social and economic organization, the pure and perfect functioning of markets removing any need and influence to any of these configurations.

Just in order to convince the reader, let me Quote two of the best minds in the economic profession, both Nobel Price winners. During a special session of American Economic Association devoted to the links between economic history and modern theories, Robert SOLOW stressed that : "My impression is that the best and brightest in the profession proceed as if economics is the physics of society. There is a single universally valid model of the world. It only needs to be applied. You could drop a modern economist from a time machine -a helicopter may be- at any time in any place, along with his or her personal computer ; he or she could set up in business without even bothering to ask what time and which place" (W.N. PARKER, p. 25-26). During the same session Kenneth ARROW expressed the following view : "Is economics a subject like physics, true for all time, or are its laws historically conditioned... What does standard economic theory have to contribute to economic history ? It could fail on several grounds. Theory might be so overwhelmingly powerful that history would become uninteresting, merely the playing out of a well defined script. Or it could be so wrong as to constitute an obstacle to historical understanding" (W.N. PARKER, p. 15-16). Our author was fearing more the second alternative than the first.

This state is not limited to neo-classical theory which for convenience adopts the view that consumers tastes, technologies and coordinating mechanism are given once for all. Even if Keynesians have recognized the historical character of market failures, they use to propose universal and timeless measures for promoting full-employment. Most of them are therefore surprised when they realize that contemporary reflations do not produce the same outcome as previously : the large openness of national economies, the burgeoning of financial innovations, high capital mobility are seen as countervailing and contingent features, rarely as an invitation for revisiting macroeconomic theorizing. Similarly, what is left of Marxian tradition is now fond of long waves in the Kondratief style, or alternatively very mechanistic approaches to the complex modern capitalist national economies and international system.

The paradoxical evolutions observed since the mid-Sixties, have progressively taken relevance away from the premises of most economic theories. Now everybody, from laymen to politicians, not to forget managers and unionists, do perceive the deep and various structural changes which are now occurring in management styles, work attitudes

and organization, state interventions, professional associations and so on. Still more, many observers now imagine subtle but probably far reaching links between economic performances *stricto sensu* and the sophistication of organizational forms, or in other words the governance structures. This is the major challenge for social sciences, which now, much more than during the Thirties, are facing the crucial issue of combining a set of various approaches into a possibly unified view about the present changes affecting modern capitalism.

The central argument permeates this paper. A race takes place between the current historical processes of transformation and the inherent inertia of research programs; adding up the achievements and potential developments of neo-corporatist theory, the disorganized capitalism view and the regulation approach might help in elaborating a relevant theory. Therefore the paper will unfold as follow. First within the governance structure melting pot and a renewed institutionalism, the regulation approach will be presented, as one contribution among many others (II). Second, it will be suggested that each specific line of analysis has a contribution to such a project, the weaknesses of some theories being balanced by the strengths of others (III). Third in the light of the regulation approach, the major findings of the sector and comparative study will be surveyed and discussed in the context of the present project (IV). Then, the apparent dilemma between sector governance systems and national regulation modes will be investigated (V). Finally, it could be useful to derive some hunches about possible and alternative ways out the crisis or at least about the very uncertain present situation (VI).

## **II - THE REGULATION APPROACH IN A NUTSHELL AND ITS SIMILARITIES WITH ECONOMIC GOVERNANCE ANALYSES**

The comparative studies on modes of governance and the "régulation" approach share a lot of similarities. They jointly aim at understanding the current transformations in advanced capitalist economies, using comparisons between nations, at the sector or aggregate level. Contrary to the narrow specialization between subfields of social research, both the governance and the regulation approaches try to mix social, political and economic factors, and therefore they build various specific intermediate

notions. Finally, they draw converging insights about the structural changes which have occurred for two decades.

A group of French economists (and now other European and American colleagues) has been trying for fifteen years to answer three major questions. First, why periods of *fast and stable* growth turn into relative stagnation and instability ? Why, *during the passage of time*, do major crises take *different directions*, since for example the present crisis is not at all the repetition of the great crash of 1929 ? For the same historical period, why growth and crisis assume significantly *different national forms*. Appendix 1 gives a very brief presentation of this emerging research program, the "Régulation" Approach (RA). Let us underline six features, which exhibit striking similitudes with the Economic Governance Approach (EGA).

### **1. Economic governance and the régulation mode are twin concepts.**

A mode of "régulation" denotes any dynamic process of adaptation of production and social demand resulting from a conjunction of economic adjustments, linked to a given configuration of social relations, forms of organization and structures. Extended at the macro level of capitalist economies, this definition is somehow related with the concept of Governance i.e. "the totality of institutional arrangements, rules and rule-making agents that coordinate and regulate transactions inside and across the boundaries of economic sectors" (Comparing Capitalist Economies, p. 4).

### **2. It is misleading to oppose pure markets to state interventions, since all modern economies are characterized by a mix of intermediate forms.**

The conventional wisdom in neo-classical theory is that, market is the only known efficient institution for coordinating decentralized strategies, whereas at the opposite, state, collective actions, interest groups and regulations can only bring disturbances instability, misallocation of resources and therefore unemployment and/or inflation. RA has tentatively shown that economic activity has always combined individuals and collective organizations, within *institutional forms* which channel individual behaviors within a given set of structural constraints.

Five institutional forms combine themselves to define a regulation mode : the nature of competition, the type of monetary constraints and management, the institutionalized compromises between state and citizens, the mode of support for the international regime and finally the forms of wage labor relation. Even if the definition of economic governance is different, sector and much more general, the empirical studies show that these five components are present in any sector and national case.

Two results have to be emphasized. First, in early capitalism, rather competitive labor markets were the outcome of explicit institutional interventions for example via laws and regulations (R. BOYER (1986)). Second, in contemporary societies, the so-called return to free market is indeed are composition of previous dividing lines between social group and sectors, private and public firms. The few competitive markets (stock exchanges, raw materials,...) are social constructs, not the result of any natural law.

### **3. In the long run, regulation modes have been changing.**

An other drawback of the neoclassical vision is to assume that economic mechanisms are invariant through time, which contradicts most of evidences about economic history, the functioning of labor markets, long term growth, economic crises and so on. RA shares with EGA the hypothesis of evolving institutional organizations and economic adjustments, at least in the long run.

First, the basic institutional forms have been transforming themselves via the pressure of major economic crises, the impact of political and social struggles, the destabilizing role of new technological paradigm and many other causes (Table 1). Second, as far as American (M. AGLIETTA (1982) and French capitalism are concerned (R. BOYER, J. MISTRAL (1978), MAZIER J. & alii (1984)), the regulation modes themselves have been changing.

Over two centuries, the old regulation ("régulation à l'ancienne") has been replaced by the competitive one, after the mid of the last century. Later, the way out of the 1929 crisis was found via the constitution under the aegis of State of third regulation

**TABLE 1 : TWO CENTURIES OF FRENCH CAPITALISM IN A NUTSHELL :  
THE REGULATION APPROACH VIEW OF ECONOMIC INSTITUTIONS**

PERIODS	1789	1848	1873	1896	1914 - 1918	1929	1939 - 1952	1967	1973	1980
<b>INSTITUTIONAL FORMS</b>										
° WAGE LABOUR NEXUS - Work organization	Manufactures replace craftsmen	Work duration is extended but reaches crisis level	Limitations of malleability of work rules	Early Scientific Management	Massive use of Taylorian methods.....	....implemented for civilian goods.....	....but workers oppose to it	Industrial disruption and recovery	Fordism becomes dominant.....But hits some limits	The search for new forms
- Lifestyle	Basically out of the capitalist sector	Slight evolution in consumption norms	Slow insertion of wage earners in society			Social wage is recognized as a principle		Lauching of a complete ° Welfare system ° Workers benefit from mass consumption		The slowing down shakes Welfare State financial stability
° COMPETITION - Concentration and centralisation	Large plants are emerging.....	.....Tendency towards concentration	Finance capital is strenghtening		Cooperation large firms/State	Industrial cartels and financial holdings	Basis for national planning	Concentration of markets.....	.....French holding become international....	...a new balance between home and international strategy
- Price formation	Controlled by guilds	Principle of free market	Price clear the market	Early monopolistic pricing	State price controls	First example of mark-up pricing	State controls	° Administrated prices, public control ° Medium term strategy in pricing decisions		...the return to more price competition
° STATE - Budget & taxes	Limited to general functions	.....even if regulations are important	Significant economic interventions (railways)	Small size of budget/GDP	Unprecedented surge	Budgeraty cuts.....	Relative growth in the the depression	New and high level for public spending/GDP	Slow growth..... stabilization.....growth of the size of State	....tentative to curb down competition
- Money & credit	Metallic reserves limit money creation	Credit is checked by external balance and interest rate variations			The war financed by pure money credit....	.....so is the postwar boom	Return to gold standard	Credit money has now a leading role...devaluations.....	.....periodic .....tentative monetary controls	.....crisis of economic policy
° INTERNATIONAL REGIME - Hegemonic	England is the core of industrial revolution.....		and the banker of the world United States and Germany are challenging British hegemony		British decline is reinforced	.....surge of US might	US are now hegemonic, organize and stabilize the international regime.....	.....which is challenged by new competitors		Underlying crisis of US leadership
- Cohesive forces	Exchange of manufactured goods versus primary commodities	The relative stability derives from the position of England			The loss of competitiveness	.....destabilizes the system	A new international order.....	.....allows OECD growth.....	.....till the crisis of the Bretton Woods	A very unstable system

Source : "Approche de l'inflation", CEPREMAP-CORDES (1977)

mode, based on fordist methods of production, Keynesian macro policy and new social compromises about a Beveridge welfare state (at least in Europe). Therefore the configuration of main macroeconomic variables has drastically be altered : the cycle was first stagflationnist, then combined deflation and depression and finally again inflation and mass unemployment (Graph 1).

In my sense, this is a significant argument in favor of the governance hypothesis and the emphasis placed upon the changing patterns of institutions during the present crisis.

#### **4. The institutional setting matters for macroeconomic performances.**

International comparisons along these lines (Y. BAROU, 8. KEIZER (1984), CEPII (1984), R. BOYER Ed. (1986)) suggest that, during the Sixties, a high rate of growth, low inflation and unemployment were associated with the more sophisticated forms of monopolist regulation. In a sense, the results are quite similar to that obtained by the neo-corporatism school (G. LEHMBRUCH and P.C. SCHMITTER Eds (1981)). However some differences have to be stressed. First, a corporatist political structure is not the only factor : the coherence of various institutionalized compromises is important as well. Second, the regulation mode is characterized by a set of parameters in a fullfledged macroeconomic model (R. BOYER, B. CORIAT (1986)) and not only by the degree of centralization of political power and interest intermediation.

