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Modernisation without flexible specialisation: how large firm restructuring and government regional policies became the step-parents of autarchic regional production systems in France

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discussion paper

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Modernisation Without Flexible Specialisation

How large firm restructuring and government regional policies became the step-parents of autarchical regional production systems in France

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Bob Hancké

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Abstract

This paper discusses the adjustment of large firms in France, in particular how they regionalised their production structures in the 1980s. Throughout the "Golden Age," large firms had geographically reorganised their activities: strategic planning remained in Paris, while the actual production was decentralised into the provinces, primarily to address cost and labour conflict issues. A "proto-regionalised" production system was the result.

When the large firms then faced a serious profitability crisis in the 1980s, and the traditional state-financed way out of the problems was no longer available, they saw in these proto-regional production systems a chance to become more competitive. In order to make the necessary changes, they relied on the decentralisation policies of the governments in the 1980s. Using the examples of technology and training policy, the paper demonstrates how the large firms used the second-order effects of the new policies as a means to modernise their own operations.

Zusammenfassung

Thema der vorliegenden Analyse ist die Frage, wie sich Großunternehmen in Frankreich im Verlauf der achtziger Jahre an stärker regionalisierte Produktionsstrukturen angepaßt haben. Während der "goldenen" sechziger und siebziger Jahre hatte sich ein "proto-regionalisiertes" Produktionsmodell herausgebildet: die strategische Planung blieb in Paris konzentriert, die Produktion wurde an kostengünstigere und weniger konflikträchtige Standorte in der Provinz ausgelagert. In der tiefgreifenden Rentabilitätskrise in den frühen achtziger Jahren sahen die Großunternehmen in diesen Standorten eine Chance, ihre Wettbewerbsfähigkeit zu steigern. Deswegen kamen ihnen die politischen Initiativen der verschiedenen Regierungen in dieser Zeit für eine stärkere Dezentralisierung in wichtigen Politikfeldern sehr entgegen. Am Beispiel der regionalen Technologiepolitik und der regionalen Bildungspolitik wird gezeigt, wie die Großunternehmen die Nebeneffekte dieser auf die Stärkung der Regionen zielenden Politikansätze für ihre Modernisierung nutzten.

Table of Contents

	page
1. Introduction	1
2. Small firms, large firms and industrial restructuring in France	3
2.1. Why are there no industrial districts in France?	3
2.2. The proto-regionalisation of production during the <i>trentes glorieuses</i>	7
2.3. The search for flexible adjustment in the 1980s: from proto-regionalisation to dependent regional economies	9
3. The institutional technology: the regional policies of the 1980s	12
3.1. The failure of decentralisation and the reappearance of large firms	14
3.2. Technology policy: „trust is good, control is better“	18
3.3. Training policy: the customisation of public schooling	20
3.4. Regional policies in perspective: public actors and private goods	
4. Conclusion: modernisation without flexible specialisation	23
5. Bibliography	25

1. Introduction

This paper addresses a problem which has occupied a central place on the agenda of French policy-makers since the early 1980s and has been heavily studied by social scientists: How does a country modernise its industry to meet the types of challenges of today's volatile world markets when it cannot fall back on Italian-style industrial districts or similar solutions as found in south-western Germany –i.e. dense networks of dynamic small and medium-sized companies (SME henceforth)– as is the case in France? The quick fix –the strong French state simply "makes" these districts through highly focused development policies– appears impossible, since such decentralisation policies require, beside a strong state, also strong non-state actors in the regions-to-be-developed, to carry through the reforms, and for a variety of historical reasons, precisely those were missing.

This paper is part of a larger body of recent "revisionist" work that is highly critical of the earlier descriptions of these district-type flexible adjustment patterns. It claims that French industry has adopted a very different path, which relies on just the opposite characteristics: hierarchy and dependence instead of equality and autonomy. Between 1985 and 1995, French industry passed through a profound adjustment process, and the large firms –the same "lame ducks" of the Giscard era (Berger 1981), which were supposedly kept alive solely by the "ambulance actions of the state" (Cohen 1989)– were at the heart of this. In response to external shocks and internal crises, they reorganised their ties with owners, workforce, and suppliers, while neutralising the radical and militant labour unions. As a result of this reorganisation, French industry was considerably "leaner" at the end of the 1980s. Some companies employed only half the workforce compared to the late 1970s, the workers that remained are better trained and increasingly put their skills to use in production, while the relations with suppliers are state-of-the-art, involving sophisticated computerised procurement, just-in-time delivery and quality management systems. In short, from the outside, many French companies have modernised their operations profoundly; yet in no way was this modernisation based on what appeared to be one of its preconditions –dynamic small firms.

Hence the puzzle to be solved for a proper understanding of industrial change in France during the 1980s: How could French industry modernise given that it was unable to rely on the dynamic small firm sector that proved so crucial in other countries? The answer, in its simplest form, is that it did not have to. In France, the large firms were able to reorganise precisely because there was no dynamic small firm sector; this allowed them to avoid being

pushed into an adjustment path which took into account the interests of the small firms, as in many ways large firms in Germany were. Yet this also implied that the large firms could force the smaller ones into reorganising in ways that would fit their own needs. The possibility of this outcome was therefore embedded in the institutional development of French industry, analogous to how other possible adjustment paths, such as the Italian districts and Baden-Württemberg in Germany, may have been a product of the evolution of Italian or German industry and industrial relations.