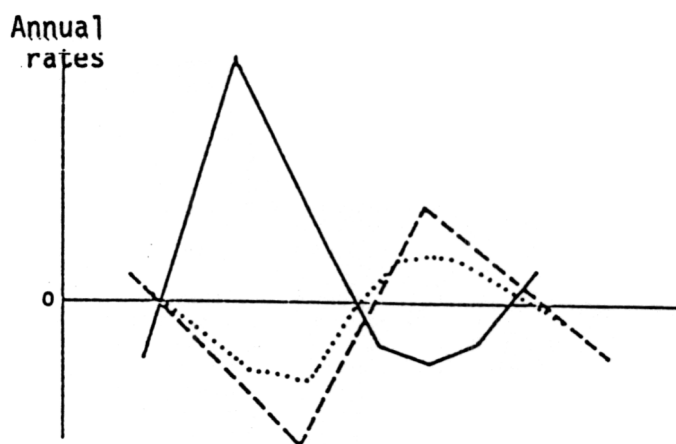
The convergence with EGA is noteworthy. The paper "Comparing Capitalist Economies" makes very similar statements : "the fact that some countries have been more successful in responding to such pressures than others, has raised the question of whether different institutional "mixes" of markets, communities, corporate hierarchies, associative self-regulation and state intervention in the management and control of transactions inside and across sector boundaries *make a difference* in terms of firms' and industries' ability to adjust to todays's international environment and to maintain or restore competitiveness" (p. 9-10). The divergence is sharp with respect to conventional views which closely correlate macroeconomic performances with pure and perfect competition. On the contrary, the

# GRAPH 1 : CHANGING INSTITUTIONS FINALLY ALTER MACRO ECONOMIC ADJUSTMENTS.

## I.E. REGULATION MODES

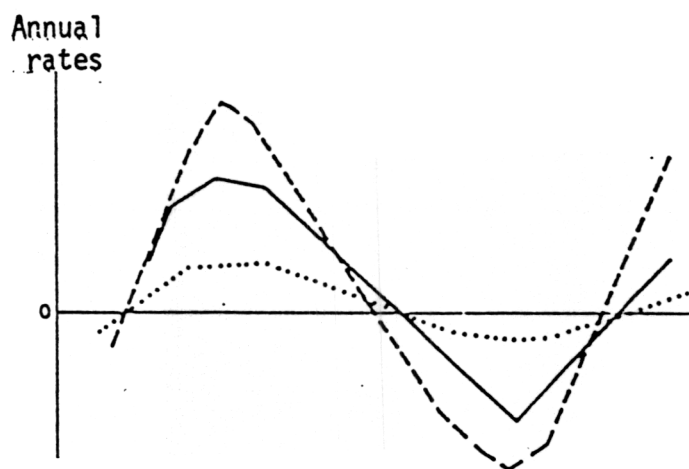
### 1. THE OLD REGULATION

XVIIIth century



### 2. EARLY COMPETITIVE REGULATION

XIXth century

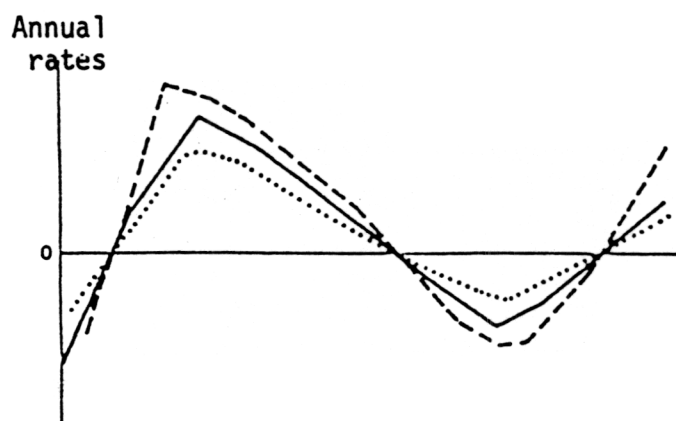


#### LEGEND :

- ..... Nominal wage
- Cost of living
- - - - - Production

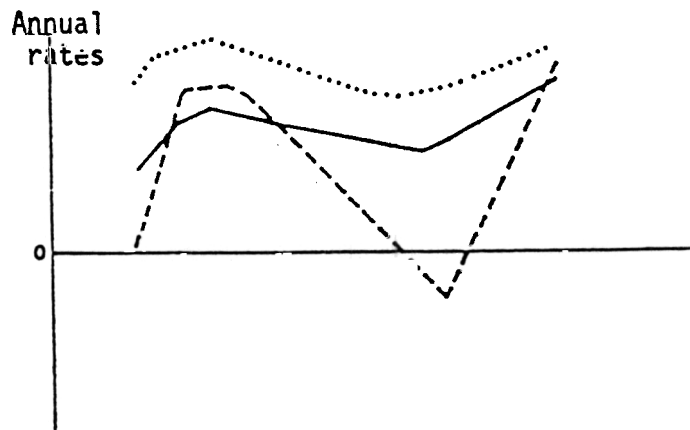
### 3. MATURE COMPETITIVE REGULATION

(Interwar period)



### 4. MONOPOLIST REGULATION

(Contemporary period)



Source : R. BOYER 1978) "Les salaires en longue période", *Economie et Statistique*, n° 103, Septembre, p. 55.



sophistication of networks and communities seems an outstanding advantage in the contemporary search for competitiveness.

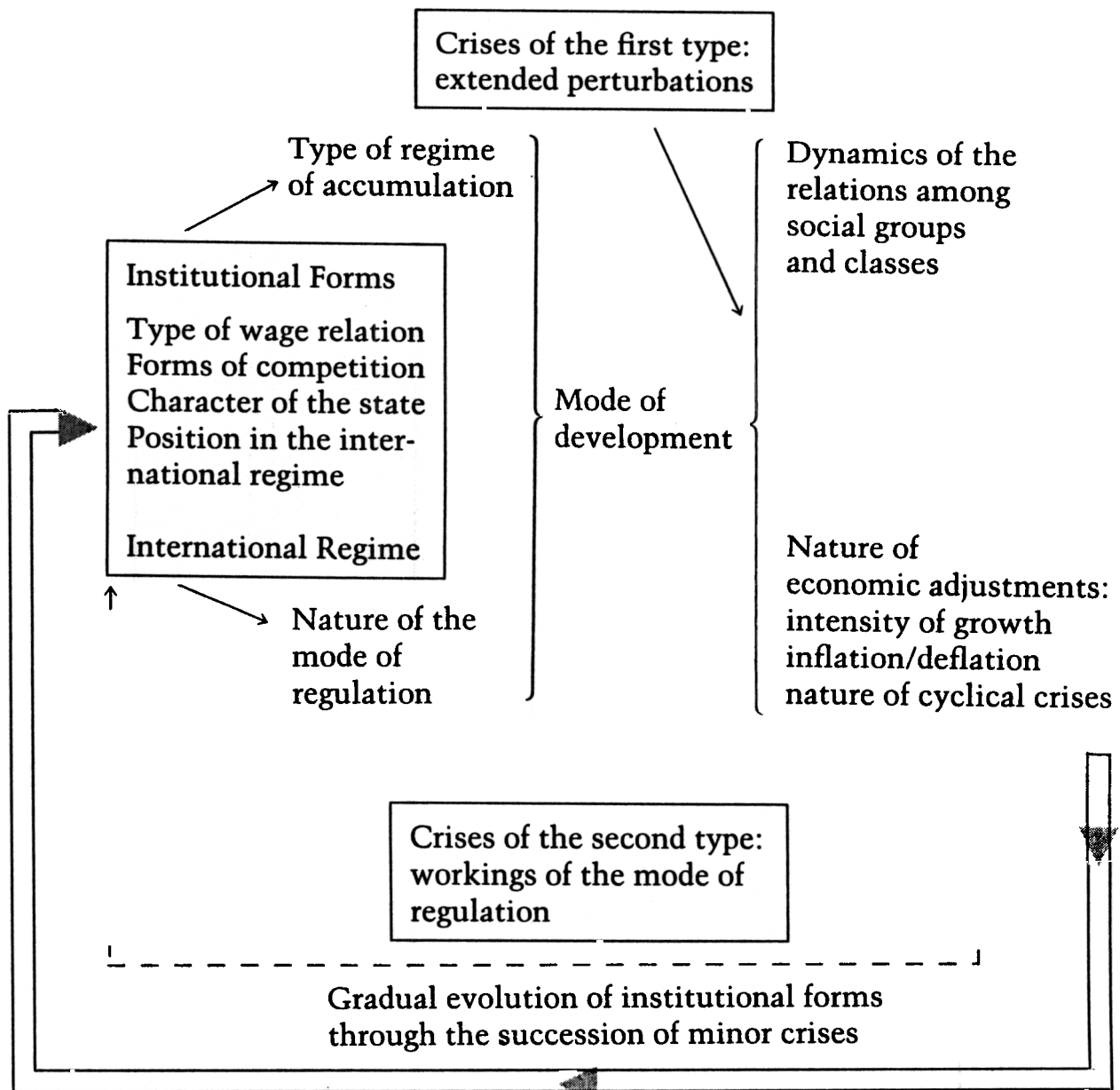
**5. Modern economies are experiencing a significant change in their organizational forms.**

EGA and RA share the same relativism about the so-called economic laws : they can be altered across countries and through time. One of the basic results is precisely that in the Eighties most economies are subject to intensive and uncertain transformations in their productive organization, wage relation, State regulations. In fact, the post WW II growth regime is now out of function ; therefore firms, States and social groups are groping after new methods for coping with financial instability, greater international competition, new techniques and products linked to information, synthetic materials and so on.

The concept of structural crisis (as opposed to cyclical) aims precisely at understanding such episodes (Graph 2). The latter are the very expression of "régulation" in reaction to the recurrent imbalances of accumulation. The former have a deeper rooted nature : the very process of accumulation throws into doubt the stability of institutional forms and the "régulation" which sustains it. Therefore this partial rupture in the functioning of the system paves the way to the search for alternatives. Volume I case studies give many examples of such a situation. The American machine tool industry would precisely suffer from the very success of its past innovation, as well as the success of followers in designing alternative productive organizations (G. HERRIGEL (1989)). The British electronics consumers has experienced a quasi-breaking down of previous governance structures (A. CAWSON (1989)). In all these cases, the very dynamics of the system destroys its pre-requisites, like a snake which would try to eat its own tail ! The homology between RA and EGA concepts is striking.

After all, the whole study about sector governance is centered upon the same analysis : what is the degree of flexibility allowed by previous governance modes ? Is the same model diffusing within the sectors all across national borders ? Possibly this research

**GRAPH 2 : A SCHEMATIC PRESENTATION OF THE CONCEPTS OF REGULATION THEORY WITH A SPECIAL EMPHASIS UPON STRUCTURAL CRISES.**



Episodes during which the reproduction of the economy comes into contradictions with the social forms supporting them: the GREAT CRISES, or STRUCTURAL CRISES, which fall into two types:

Crises of the third type:  
of the mode of regulation

Crises of the fourth type:  
of the regime of accumulation  
and mode of regulation

would benefit from some of RA studies, which bring some hints about the regulation mode at the macro level (M. AGLIETTA, R. BOYER (1982), M. AGLIETTA, A. BRENDER (1984), R. BOYER Ed. (1988)). We will return latter to this argument.

## **6. A priori, different strategies might overcome the present crisis.**

Again, both approaches share the same vision : the evolution of institutions and economic activities can be strongly different according to sectors and nations. The question is not whether economies will evolve towards pure market competition or alternatively towards a complete socialization via the State, but how *intermediate institutional forms* will emerge combining a large set of social economic and political factors. Under this respect, the taxonomy proposed by "Comparing Capitalist Economies", sophisticated by L.N. LINDBERG, J.L. CAMBELL, J. R. HOLLINGSWORTH (1988) is quite illuminating for any macroeconomist involved in understanding the transformation of regulation modes during the present crisis.

As far as competition is concerned, RA uses to oppose market and firms with an intermediate form, called quasi-vertical integration (D. LEBORGNE (1987)). Obligational networks and promotional networks provide a more detailed analysis, while the distinction between individualistic and collective coordination offers a wider range of institutional arrangements. In my opinion, the "régulationnists" should quite soon adopt this very clear synthesis and try to use the corresponding empirical results as an input to their meso-macro analyses and modelling.

A last convergence has to be noted. The way out of institutional and economic mismatch (to use the expression coined by C. FREEMAN and C. PEREZ (1986)) is not totally deterministic. Just to follow the image proposed by H. PIRENNE and worked again by R. HOLLINGSWORTH, P. SCHMITTER and W. STREECK, the history of capitalism looks like a stair case, but during the Eighties, the various national economies may have bifurcated. Some are more confident with markets and are increasingly destroying previous organizations, others are ascending towards a new stage of organized capitalism. This was precisely the theme of a recent research (R. BOYER (1991)) which has exhibited, by other methods, such a divergence :

Either, the way out of the crisis is expected from more competition without significant institutional innovations and collective guidance via the state. The likely result seems to be a tendency towards stagnation. If the free market strategy is sharpened, the risks about financial and economic instability are quite important.

- Or, new intermediate level institutional forms are designed to promote cooperation at the firm level, to delineate new boundaries between private and public sectors, to set up minimal rules in the international system. In that case, a renewal of growth and a decline in European unemployment is possible if not warranted. Everything is up to the precise regulation mode which will result from innovations, conflicts and cooperation between social groups, industries and nation-states.

### **III - THE MELTING POT FOR A NEW POLITICAL ECONOMY.**

Let us now broaden our scope, and investigate the mutual links and possible hybridization between the RA and other analyses in modern political economy. For simplicity sake, the analysis will be restricted to three of the major ingredients which are at the roots of the governance mode approach.

#### **1. Combining the policies of neo-corporatism with the economics of the regulation approach.**

These two research programs share a lot of similarities. Both of them correspond to quite young schools of thought, approximately fifteen years old. If one uses the code word of a neo-corporatism (NC) as a specific mode of interest intermediation, the other (RA) has elaborated along Fordism, as a development mode. These concepts were designed in order to challenge the domination of pluralistic approaches in political sciences on one side, of the unique concern of neo-classical economists for pure market mechanisms of the other side. In a sense, the social democratic variant for corporatism exhibits an original process for economic coordination, in which a globalization of various interests might give a better result than a pure fragmentation of political conflicts and competition. Mutatis mutandis, this is very similar to the monopolist or administered regulation of European political economy : an adequate sharing of productivity gains,

formally institutionalized, or not, might remove most of previous crisis or cumulative depression. In other words, pure and perfect markets are not the unique coordination mechanism, nor the more efficient every where and every time.

Therefore, State intermediation and interventions are not operating within a zero sum game. If convenient political compromises are searched for and implemented, then both entrepreneurs, and wage-earners can benefit from the cumulative growth, which derives from such arrangement. This was the discovery of neo-corporatist studies about Sweden, Austria and other social democracies. Moving from synchrony to diachrony, the regulationnists got the same results for long run transformations in American and French capitalism. Within the administered regulation, Fordism could promote higher and/or more stable growth. Specially for European countries, institutionalization of economic rights seem to have benefited to standard of living as well as employment, at least until the end of the Sixties.

A third analogy emerges from a brief historical perspective of both approaches. In the early beginning corporatism and Fordism were conceived as unified and well defined configurations. But the generalization of more elaborated international comparisons has led to a more sophisticated typology. For example, G. LEHMBRUCH (1984) has proposed a whole spectrum of political configurations, from pluralism to weak, medium, strong corporatism to a state of concertation without labor. Similarly, a market driven Fordism has been opposed to a state driven, where as flawed Fordism is at odds with the flex-Fordism or the new model emerging from Japan (R. BOYER (1988)). Furthermore, a rather similar challenge has been addressed to both theories : how do regularities at the macro level emerge from a micro behaviors and strategies ? Seemingly, the exploration of micro, meso and macro-corporatisms, as well as the governance modes project define a reply to this question (A. CAWSON Ed. (1985)), whereas the need for micro or at least sector foundation is stronger and stronger within the regulation approach (see Barcelona Conference (1988), especially the session New area for research, firms, and sectors)

But all these features do not define an identical theorizing : quite on the contrary, the strength of the political approach explores a weakness of the regulation method and vice versa. The RA economic analysis is intentionally open upon political

processes, the importance of which emerges from long run historical studies (M. AGLIETTA (1976), CEPREMAP-CORDES (1977)). But the emergence of institutionalized compromises is more described than analytically deduced from any explicit political theory. Such an imbalance is all the more detrimental in consideration of the key role of political strategies as a way out of a structural crisis. Consequently, economists can benefit a lot from all the researches of political scientists about the institutionalization process itself.

Symmetrically within NC one may regret the relative looseness of the transmission mechanisms according to which global interest intermediation by the state might lead to superior macroeconomic achievements. In the corporatist tradition, this is made by relating indices measuring the degree of corporatism with inflation or unemployment rates. Trained economists feel obliged to work out a complete model which could explain such a superiority, at odds with conventional wisdom as well as general equilibrium theory. Using long run historical data, the regulationnists have elaborated typical models for competitive and then monopolist regulation (R. BOYER, J. MISTRAL (1978), L. CAUSSAT (1981), M. JUILLARD (1988), R. BOYER (1988)). Nowadays, these simple models are superseded by a series of new neo-classical models, which try to explain the hump-shaped links between centralization and macroeconomic performances (L. CALMFORS and J. DRIFFILL (1988), P. CAHUC (1989), OCDE (1988)).

This opens an area for possible cooperation between the corporatist and regulationnist schools. At a first level, one contemplates to build an original macroeconomic theory, the building block of which would be a given state of industrial relations, citizen-state compromise, business interest intermediation and of course a given regulation in the English sense for the financial system. Historians, sociologists and political scientists would have the task to provide the relevant ideal types and taxonomies. In a more ambitious project, the objective would be to understand long run structural changes. For a given set of institutional compromises, what are the short-medium and long run economic evolutions ? Answering such a question would be the objective of the economists. But alternatively, what are the contradictions deriving from economic pressures and conflicts within the political sphere ? The political scientists, the game theoreticians and many others should then investigate the crucial periods of structural crisis,

i.e. the breaking-down of past political and economic regularities. Some have already tried such an exercise and got stimulating results P. GOUREVITCH (1986), P. J. KATZENSTEIN (1985), P. HALL (1986).

Such a project would reduce the present divergences between the two approaches. For example, the international comparisons do not provide the same characterization and ranking according to neo-corporatists or regulationnists. Similarly the more complete variants for corporatism imply an intentional coordination of actors at the national level, whereas even in the more perfect Fordist configuration, the compromises are always partial and local by nature, leading to unintentional results at the macro-level. So, Fordist wage bargaining might be the outcome of a given state of industrial relations but not necessarily the ideal for macroeconomic stabilization and full-employment.

While remaining conscious of the far reaching consequences of such a project...and of its tremendous difficulties, let us turn now towards a second line of analysis.

## **2. Capitalism disorganization : an integrated view of political social and economic factors.**

Another parallel road has been followed by authors like C. OFFE (1985), S. LASH and J. URRY (1987). As regulationnists did, capitalism disorganization (CD) starts from a criticism of orthodox Marxism, and tries to use the basic concepts of MARX given the new configuration of contemporary capitalist economies. The various spheres are no more disconnected one from another, but are inter-related by many two sided causal mechanisms. The parallelism between the two methodologies is striking indeed. Claus OFFE defines as follows the aim of his investigation : "Do the procedures, patterns of organization, and institutional mechanisms that supposedly mediate and maintain a dynamic balance between social power and political authority....actually fail to perform this function" (p. 6). This is precisely the definition of structural crisis by regulationnists, if one adds economic dynamics to social power and political authority (see previous section II.1)

When applied to the present period, this leads to some general common assessments : the significance given to the flexibility issue, the danger of a segmented and dualistic society, the shift in belief, mentalities and expectations, do converge (S. LASH, J. URRY (1987), R. BOYER (1988)). Nevertheless, some significant discrepancies have to be stressed. Thus, CD is not sufficiently defined in order to conclude that it is a new long term configuration for modern societies. It might simply be the outcome of the demise of post WW II development mode. The breakdown of a social political and economic system is not necessarily an evidence for its reorganization (R. BOYER (1990)). Therefore RA possibly provides more positive views about new configurations. In fact, contrary to a rather current belief, a return to a free market capitalism is far from evident, and might even be fairly inefficient even from a purely capitalist point of view.

A decade ago the regulationnists too used to refer quite loosely to post-Fordism, as a follower of post World War II development mode. The reference to post modern culture as well as disorganization is after all very similar for CD. In both cases, the subsequent analyses have brought/or will bring more precise features about the recomposition of capitalist economies. In the mid-Seventies, M. AGLIETTA (1976) focussed on the commoditization of the various components in the reproduction of the labor forces, before converging to another view : the modern society would pass from a bourgeois-capitalism to a wage earner capitalism (M. AGLIETTA, A. BRENDER (1984)). Other early researches had over emphasized the impact on the speed of the so-called conservative counter-revolution (R. BOYER, J. MISTRAL (1978)). In retrospect, the ongoing transformations are pointing toward more than one possible new development mode. The idea of national specificities, shared by S. LASH and J. URRY (1987), p. 17 to 160) is pushed a step forward into the notion of national diverging trajectories. The re segmentation of labor and the recomposition of social groups, the deepening of a cooperative strategy within social democracies and the hybrid European community case, seem to explicit diverging paths in the medium, if not the very long run (R. BOYER (1990)). Still more, some historical studies suggest that the way out of structural crisis is not at all a continuous and steady process but, on the contrary, show trials and errors and possibly a complete reversal of previous strategies. In a sense, in the Eighties, the economic policy pendulum has shifted from an extreme laissez-faire belief to a more balanced view: verbally or implicitly, more politicians recognize now the potential



efficiency of a so-called mixed economy.

But conversely, the CD can learn many things to the regulationnists, sometimes tempted by a too economicist approach. All the problems of legitimation, collective action, interest and class-conflict are given a more detailed and coherent treatment by CD than RA. During structural crises, the economic contradictions are destabilizing the previous state interventions, consequently the debates turn basically into the political arena. But with some possible exceptions (R. DELORME, C. ANDRE (1984), A. LIPIETZ (1984), (1989)), the regulationnists have not produced major contributions in this line of analysis. In this respect, the diagnoses is parallel to the one that has just been done for neo-corporatist theories. A rather distinct line of analysis has now to be dealt with.

### **3. Can the transaction cost micro theory be mitigated by the macro regulationnist approach ?**

A priori any outsider can hardly find any evident relations between RA and the modern transaction cost economics (TCE). In his book on the economic institutions of capitalism (O. WILLIAMSON (1985)) gives the following definition : "As compared with other approaches to the study of economic organization, transaction cost economics (1) is more micro analytic, (2) is more self-conscious about its behavioral assumptions, (3) introduces and develops the economic importance of asset specificity, (4) relies more on comparative institutional analysis, (5) regards the business firm as a governance structure rather than a production function, and (6) places greater weight on the ex-post institution of contract, with special emphasis on private ordering..." (p. 18). Clearly the debate is among the new domain of micro foundations for the basic institution of existing capitalism: the vertically integrated firm, the labor contract, the role and limit of bureaucracy, antitrust regulation, the changing organization of modern corporate firm.