Part 2 develops this argument in detail. Section 2.1 discusses why there are no industrial districts in France. The answer provided is straightforward: they were the victims of the postwar modernisation policies, which favoured the large firms. In this version, the story is well-known since it figures in all the accounts of France's extraordinary modernisation in the 1950s and 1960s. However, there is a suppressed world underneath the conventional story, not at odds with it, but which provides the necessary complement to understand recent developments. This is discussed in section 2.2, which treats the geographic organisation of production in the large firm-organised France of the Golden Age. In that period, and accelerated after May 1968, large firms began to relocate production sites away from the highly industrialised north-west of the country (Ile-de-France and Nord-Pas de Calais) to other parts of the territory: Bretagne, Normandie, Franch-Comté, Rhône-Alpes, Toulouse, the Provence, etc. In need of suppliers, they set up what could be called "proto-regional" production networks in those areas, which included their most important suppliers, but did not require a reorganisation of production to make full use of the suppliers' resources. In fact, the "regional" dimension was almost an accident, solely guided by the search for a cheap and docile labour force. Section 2.3. then moves fast forward to the mid-1980s. At that moment, French industry passes –in part reflecting the culmination of the French model of organisation– through a serious cost crisis, and in a desperate attempt to rapidly change their cost structure, large firms export as much as possible of their adjustment costs to the suppliers. They lay off large sections of their workforce, using the generous state-financed early retirement system as a way to cushion the blow to the workers and unions, and they impose previously unseen flexibility on their suppliers, mostly by means of the sudden requirement of just-in-time delivery (which shifts the cost of storing fixed capital as inventory onto the supplier). At this point, the latently existing regional production structures are resuscitated by the large firms, who see this as an opportunity to rethink their internal organization, lower costs, and upgrade their dedicated local supplier network(s) in one move. Proto-regionalisation thus changes into regionalisation.

Part 3 discusses how the large firms accomplished this. What was the institutional hardware for this reorganisation of production? The answer provided is that they find this technology in the government policies of the 1980s, who aimed to favour the region as a more relevant unit of government

operations. Section 3.1. discusses how originally these policies were intended as ways to provide regions with some (what are now called in economics) "endogenous growth" capacities (see Duchéneault 1995: 417 for the use of this term)—a stated public goal in which the policies essentially failed— and then how they receive a second lease on life after being „hijacked“ (I cannot think of a better term) by the large firms and remoulded to fit their own needs. Regional government policies in different areas, of which this paper discusses technology (section 3.2.) and training (3.3.), thus all pass, after the first failure, through the large firms the second time around. The end result of these different adaptation processes are the hierarchically organised autarchic regional production networks found all over France today. Section 3.4. puts this discussion in a somewhat broader perspective by examining the threads common to the three areas. Part 4 concludes.

2. Small firms, large firms and industrial restructuring in France

Perhaps the most surprising aspect of French industry's adjustment path in the 1980s, is that it did not follow a version of the industrial district success recipe proposed by many authors to describe developments in other countries (Courlet and Pecqueur 1992; Ganne 1992; Ganne, Michelsons et al. 1993). Whereas in Germany and Italy, locally embedded versions of the industrial districts re-emerged in response to the developments of the 1960s and 70s, France simply lacked such districts to begin with. Both the relations between small and large firms, and between small firms and other small firms, remain organised around the most important obstacle to the construction of industrial districts: the absence of trust. Against such a social and cultural background, it should come as no surprise that the renaissance of dormant local industrial structures under new economic conditions, as in Italy and Germany, did not take place.

After discussing the demise of existing regional economic orders after the Second World War, this section continues with a discussion of how a new, subordinate type of regional industrial model developed in the 1950s and the 1960s, centered around the large firms, which, during the large firms' reorganisation of the 1980s, was mobilised by the latter and led to the type of autarchic local industrial systems that we know today.

2.1. Why are there no industrial districts in France?

Why are there no industrial districts in France? Weren't there any to begin with, and is this what needs explaining? Or is the right mix of cultural-institutional

conditions –lack of trust, social capital, or of independent social actors such as trade associations simply too important an obstacle to planned change, even in a country with a "strong state" like France who supposedly would be able to marshal the resources necessary for such a shift in policy (Baudry 1994; Levy 1994; Lorenz 1992)?

The first of these answers is entirely at odds with the particulars of the French case. Only fifty years ago, at the end of the Third Republic, France was populated by many of these locally embedded industrial systems, almost to the point of over-population: the „système Motte,“ groupings of small firms in the North (see Piore & Sabel 1984; Sabel & Zeitlin 1985), the shoe and clothing factories in the Cholet area, the paper industry in the Ardèche, or the textile districts in the Vosges (Ganne 1992). They were, in fact, as can be deduced from the descriptions of these districts, the industrial-geographic expression of what Hoffmann (1963) labeled the Republican synthesis: regional, quasi-corporatist groupings of small firms who secured, through a wide arsenal of mutualist structures, each other's survival, thus creating important obstacles to any fundamental modernisation of industry.