By contrast, all the previous political economy theories have a clear macro and comparative purpose, and generally do not deal explicitly with the micro-meso-macro problem and still less with the purely micro foundations of their analyses. Nevertheless, the role of networks, communities or professional associations is clearly taken into account

by NC and more partially and recently by RA researches (D. LEBORGNE, A. LIPIETZ (1987)). Are these approaches basically contradictory or can they be combined eclectically, as O.E. WILLIAMSON (1975 and 1985) did for law, firms' history and micro theory ?

After all, these approaches share three common features. First, the analysis is focussed on transactions and organizations and not on a purely abstract view about competitive markets, fully rational behavior and i.e. the mix of homo oeconomicus and the Walrasian concept of general equilibrium. In a sense, the TCE is elaborating the micro analytics of the basic institutions of capitalism, ultimately combined with other theories (NC, RA)...which might disagree about purely micro economic foundations and emphasize the macro and societal components in economic coordination. Second, O.E. WILLIAMSON gives strong arguments to challenge the conventional view according to which markets are always superior to private or public contracts. What NC shows for social democratic economies is functionally equivalent to the reasons for the existence of large firms or networks. Finally, a multi disciplinary approach is needed for any analysis of institutions : melting law, politics, history, management and economics becomes more and/or more fashionable in modern researches about the transformations of capitalism, purely mathematical theory being the only but noticeable exception.

Therefore, as the governance structure project aims at, one can imagine to combine some micro hunches by TCE, with the macro orientation of other political economy theories, specially NC and RA. On one side, any theory needs a rationale for micro efficiency, whereas the global compatibility has to be investigated with other tools than purely cybernetic adjustments by prices. After all, the Keynesian theory was built implicitly if not explicitly upon a very precise configuration for financial markets, industrial relations, forms of competition (R. BOYER (1984)). The challenge is now to "generalize general theory" which (after all) was built on very specific institutional setting (O. FAVEREAU (1988)). Therefore, a new macroeconomic theory could enlighten the global compatibility of a set of basic institutional arrangements operating at the meso level. Nowadays this is one of the tasks of a new vintage of RA researches (R. BOYER (1988)), which ultimately could provide a firmer macroeconomic basis to NC.

Another cross fertilization could occur between TCE and RA. On the one

hand, this latter theory has under investigated the impact of the forms of competition upon "régulation" modes. This theme was very present in the early long run historical studies especially about US capitalism : the surge of the large corporate firm was attributed a major role in price formation, labor and industrial relations, profit and investment dynamics (M. AGLIETTA (1982)). Nowadays, the decline of employment share in large plants, the rise of small or medium size firms, the break-down of some forms of vertical integration seem to exhibit a shift in the inner governance structure of the firms as well as in their coordination mechanisms. Precisely, TCE and especially O. WILLIAMSON provide many insights about the shift from a U-firm to a M-firm but it could be enlightening to test empirically the relevance of transaction cost changes as a key factor explaining this shift. More basically, turning back to the initial inspiration by management historians, what is the explanatory power of TCE for two centuries of American firms ?

In the melting pot of new institutional theories, O WILLIAMSON has initiated a lively debate, due to his multi-disciplinary approach and his very simple hypothesis : "Transaction cost economics holds that microeconomic institutions play a crucial, subtle and relatively neglected role in explaining differential economic performances -over time, within and between industries, within and between nation states and socio-political systems. The huge valuation disparity, between technological and organizational factors, to which HAYEK referred with dismay in 1945, is still awaiting redress" (1985), p. 408. This relativization of technological determinism fits quite well with one of the major insights of RA and many international comparative studies in industrial organization and labor relations : social and economic organizations are not totally conditioned by technology. Finally, TCE could benefit a lot from an historicization of its results and propositions, in order to be attracted, not towards a new variant of an historical neo-classical theories, but towards an institutional and path dependent view of history and a historical political economy (P.A. DAVID (1988), F. CORICELLI, G. DOSI, L. ORSENIGO (1989)).

After this too short and sketchy theoretical survey, it is time to review the cross national sector studies in the light of a possible new institutionalism (NI).

#### **IV - THE RELEVANCE OF CROSS NATIONAL SECTOR STUDIES FOR REGULATION APPROACH.**

Volume I empirical analyses bring many stimulating results or insights, under two major headings : first, what are the basic structural transformations occurring in contemporary capitalist economies ? Second, how to reconcile various sector modes of governance with aggregate régulation modes operating at the national/international level ? The present section will deal with the first issue and propose three provisional conclusions, whereas the next section is devoted to the second question.

##### **1. Most of governance structures are undergoing qualitative and deep changes : the present crisis is structural.**

*Quite all the sectors* scrutinized by the comparative studies, exhibit significant and sometimes impressive transformations. In *consumer electronics* the British firms quasi-collapsed and were replaced by Japanese ones bringing new products, processes and industrial organizations, whereas in France an inward strategy directed towards the home market shifted towards an internalization of investment and production (A. CAWSON (1989)). The American *steel* industry has experienced a drastic loss of competitiveness, due to the increasing inadequacy of its governance structure with respect to the novel methods implemented in Japan and newly industrialized countries (P. A. O'BRIEN (1989)). Similarly, the American *machine tool* industry, which had been leading production at the world level, is now severely challenged by Japanese as well as German electronized equipment goods. Again this decline can be attributed, for a significant part, to the inability of American forms of organization to cope with a rapid technological change, once the macroeconomic regularities which used to derive from Fordism were broken down (G. HERRIGEL (1989)).

This characterization has to be mitigated, at the two extremes of technological change. On the one hand, the *printed circuit board industry*, a quite novel branch, exhibits original governance structures, adapted to the very specific features of a very elaborated product. Therefore, one does not necessarily observe the same demise than in mature

industries (M. SAKO (1989)). On the other hand, the *dairy sector* does not show any major transformations, though it is submitted to some pressures to be reformed (F. TRAXLER & B. UNGER (1989)). Paradoxically, the *security industry*, in spite of a fast internationalization and the new opportunities opened by information technologies, has experienced only mild reforms in the governance structure mainly obtained by self regulation, possibly complemented by a set of public regulations (W. D. COLEMAN (1989)). Finally in the *chemical industry*, the mode of governance seems to adjust gradually to the deepening of internationalization, without any major challenge to the stability of organized interests (W. GRANT & W. PATERSON (1989)).

Looking at the *various countries*, one gets the feeling that most of their governance structures have been undergoing many pressures. *United States* and *United Kingdom* clearly exhibit a national component in the related crisis, since quite all the sectors under review are experiencing fast changes, sometimes a quasi-breaking-down. A similar hypothesis could be argued for France : the Fordist methods with a strong statist component are running into troubles in the Seventies and the Eighties (F. MIDLER (1984), P. D'IRIBARNE (1989), along with A. CAWSON (1989)). The case of *Sweden and Austria* is less clear, due to the lack of sufficient sector studies in volume I. Nevertheless, a rapid survey suggests that after a period of uncertainty and unbalance, the corresponding governance modes seem to fare rather well at the end of the Eighties. A closer examination would probably reveal a faster technical dynamics in Sweden by comparison to Austria, which is not invalidated by the two sector case studies about the ship building (B. STRATH (1988)) and the dairy industries (F. TRAXLER & B. UNGER (1989)).

Consequently, EGA seems to support one of the major hypotheses of RA : quite all advanced capitalist countries and for sure the international system as a whole have been experiencing a *structural crisis* for two decades. What is meant is not catastrophic economic evolutions, but the destruction of previous organizational forms due to the very unfolding of the regulation modes: disruption of exchange rate expectations after the collapse of the Bretton-Woods system, decline of Fordist methods, demise of the capital labor compromise, new conceptions and implementation for economic policy. The problem is still that these changes do not bring any clear structural and long run compatibility for

the national/international regimes. RA has tried to support this statement first by using existing surveys about the transformations of major industrial forms, second by testing econometrically the consequences of such a move upon macroeconomic adjustment processes, i.e. "régulation" modes (R. BOYER Ed. (1990)).

Seemingly, EGA strengthens this broad evidence, and therefore helps in fighting against the economicist bias of economists. For most macroeconomists, the surprising U.S. and British recoveries of the mid Eighties do suggest that the crisis is over. For RA, and possibly EGA, this statement will be correct only if it can be proven that long run social political and economic reproduction can take place within the existing institutional forms or/and governance structures. Volume I case studies suggest that a new American or British way for handling fast technical change and strong foreign competition has not necessarily emerged and been implemented, at least if one excludes the very dynamic role played by Japanese direct investments in these two countries. Therefore, within a splendid economic recovery, political scientists might still perceive a creeping crisis within institutional organization, which might finally lead to severe financial and economic imbalances (see for example S. COHEN and J. ZYSMAN (1988)).

## **2. Japan : the leading country in the implementation of an original governance system ?**

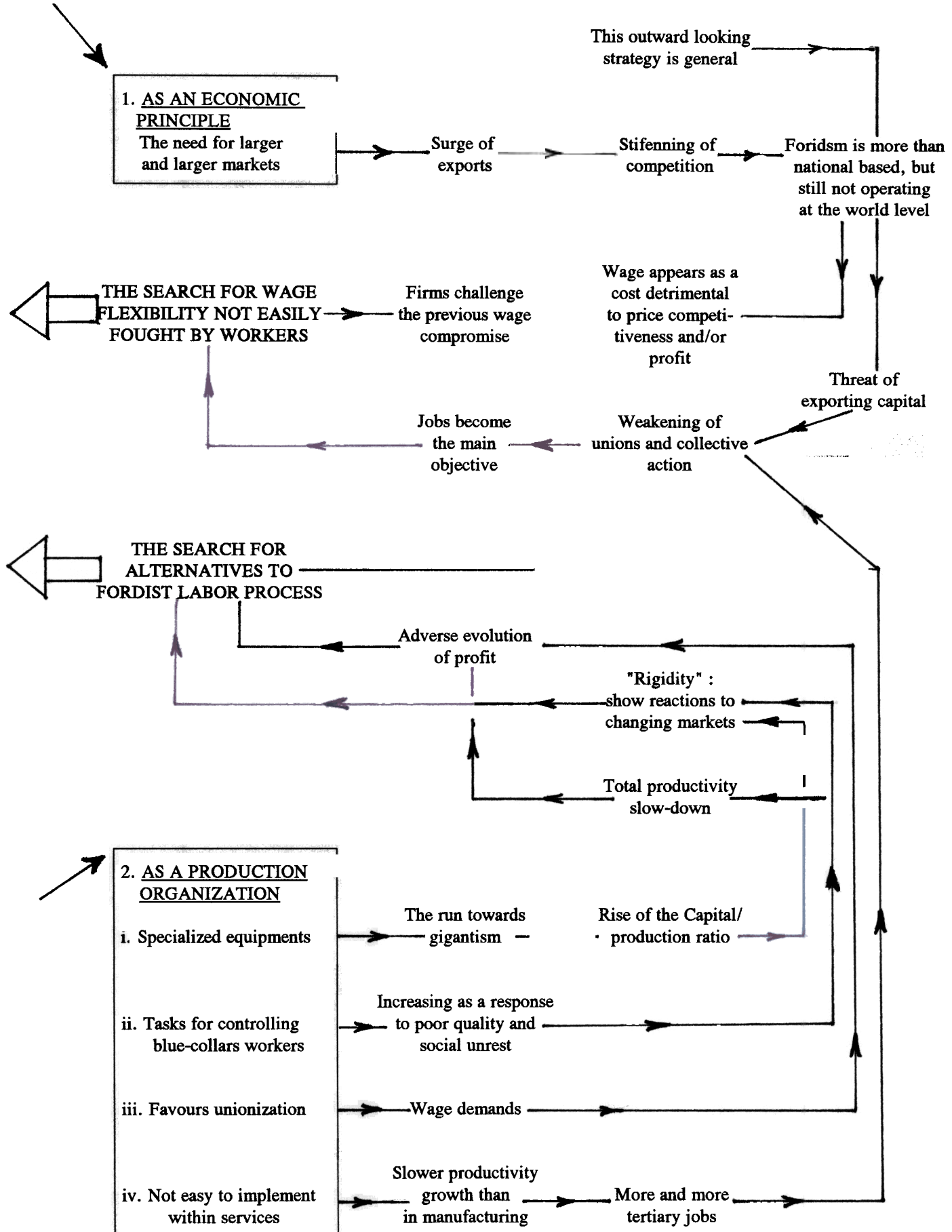
Quite rightly, the previous conclusion might be challenged, considering the Japanese case. "The consumer electronics is totally changing in UK and France under the pressures of Japanese firms and innovations" (A. CAWSON, p. 29). A similar conclusion comes out for the steel and the machine tool industries, the only exception seems to be the security industry, for which United States still have the leadership...but for how long if American deficits pile up ! Of course the Japanese are not leading in every sector : they seem rather weak in chemical industry (W. GRANT & W. PATERSON (1989)), and new industrialized countries in South East Asia are challenging some labor intensive Japanese industries. Nevertheless, globally the case studies show *a clear singularity of most Japanese governance structures*.

Recent RA researches have suggested that probably Japan has already invented one of the follower to Fordism. Just for stimulating discussion, let us call it sonyism and define it as the following complex mix : permanent product and process innovations, highly skilled and committed workers engaged in long run relationship with the firm, implicit compromise about surplus sharing, a form of planning within and outside the firm, multiple tier subcontractors included into modernization programs, networking and decentralization in order to exploit information about markets and technologies, cooperation between firms for elaborating new products but severe competition for manufacturing them, long term strategies shared by manufacturers, bankers and civil servants, careful but not Malthusian monitoring of external competition. This is at least what the regulationnists have understood from the best authors (M. AOKI (1988), C. JOHNSON, L. TYSON, J. ZYSMAN (1989), J. KOIKE (1988), R. DORE (1987)).

Every case study confirms one or another component of this model, even if it remains difficult to have a real understanding of their relative constitution or of the crucial nexus at the core of its economic efficiency about the J. model. Thus, A. CAWSON (1989, p. 9, 22) insists upon product innovation (for example VCR), quality within the production process, the influence of community firms at odds with company law firms. Just in passing, the Japanese productive community can be given various characterizations within EGA : networks, subcontracting, quasi-cartels, government and business intermediation do not necessarily describe a homogeneous governance system, an ambiguity which would deserve some clarifications. P. O'BRIEN, (1989, p. 12), focuses upon the long run view of the Japanese steel industry, continually investing in more efficient means of production, rather independently from short run sales and expectations. Close links between manufacturers and bankers appear as a requisite for such a long run view in investment and production decisions. At the opposite, if the stock market is given the central role in allocating capital, then rational choices undershort run expectations will logically down play long run efficiency and quality improvement : UK and US give a good example of such a behavior, which was blamed long ago in the General Theory for leading to poor employment achievements (J.M. KEYNES (1936)).

Therefore a kind of risk socialization can only promote long run strategies about quality and productivity (O'BRIEN, p. 20, 21), and the density of related interests

**FIGURE 1 : THE ROLE OF INTERNATIONALIZATION AND INNOVATIONS IN THE CRISIS OF FORDISM**





between finance and industry is crucial. M. SAKO too finds that Japanese firms have a preference for long term strategies, within obligational contractual relations (OCR), whereas the British firms are biased towards arms length contractual relations (ACR). Only few case studies bring at the forefront capital labor governance, with the exception of A. CAWSON. At the opposite, the synthesis by R. HOLLINGSWORTH (1989) as well as the various contributions by W. STREECK (1985) insist largely on this feature, as do most Japanese labor market specialists. One interesting suggestion is that tenure job in large firms and long run contracting would not be viable in the absence of fast product innovations and close links with banks and a small role attributed to the stock market.

If some studies claim some kind of *cultural specificities* directly linked to Japanese history (M. SAKO (1989)), the majority finds rather universal principles, which could probably be translated and adapted to a large variety of national configurations. Therefore the typology proposed by Ph. SCHMITTER (1988, p. 23) is specially relevant : markets, alliances, hierarchies, communities, networks and public authorities correspond to original and sustainable modes of governance, not to archaisms within a unique and one best way for organizing political and economic coordination. The point is specially important if Sonyism is thought to delineate a possible follower to Fordism : it has to be potentially able to be implemented in different societies and consequently has to be valid not only for the twins of the inventor nation state.

### **3. No overwhelming determinism by technical change or international competition.**

Now comes a very crucial but difficult question : what are the reasons for such massive or at least significant changes in sector and aggregate governance structures ? At least, three major explanatory factors have been proposed by the present project : advances in technology, transformation in the international regime and in competition, governments in power and their ideas about economic policy (Ph. C. SCHMITTER (1988a, p. 15, 19)). With minor exceptions, the case studies have privileged the first two determinants. Only some short remarks, deriving from RA past and present researches, will be presented here.

Let us recall briefly the basic interpretation for the Fordist demise (Figure 1). On one side, the generalization of specific equipment and the extreme division of labor in

assembly lines, leads to recurring productivity problems, both from a purely organizational side (rising unbalances between a lot of complementary tasks) and from social unrest due to blue collar protests. One has to recall that the search for alternatives to Fordism began in the mid Sixties, i.e. well before the first oil shock and the slowing-down of growth. Consequently, technical and organizational innovations were a key issue for firms and managers. On the other side, capturing the increasing returns to scale inherent to Fordism was calling for an enlargement of markets, first domestic and then international. A consumption led growth turned into an export led growth. But since almost all advanced capitalist countries had the same strategic shift, a stiffening of international competition after a decade burst out, due to the emergence of excess capacities, new industrial countries, as well as the surge of Japanese style for manufacturing. Again, innovations in technology, market and finance are playing a major role in overcoming this new challenge to the competition which previously was operating within the national frontiers. No doubt that *innovations and internationalization* have destabilized the old political and economic order.

Nevertheless RA suggests that the bursting out of innovations and the persisting trends towards internationalization are far from exogenous, since they derive from attempts to overcome the structural crisis of Fordism. Therefore they are parts of systemic and far reaching changes. Roughly speaking governance structures have been transforming themselves along with innovations and internationalization. Let us point out briefly some key examples. Thus in the consumer electronics, the bursting out of new products has actually broken down British governance structures and pushed a new strategy for the French leading firm. Similarly, two or three decades ago, new processes in the steel industry destabilized American sector governance, not to speak of the decline of the ship building industry which put strong pressures upon job reduction and therefore on the viability of the previous management system, in quite all countries.

Nowadays, basic innovations tend to operate more and more at the world level, in such a way that each national sector governance mode is recurrently challenged by the outsiders and new entrants. Thus, the dairy industry, usually less open to free market and international competition has not undergone such drastic changes in its governance structures. But on the contrary, the security industry shows a gradual and apparently

irreversible internationalization, without massive and structural changes in self regulation and associations governance. Finally, in the machine tool industry, a globalization of competition has accentuated the diverging trends in United States and Germany : in this sector internationalization is a chance for German producers, a major threat for the American ones.

These results help in dampening the temptation of a pure and total determinism of governance forms by technology and internationalization. Of course, advances in technology are not without consequences upon organizational forms, but *they do not shape them completely*. So let me phrase R. HOLLINGSWORTH statement (1989, p. 16) accordingly : "Production systems are *somehow* linked to and *partially* conditioned by technology". I will not refer here to any systematic survey of the existing literature. Nevertheless let me recall the famous results by M. MAURICE, F. SELLIER, J.J. SILVESTRE (1982) : manufacturing plants operating with the same equipment goods, working out the same products for the European market do exhibit significant differences in division of labor, wage hierarchy, relative numbers of controllers and blue collar workers. The present case studies give many evidences supporting this view.

M. SAKO convincingly argues against technological determinism (p. 9) : two quite different systems of governance have structured the printed board industry, one along community principles, the other one in accordance with pure market relations. B. STRATH shows that job reductions have been managed quite differently in Sweden, Germany and Japan : the level of intervention can be national, regional or within the large company holdings. G. HERRIGEL argues that the new opportunities brought by electronization can or cannot be incorporated within firm strategies, given the degree of cooperation. Implicit to the analysis by W. D. COLEMAN, one finds the idea that computerization may permit deregulation, but does not lead automatically to such an institutional change.

The evidence can be pushed a little further, by considering whether there is any systematic link between production organization and degree of internationalization on one side, modes of governance of the other side (Tableau 3). Not any clear correlation

**TABLE 3 : TECHNOLOGY AND INTERNATIONALIZATION : SEEMINGLY LOOSE DETERMINANTS OF GOVERNANCE STRUCTURES AND REGULATION MODES.**

<b>PRODUCTION TECHNOLOGY</b>  <b>INTER-NATIONALIZATION</b>	<b>STANDARDIZED MASS PRODUCTION</b>	<b>DIFFERENTIATED MASS PRODUCTION</b>	<b>CUSTOMIZED SMALL/MEDIUM BATCHES</b>
<b>HIGH</b>	<b>CHEMICAL INDUSTRY</b>  Associations and cartels at the international level	<b>CONSUMER ELECTRONICS</b> ° Meso corporatism (UK)  ° State owned firms (France)	<b>SHIPBUILDING</b>  ° Decentralized corporatism (FRG)  ° Political management (SW)  ° Oligarchy (Japan)
<b>MEDIUM</b>		<b>PRINTED BOARD</b>  ° Arms length relations (UK)  ° Obligational relations (Japan)  <b>MACHINE TOOL</b>  ° Markets (US)  ° Networks (FRG)	<b>SECURITY</b>  Self regulation by associations, with possible government supervision (US)
<b>LOW</b>	<b>DIARY</b>  Mainly associations with possible government control		

comes out. For example, associations can be observed both in cases of high (chemical industry) and low (diary industry) degrees of internationalization. Even within a very narrowly defined industry (printed board, machine tool), quite different governance structures might prevail according to past interest intermediation, the hysteresis of each national trajectory, the strategic choices made for example during structural crises or/and at the early beginning of each industry. The chemical industry gives another interesting counter example : the stability of associations and cartels operating at the international level, even if markets become uncertain or even decline. In some cases, internationalization brings the emergence of new cooperative strategies either private (cartels, international business associations) or public (multinational institutions as IMF, GATT, BIRD...). It would be erroneous to think that any economic process operating at the world level excludes any governance forms except the market. Again Japanese multinationals give a stimulating example of very sophisticated organizations, far opposed to pure market relations.

## **V - SECTOR GOVERNANCE WITH NATIONAL FLAVOR FOR REGULATION MODES.**

Here the crucial issue comes at the forefront : do sector characteristics explain diverging governance modes better than national discrepancies in general organization do ?

### **1. A puzzle for the "régulation" approach.**

Due to the very characteristics of the trajectories followed by RA, this is a very tricky question. The long run study of American and French capitalism led to the hunch that the main institutional forms were essentially homogeneous all over the national economy. The Fordist compromise between capital and labor, the leading role of large conglomerates, a new conception for monetary policy and fiscal policy were broadly defined to affect quite all firms and sectors. This was the charm, but the limit too, of a very microscopic analysis : remember that macroeconomic regularities were the major features to be explained.

A decade latter, such an extreme hypothesis does not hold. First, international

comparisons (Y. BAROU, B. KEIZER (1984), R. BOYER Ed. (1988), (1989)) show that countries like Italy, Germany or Japan are far from exploring typical Fordist strategies, since they have probably invented alternatives to -or at least hybrids of- this regime. Second, even during the roaring Sixties, mass production of standardized goods by large firms was complemented by subcontracting to smaller plants, more easily flexible. Only the mix of these two governances could cope with economic fluctuations, even before their broadening after the two oil shocks (M. PIORE and Ch. SABEL (1984)). Third, sector studies for the construction industry (M. CAMPINOS-DUBERNET (1984)), or the process industries (C. DU TERTRE (1989)) found totally non Fordist governance systems, though partially conditioned by global Fordist growth. Four, historical investigations have drawn interesting cases in which many trials to implement purely Fordist methods in the building industry, traditional services and health care failed, since they could not cope with the sector constraints specific to these industries.

Therefore, any change in "régulation" modes is to be explained by asynchronous move in quite all the sector modes of governance : some leading sectors are finally imposing their pace, if not their logic, to the rest of the system, but not necessarily by exporting their own precise governance structures. A new management style, the diffusion of productivity increases via intermediate inputs and the equipment delivered to other sectors, the transformations in life style and finally the emergence of a central configuration for industrial relations, all these factors do shape, if not condition, sector governance in most industries. Nevertheless, sector specificities rarely vanish and continue to influence systematically economic adjustments. C. DU TERTRE (1989) has proposed a taxonomy for sector "régulation", which combines three components.

First, given the physical characteristics of each industry, organizational constraints upon the labor process usually define sector feature : assembly, process and craft industries have definitely contrasted characteristics. But a sector is always a social construction and not the pure implementation of technical devices. Therefore, the history of institutions governing interest intermediation defines a second set of specificities : international comparisons (see the machine tool or the printed board industries) show that the same physical processes are associated with very distinctive business associations, internal division of labor, industrial relations and so on. Third, the place given to each

sector within the global accumulation regime plays a role : for example if the French construction industry has been so lagging in terms of productivity and modernization, one major reason concerns the place of infrastructures and buildings within the Fordist regime. Why to bother with innovation, if high profits can be reaped from fastly increasing urban rents ?

In this huge research field, let us propose two basic and complementary hints.

## 2. The sectors matter for economic adjustments.

Ideally, one should examine how to combine firms, sectors and the national levels, since some authors have suggested that finally during the Eighties, the firm's own organization was far more important than the sector governance mode (B. DANKBAAR (1988)). Here let us play simply with the sector/national dilemma. In EGA, why should sectors be different ? Reading volume I suggests at least five series of factors (Table 4).

- ° The first discriminating factor relates to the determinants of economic performance : are they obtained by the *search for increasing returns to scale* in the production of largely standardized product or are they linked to *flexibility* i.e. the ability to shift production, both qualitatively and quantitatively, according to market opportunities ? In the first case, vertical integration or quasi-vertical integration will be the rule, as clearly shown by historical studies (A.D. CHANDLER (1977)). Steel and chemical industries governance structures are significantly shaped by the overcapacity problems (P. O'BRIEN (1989, p. 11), W. GRANT, W. PATERSON (1987,p. 7)). If at the opposite the production is largely divisible (the dairy industry) or differentiated as regards quality or use (printed board industry), many firms can coexist within the same market, eventually coordinated via associations or purely contractual relations. Nevertheless remember (Table 3) the absence of any precise relation between increasing returns to scale and the governance structures.

*The degree of internationalization* is the second candidate for explaining sector divergences. Conventionally, economic theory opposes sheltered sectors, for which a relative degree of monopoly allows associations, communities or cartels, to competitive

**TABLE 4 : BOTH SECTORAL AND NATIONAL FACTORS SHAPE ECONOMIC GOVERNANCE**

	<b>CONTEXT MACRO SECTORAL</b>	<b>METHOD OF GOVERNANCE</b>	<b>ECONOMIC PERFORMANCE</b>
<b>DAIRYING</b> UK, Germany, Austria	Over capacity  <b>CONVERGING</b>	Significant differences : UK more corporatist than Germany at the sectoral level (p. 37) <b>RATHER CONVERGING</b>	Lower costs in Austria, with more state and associations governance (p. 32) <b>RATHER CONVERGING</b>
<b>MACHINES TOOLS</b> US, Germany	Early mass production in US  Customized machines in Germany <b>DIVERGING</b>	° Individually specialized firms in US ° Large networks outside firms in Germany <b>DIVERGING</b>	° Success for US in the Fordist phase ° Better performance of Germany nowadays <b>DIVERGING</b>
<b>CHEMICALS</b> UK, Germany, US	Science based large scale internationalization over capacity  <b>CONVERGING</b>	Germany : Association of firms for research UK: Company level national context overrides sectoral differences (p. 24) specially in skills and procurement of labor Div. decreases overtime (p. 26) <b>RATHER CONVERGING</b>	Significant difference  Better performance in corporatist arrangement (Germany)  <b>DIVERGING</b>
<b>STEEL</b> (US, Japon)	Enormous scale economies Instability of demand overcapacity  <b>CONVERGING</b>	US : Adverse role of unio- nisation. Short term profit maximization Japan: Socialization of inves- ment. Search for long run productivity growth <b>DIVERGING</b>	American absolute and relative decline  Dramatic Japanese growth and competitiveness  <b>DIVERGING</b>
<b>PRINTED CIRCUIT</b> (UK, Japan)	Customized high tech production  <b>CONVERGING</b>	UK: Arm-Length contractual relation. Spot contracts Japan: Obligational contractual relation. Long term contracts <b>DIVERGING</b>	° Better flexibility down turn  ° Higher productivity. Lower price, better quality <b>DIVERGING</b>
<b>SHIP BUILDING</b> (Germany, Japan, Sweden)	Growth and decline  Internationalization  <b>CONVERGING</b>	Germany: Decentralized compromises Sweden: Unified political center social plans Japan: mix of political oligarchy management and market pressure (Strong national patterns) <b>DIVERGING</b>	1. Expansive and accelerat- ing 2. Contracting and redon- dancies (p. 27)  <b>DIVERGING</b>
<b>CONSUMER ELECTRO- NICS</b> (US, France)	Competition for mass pro- duction at the world level  <b>CONVERGING</b>	UK: Less concentrated, no explicit state intervention. Tentative meso-corporatist model France: High concentration, bilateral contract state-natio- nalized firm <b>CONVERGING</b>	Transnationalization of both strategies Quasi vanishing of British producers Internationalization of Thomson <b>DIVERGING ?</b>
<b>SECURITY INDUSTRY</b> (US, Canada, UK)	Fast internationalization and steady advances of technology  <b>CONVERGING</b>	Convergence towards self regulation US: Strongest state intervention Canada: Intermediate between US & UK UK: Community or clan network <b>RATHER CONVERGING</b>	Best performances in US... .....but other factor than governance play a role  <b>UNEQUAL</b>



sectors highly exposed to the international competition. For them, it is difficult to keep national governance modes independent from the trends associated with world markets. For example, the consumer electronics suggests that "internationalization is destroying national forms of governance" (A. CAWSON (1989, p. 35-36). Symmetrically, domestic production is more likely to be associated with original governance structures, as suggested by the dairy industry or some components of the building industry (M. CAMPINOS-DUBERNET (1984)). But from the viewpoint of the leading firms, internationalization might be necessary in order to keep a float the previous sector governance. For example, Japanese firms probably need exporting consumer electronics or investing abroad in new plants in order to maintain the previous founding compromises specially the tenured jobs in large firms.

- *The constitution of interests at the sector level* defines a third feature to be considered. Here history matters a lot since every sector reacts to disturbances and innovations according to its organizational features inherited from the past. Thus, if the international cartels are much more developed in the chemical industry than in the consumer electronics industry, the reason is quite simple : for the former, cartelization began almost a century ago, while the latter is a new emerging industry, built under a so-called free market ideology, i.e. during a period where such cartels are difficult to build, at least openly and officially. Let me mention that the capital labor relation is an important piece in sector governance, too seldom mentioned in sector studies. The case of steel suggests that the adversarial labor relations in the US have contributed to the lagging adjustments of US manufacturers, whereas more conciliatory views in Japan helped a lot in modernizing and redeploying capital (P. O'BRIEN (1989, p. 32)). Ideally one should like to have a systematic analysis of the *industrial relations* side in the governance structures. Some researches suggest that this factor is far from negligible (R. BOYER (1988), (1989), W. STREECK (1985)).
- *The role of the State*, far from being homogeneous, varies from sector to sector given the national strategic importance granted to the industry, the reliability of self governance, the potential disruptive consequences of a sector failure. With the exception of W. GRANT & W. PATERSON, B. STRATH, and W. D. COLEMAN, too few papers deal with this crucial issue. Why not introduce a typology of State intervention (regulatory

**T A B L E 5 : N A T I O N S A S B A S I S F O R R E G U L A T I O N M O D E S**

<b>LEVEL PROCU- REMENT OF</b>	<b>LOCAL / MICRO</b>	<b>SECTORAL / INTERMEDIATE</b>	<b>NATIONAL / GLOBAL</b>	<b>INTERNATIONAL / WORLD</b>
<b>KNOWLEDGE</b>				
° Markets	Individual search	Role of associations	Consultants Government agencies	Consultants Multinational organizations
° Technology	Learning by doing	Professional skills	Generic skills	Patents Equipment goods
<b>LABOR</b>	Local markets	Apprenticeship	General Education	Migration
<b>CAPITAL</b>	Regional banks	Sectoral banks	Stock exchange / Banking system	World financial markets
	If constrained by localization (high transportation costs)	If networks coordi- nating specialized firms	For conventional products/or if national preferences	For sophisticated and highly specialized products

*Source* : highly inspired by W. STREECK.

role, producer of public and standard goods, player, initiator and innovator, arbitrator in interests conflicts...) and use it for analyzing sector governance, possibly within a cross national comparison ? For example, as far as economic policy is concerned, Germany and France exhibit much more institutional differences than the ex post macroeconomic figures do (C. ANDRE, R. DELORME (1989)).

*Cultural values* is a last determinant to be considered, although it is rarely mentioned. Nevertheless M. SAKO traces some differences between Britain and Japan to diverging value preferences : "A society with high trust may require less vertical integration than another with low trust in order to achieve the same degree of control" (p. 3), following an hypothesis by K. ARROW and O. WILLIAMSON. Nobody can deny such cultural differences, which frequently emerge from systematic comparisons in management styles (Ph. D'IRIBARNE (1989)). Nevertheless one may challenge such an interpretation as being partial and in some extreme cases, misleading. Are the cultural values captured by firms governance totally exogenous to them, i.e. created by other institutions (religion, school, ideology...) or do they have a functional significance with respect to management itself ? If purely cultural, a governance mode could not be exported whereas if it fits into much more general principles, it is able to diffuse to other societies with differing traditions.

Therefore the emphasis shifts from a sector approach to a national analysis, a very crucial alternative indeed.

### **3. National styles still exist and show up into "régulation" modes.**

Table 4 is specially designed in order to investigate how sector and national factors combine in shaping governance systems. If the main divergences were sector, then national "régulation" modes would vary only according to the relative weight of sectors in each country. More basically one could imagine *a mosaic approach* to a national governance structure : the only condition would be the structural compatibility of the various pieces of the puzzle. Therefore, one could observe an extreme variability across nations. The national territory would be without any significance, but a complex mix of standard sector governance modes.

**T A B L E 6 : BENEATH SECTORAL GOVERNANCE, NATIONAL TRAJECTORIES**

<b>LABOR</b>  <b>CAPITAL</b>	<b>REPRODUCTION OF SKILLS VIA</b>				
	<b>STATE REGULATIONS</b>	<b>NATIONAL TRIPARTITE AGREEMENTS</b>	<b>REGIONAL / LOCAL ASSOCIATIONS</b>	<b>AGREEMENT WITHIN FIRMS</b>	<b>PURE MARKETS</b>
<b>CONNEC- TIONS FINANCE/ INDUSTRY</b>					
° Close (Bank credit)			GERMANY	JAPAN	
° INTERME- DIATE	FRANCE	AUSTRIA / SWEDEN			
° DISTANT (Stock market)				UNITED KINGDOM	UNITED STATES / CANADA

Nevertheless one is struck by the national flavor which permeates quite all the sectors within the same nation state. For example, all the sector studies under review point out to a *Japanese style* : adoption of long run views and strategies, cooperative attitude and long run commitment in transactions between manufacturers and subcontractors, managers and workers, industries and the financial sector, close links between private strategies and public policies. On the contrary there is an *American of governance style* : search for short run profit, adversarial capital labor relations, rapid changes in subcontractors according to instantaneous opportunities, intermediation of manufacturing and finance mainly via stock market adjustments, built-in difficulties in making compatible private strategies and government actions. Similarly one could develop a *Swedish way* for handling declining industrial sectors as well as for organizing the development of sunrise industries. The *French model* would combine a lot of state interventions and initiatives, with rather adversarial political and social relations. And so on....

Far from reducing national discrepancies, sector comparisons do enlighten them. W. STREECK has clearly pointed out some theoretical reasons for such a national component. His model has slightly be an extended and refined (Table 5). Basically any governance mode has to provide information on markets and technologies, monitor labor relations, especially skills production in the long run, provide adequate financing of investment and finally organize the delivery of raw materials and intermediate products. Is there any definite level (local, sector, national or international) at which these requisites have to be implemented ? A priori one could imagine purely local or regional governance modes and some of them do exist at this level, as suggested by researches about Emilia Romana or Bade-Wurtemberg (M. PIORE, Ch. SABEL (1984)). At another extreme, some specialists think that now accumulation takes place at the world level, therefore inhibiting any national governance mode. The inability of central banks to control exchange rates, or to put control upon capital movements convincingly substantiates such a view.

Nevertheless, volume I case studies exhibit at least two series of national determinants. On the one hand, the closeness or the distance between banking and manufacturing remains one of the first discriminating factors between long run and short run strategies...even though financial deregulation in response to innovations is at the

**T A B L E 7 : ALTERNATIVE CONFIGURATIONS FOR THE CAPITAL LABOR  
RELATION : ANOTHER ROOT FOR NATIONAL TRAJECTORIES**

<b>LABOR PROCESS  LABOR CONTRACT</b>	<b>LARGE AND RIGID DIVISION OF LABOR  a</b>	<b>LARGE AND RIGID DIVISION OF LABOR + AUTOMATION  b</b>	<b>FLEXIBLE AUTOMATION + FLEXIBLE ORGANIZATION  c</b>	<b>FLEXIBLE AUTOMATION + LEARNING BY DOING + TRAINING  d</b>
<b>WAGE AND/OR EMPLOYMENT FLEXIBILITY (1)</b>	TAYLORIST	FORDIST "T"	CALIFORNIAN	FLEXIBLE SPECIALIZATION
<b>CONTRACTUAL WAGE FLEXIBLE EMPLOYMENT (2)</b>	NEO-TAYLORIST	FORDIST "A"	NEO-FORDIST	POUDHONNIAN COOPERATION
<b>THREE COMPONENTS WAGE FORMULA WITH JOB TENURE (3) = (1) + (2)</b>	REJUVENATED NEO-TAYLORIST	REJUVENATED NEO-FORDIST	SATURNIAN	"J" FIRM
<b>THREE COMPONENTS WAGE FORMULA + MESO/ MACRO TUNING (Job duration, wage funds employment banks, training and retraining)</b>	SOCIAL- DEMOCRAT TAYLORIST	SOCIAL- DEMOCRAT FORDIST	SCANDINAVIAN	GERMAN

**WORK DEMOCRACY : FOUR VARIANTS**

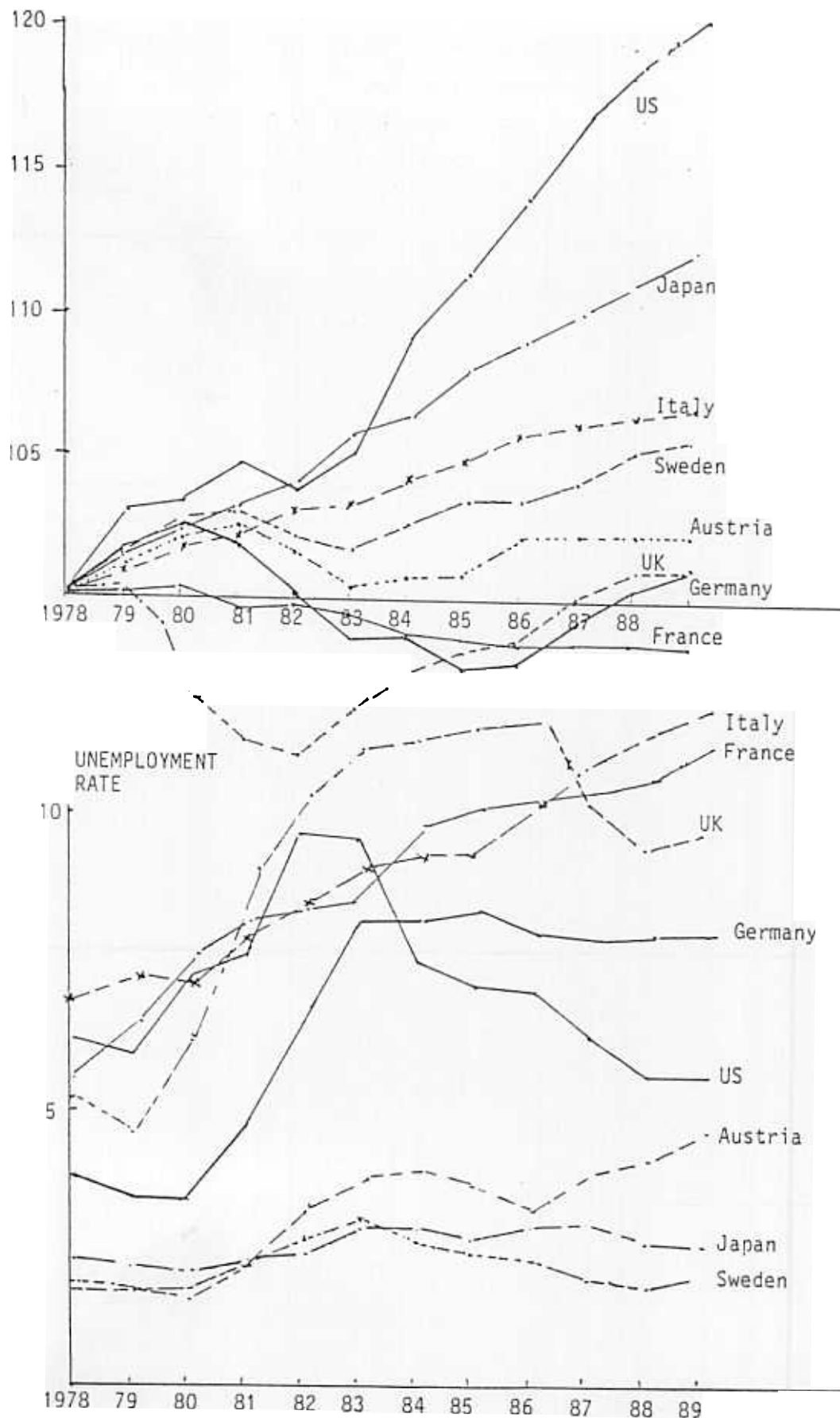
<b>TRAINING AND SKILLS  WAYS FOR GETTING COMPROMISE</b>	<b>INTERNALIZED</b>	<b>EXTERNALIZED</b>
DECENTRALIZED	MODEL "J"	SATURNIAN
CENTRALIZED	SCANDINAVIAN	GERMAN

forefront of most political agenda. Here the tricky question of cultural values could be incorporated : the larger the commitment to communities, clans or associations, the closer the links between banks and industries. To be brief and provocative, Wall Street seems rather antagonistic with any cooperative strategy in the US. On the other hand, I would be tempted to add the *capital labor configurations* as a key transversal component to most sector strategies. Is not the same strength in apprenticeship observed all across the German sectors from the car to the construction industry (W. STREECK (1985), (1988)). At the opposite are not individualistic societies such as the US, unable to organize an efficient training and retraining of blue collar workers ? Similarly is not the French statist system badly organized in order to monitor adequate retraining of workers, given the lack of cooperation between business associations and workers unions ? More basically, alternative configurations of the capital labor relations can be proposed within a provisional typology (Table 7).

The synthesis of capital and labor governances finally induces national trajectories for governance systems and "régulation" modes (Table 6). Loosely speaking the eight countries under review show a rough correlation between long run contractualization of capital labor, specially skill reproduction, and the prevailing close relations between bank and industry. At the opposite US, Canada and UK exhibit a decentralized approach to labor with a leading role attributed to the stock market in deciding, implicitly at least, about strategic options. Of course, this very preliminary result would have to be checked by a survey of the voluminous existing literature.

One interesting comparison would concern studies in technical change, along the line worked out by R. NELSON and S. WINTER (1982), whereas F. CORICELLI, G. DOSI and L. ORSENIGO (1989) have already proposed a symbiotic approach of technologies and institutions in an evolutionary context. In any case, broad macroeconomic indices show that national discrepancies are far more important than would imply the simple variability of sector mix across countries. In terms of employment unemployment for example, the Scandinavian, Japanese, European and American trajectories come out clearly (Graph 3), even if more sophisticated analyses are needed in order to get firmer results. Again, working out a macroeconomic dynamic theory, open to institutional variability, appears on top on the agenda of a new political economy.

**GRAPH 3 : VERY CONTRASTED ECONOMIC PERFORMANCES EMPLOYMENT AND UNEMPLOYMENT RATES SINCE 1979**



Sources Figure 4 OECD (1988) "Employment Outlook", p. 18 and 19  
 Figure 5 OECD (1988) "Economic Outlook", December, p. 197



The issue at stake is not minor : do we experience a breaking down of organized capitalism and a partial return to more competitive and market oriented societies or will a *SECOND GREAT TRANSFORMATION* emerge, and lead to a new phase of institutionalization. Mutatis mutandis, capitalism would play the next round of the game initiated in the interwar period and brightly and lucidly characterized by K. POLANYI.

## **VI - THE WAYS OUT OF THE CRISIS : WHAT HAVE WE LEARNT ?**

The challenge addressed to RA, but I hope that this concern is shared by other approaches in political economy, is now to understand the complex process according to which the contemporary capitalist system is evolving towards possible new configurations. The very stimulating studies gathered in volume I substantiate three major provisional results, already investigated by more macro oriented methods.

### **1. Market, vertical integration or networks ?**

Contrary to a common view, the destabilization of vertical integration and large conglomerates does not necessarily imply that modern economies would return to market as the main tool for coordinating a multiplicity of decentralized decisions. Fairly efficient in the short run, when quality is clearly observed and for a given state of expectations and institutions, markets encounter structural failures when they face uncertainty upon quality, major externalities due to infrastructures, norms, complementarity between interdependent decisions. In such a context, intermediate forms such as communities, clans or associations can be far superior. This hint already suggested by some theoreticians (B. ARTHUR (1988), M. AOKI (1988)), seems rather well supported by the cross sector and national studies.

### **2. The future : flexible mass production more likely than flexible specialization ?**

In retrospect, the very stimulating book by M. PIORE and Ch. SABEL (1984) has led to a renewed interest in mixing politics with production organization and technology. Nevertheless, the present research challenge their view about a second

industrial divide. Most of the evidence about the strengthening of increasing returns to scale by simultaneously reaping economies of scale and of scope, make rather unlikely the shift towards an economy composed exclusively of small and medium size firms which would implement the ideal of flexible specialization (R. BOYER, B. CORIAT (1986)). Here again the present studies insist upon the steady and continuous importance of mass production, rejuvenated by a larger product differentiation than during the Fordist RA. This is another reason for having doubts about any return to markets as unique coordinating mechanisms. On the contrary quasi-vertical integration might be the name of the game, whereas State intervention continues to be needed for organizing labor and skills and channeling the long term views about capital formation.

### **3. International trends, but national trajectories.**

Again the case studies show that any new governance mode, be it Fordism or Sonyism, can be implemented within very different social and political configurations. Far from homogenizing sector and national dynamics, the present innovations and internationalization trends seem to reinforce national specificities : the opportunities for the leading countries mean constraints and challenges and sometimes decline for other societies. Still more, the same international competitive pressure is not sufficient to diffuse the "one best model" of governance. The social democratic trajectory, exemplified by Sweden and Austria, is not at all equivalent with the North American trajectories, whereas Continental Europe seems struck into a third model. Finally, the Japanese trajectory is also specific too and different, but cannot be exported easily, given the path dependent characters of most national evolutions.

A final puzzle has now to be solved : how the international system will be stabilized, given the contrast between the slow but significant shift in economic hegemony and the inertia of the institutional setting marked by the polarization of political powers inherited from WW II. To go back to the Thirties, remember how the transition to Fordism has been dependent on the emergence of US as the leading power. Will international politics and economic dynamics lead to new compromise able to bring back stability and predictability to the world system ? This is probably the crucial issue of the next decade...and another task for a new political economy of institutions and governance.

## APPENDIX 1

### THE NEW PALGRAVE DICTIONARY : "REGULATION"

pp. 126-128.

During the debates of the 1980s, the term "régulation" suggested state intervention in the name of economic management though its opposite, "dérégulation" was more widely used. In the area of economic policy and in accordance with Keynesian precepts, regulation indicates the adjustment of macroeconomic activity by means of budgetary or monetary contracyclical interventions.

This term is also used in physics and biology, but with different meanings. In mechanics, a regulator is a means to stabilize the rotary speed of a machine. In biology, regulation corresponds to the reproduction of substances such as DNA. In general terms, the theory of systems involves the study of the role of a set of negative and positive feedback loops in relation to the stability of a complex network of interactions.

Here, a third meaning of the term will be more thoroughly developed. While it is not completely disconnected from the preceding meanings, it is nevertheless distinct from them. Theories of régulation constitute an area of research which has focused on analyzing long-term transformations in capitalist economies. Initially, this work was mainly French ; but related studies can be found in various OECD as well as Third World countries (HAUSSMANN, 1981, OMINAMI, 1986). These combine Marxian intuitions and Kaleckian or Keynesian macroeconomics in order to revive institutionalist or historicist studies.

At a primary level, a form of régulation denotes any dynamic process of adaptation of production and social demand resulting from a conjunction of economic adjustments linked to a given configuration of social relations, forms of organization and structures (BOYER, 1979 and 1986a). On a secondary, more ambitious level, this problematic aims at describing, and where possible at explaining, the transition from one mode of régulation to another in a long-term historical perspective (AGLIETTA, 1982; G.R.E.E.C., 1981). So the aim of this problematic is far-reaching and of a general character but its field is defined by three essential questions : How can we explain the transition from periods of high and relatively regular growth to periods of relative stagnation and instability? Why, during the passage of time do crises take different directions? Can one assume that growth and crises assume significantly different national forms?

Most economic theories -neoclassical, Keynesian, or even Marxist- emphasize the general invariable of eminently abstract systems, in which history serves merely as a confirmation, or failing that, as a perturbation. In contrast, the régulation approach seeks a

broad interaction between history and theory, social structures, institutions and economic regularities (DE VROEY, 1984).

As a starting point we consider the hypothesis of the central role of accumulation as the driving force of capitalist societies. This necessitates a clarification of factors that reduce or delay the conflicts and disequilibria inherent in the formation of capital, and which allow for an understanding of the possibility of periods of sustained growth (BOYER and MISTRAL, 1978). These factors are associated with particular regimes of accumulation, namely the form of articulation between the dynamics of the productive system and social demand, between the distribution of income between wages and profits on the one hand ; and on the other hand the division between consumption and investment. It is then useful to explain the organizational principles which allow for a mediation between such contradictions as the extension of productive capacity under the stimulus of competition, and downward pressure on wages which inhibits the growth of demand. The notion of institutional form -defined as a set of fundamental social relations (AGLIETTA, 1982)- enables the transition between constraints associated with an accumulation regime and collective strategies; between economic dynamics and individual behavior. A small number of key institutional forms, which are the result of past social struggles and the imperatives of the material reproduction of society, frame and channel a multitude of partial strategies which are decentralized and limited in terms of their temporal horizon. Research on the United States (AGLIETTA, 1982) and France (BOYER, 1979, 1986a) distinguish between five main institutional forms.

The forms of competition describe by what mechanisms the compatibility of a set of decentralized decisions is ensured. They are competitive while the *ex post* adjustment of prices and quantities ensure a balance; they are monopolist if the *ex ante* socialization of revenue is such that production and social demand evolve together (LIPIETZ, 1979). The type of monetary constraint explains the interrelations between credit and money creation credit is narrowly limited in terms of movement of reserves when money is predominantly metallic; the causality is reversed when on the contrary the dynamics of credit conditions the money supply in systems where the external parity represents the only constraint weighing upon the national monetary system (BENASSY and al., 1979). The nature of institutionalized compromises defines different configurations of relations between the State and the economy (DELORME and ANDRE, 1983): the State-as-Arbitrator when only general conditions of commercial exchange are guaranteed; as the interfering State when a network of regulations and budgetary interventions codify the rights of different social groups. Modes of support for the international regime are also derived from a set of rules which organize relations between the Nation-State and the rest of the world in terms of commodity exchange, capital movements and monetary settlements. History goes beyond the traditional contrast between an open and a closed economy, free trade and protectionism; it makes apparent a variety of configurations spaced out between the hegemonic economy constituting the axis of the international system, and countries at the periphery of this system (MISTRAL, 1982; LIPIETZ, 1986a). Finally, forms of wage relations indicate different historical configurations of the relationship between Capital and Labor, i.e. the organization of the means of production, the nature of the social division of labor and work techniques, type of employment and the system of determination of wages, and finally, workers' way of life. If, in the first stages of industrialization, wage-earners are defined first of all as producers, during the second

stage, they are simultaneously producers and consumers. Hence the contrast between 19th-century wage relations and the Fordist relations corresponding to the contemporary period (CORIAT, 1978; AGLIETTA, BRENDER, 1984; BOYER, 1979 and 1987).

On the basis of these forms, one can analyze the logic of the behavior of social groups and of individuals ensuring the relative coherence and stability of the current accumulation regime. At this point appears the notion of *régulation* as a conjunction of mechanisms and principles of adjustment associated with a configuration of wage relations, competition, State interventions and hierarchization of the international economy. Finally, a distinction between "small" and "big" crises is called for (BILLAUDOT and GRANOU, 1985; LORENZI and al., 1980; BOYER, 1986a; MAZIER and Al., 1984). The former, which are of a rather cyclical nature, are the very expression of *régulation* in reaction to the recurrent imbalances of accumulation. The latter are of a structural nature: the very process of accumulation throws into doubt the stability of institutional forms and the *régulation* which sustains it. The partial rupture in the functioning of the system paves the way to social struggles and political alternatives.

If the relevance of a theoretical model derives from the scope of its conclusions, it is imperative to point out some of the major findings in research pursued during the last decade. According to this problematic, in long-term dynamics as well as in short-term development institutions are important. Historical research confirms that sometimes institutional forms make an impression on the system in operation ; at other times they register major changes in direction. At the end of a period which can be counted in decades, the very mode of development -i.e. the conjunction of the mode of *régulation* and the accumulation regime- is affected : there will be changes in the tendencies of long-term growth and eventually in inflation, specificities of cyclical processes (coexistence of recessions and deflations or marked stagflationist character) (CEPREMAP-CORDES, 1977).

So a periodization of advanced capitalist economies emerges which is not part or the traditional Marxist theory (LORENZI and al., 1981)). Despite the rise in monopoly, the interwar period is still marked by competitive regulation. After World War II an accumulation regime without precedent is instituted -that of intensive accumulation centered of mass consumption (BERTRAND, 1983)- known as Fordist and channeled through monopolist type regulation.

In fact, the alteration in wage relations -in particular the transition to Fordism (CORIAT, 1978) i.e. the synchronization of mass production and wage-earners' access to the "American way of life" -and in monetary management, i.e. transition to internally accepted credit money- seems to have played a greater role than the change in modes of competition or conjunctural stabilization policies à la Keynes (AGLIETTA, 1982; AGLIETTA and ORLEAN, 1982; BOYER, 1987).

Since the Sixties, we have allegedly been experiencing a big crisis without historical precedent; corresponding to an altogether original form of development (BOYER and MISTRAL, 1978; MAZIER & al., 1984). This explains the absence, at least at the present, of cumulative depression and persistent, if more moderate, inflation (LIPIETZ, 1985).

In consequence, it is logical that former economic policies lose their efficacy (BOYER, 1986a). First, because the crisis is not cyclical but structural; this invalidates the policy of fine-tuning; second, because the structural changes which permitted the 1929 crisis to be overcome have become blocked (LIPIETZ, 1986b). They can therefore not be repeated in order to find a way out of the accumulated contradictions and imbalances.

There is no economic or technological determinism in the strictest sense. The multiplicity of past variants of Fordism and the diversity of strategies now deployed point to an opening, however partial, to ways out of crisis (BOYER, 1986b, 1986c). New problems are emerging which relate to an original articulation between industry and the service sector (PETIT, 1986).

Moreover, research on social formations other than France, the United States and the old industrialized countries shows the extreme relativity of institutional forms, accumulation regimes and forms of regulation which cannot be reduced to a cardinal opposition between Taylorism and Fordism, competitive versus monopolist capitalism, etc. Rather than irrefutable results and a perfected theory, the regulation approach sets out general notions and a method of work. It is up to future research to turn these premises into a more complete theory.

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