Rather than expressions of local dynamism, which is what we now associate with industrial districts, the industrial districts under the Third Republic were reservoirs of traditionalism (Ganne 1992). The postwar modernising coalition within the state (Hall 1986; Shonfield 1965; Zysman 1977) therefore deliberately eliminated them. For the planners of the Fourth and Fifth Republics, industrial districts actually hindered industrial progress: firms were too small to be efficient, and too preoccupied with their short-term survival, to be modern. The large firms, many of which were directly or indirectly controlled by the state, were the preferred partners of the modernisers, and at the same time that their policies toward the small firms attempted to kill the latter, these policies were very much in favour of the large firms. The governments secured their markets through protectionist policies and home-made Keynesianism, and made available a wide array of institutional tools for the latter to stabilise their environment. This modernising view simply left no room for industrial districts.

The exceptions, i.e. those that survived, prove the point. Despite all the modernist destructive zeal, some pre-war industrial districts fared better than others. The area around Cholet, for example (50 km south-east of Nantes) was and remained a center of shoe manufacturing –a "true" industrial district. The same is true of the Anjou (around Angers, 90 km east of Nantes) and in the Vendée (the department south of Nantes) (Minguet 1985). All these areas retained their district-like characteristics because of a peculiarity, in part foreshadowed by their geographical location. They share a particular socio-political history, which helps explain their survival: at the time of the Revolution, they were "white," i.e. anti-revolutionary, royalist and catholic areas (in

opposition to Nantes, which was the local headquarters of the Revolution and firmly integrated into the French state), and retained this only partially integrated character afterwards.¹

Similar social and political antecedents explain the persistence of district-like structures in the Jura (a watchmaking district close to the Swiss border) or around Oyonnax (plastics, in the Lyon area). Rather than the "Catholic" exceptionalism, it is the left-libertarian (anarchist-socialist) tradition in these regions which set them apart from the broader French picture. Different from but analogous to the Anjou-Cholet area, here as well, industrial development took a different turn from the dominant French model, emphasising the growth of craft-based industries rather than mass production (Ganne 1992: 321-323).

It is precisely this kind of regional exceptionalism, expressed through political autonomy and cultural specificities, which explains the somewhat atypical industrial development of these areas in the postwar era. In other words, their incomplete integration into the French state, and into the dominant French industrial model, explains why they persist(ed), and how they could become the basis for a dynamic regional development model which is much closer to the Italian districts. But –and this is critical for a proper assessment– they are exceptions. The large mass production firm was the norm in France, and craft-based industries gradually disappeared throughout the postwar era.²

Industrial districts may be unable to re-emerge, since they were destroyed; yet that does not preclude the possibility that they could be "created" through political intervention which recombines previously existing resources in novel ways, as appeared to have been, to some extent at least, the case in Baden-Württemberg (Herrigel 1993). By using existing, perhaps even traditional resources in ways for which they were not designed, in unforeseen combinations, political authorities (in the broadest sense, i.e. including local

¹ To give just one example of how these areas remain, to this day, less integrated into France than others: Philippe de Villiers, a very conservative anti-European politician, is the most important political figure in the Vendée, and cherishes this cultural heritage with great bravura (see also Renard 1995). Such historical political exceptionalism obviously does not translate into distinct patterns of industrial development in a mechanical way. At least one author has tried to understand the regional development in the Vendée within this broader religious-political trajectory (Clenet s.d.) and he indeed concludes that the nature of regional integration into the larger political unit France helps understand local industrial development. A recent study, to which Michel Crozier lent his support, evaluated the Vendée's industry (Bovais and Desmedt 1992).

² To avoid misunderstandings: the French state did everything, of course, to save its traditional sector from perishing, as Berger and Piore 1980 convincingly demonstrated. The argument developed here about the elimination of small firm districts, is not at odds with this point. The industrial districts were not populated by these firms –garages, bakeries, wine and cheese farmers, silk clothing manufacturers, etc.(see also De Ferrière on the luxury goods industry)– but by manufacturing firms which were, in most of their operations, pre-industrial rather than modern, and posed an obstacle to the economic goals of the French governments. In other words, the French state devised policies to protect both very small, non-industrial firms and very large industrial firms. The group in between was the demographic basis of the districts, and those the state tried to eliminate.

governments, interest groups and other intermediary associations) would be able to create a functional substitute to the institutional hardware necessary for a re-emergence of industrial districts (Sabel 1993b; Sabel and Zeitlin 1996 (forthcoming)).

To a large extent this captures precisely what the French state tried to do in some areas. Reinterpreting Silicon Valley in light of the French experience (Grefe 1992: 29), the state tried to create some high-tech industrial district-type regions in Rhône-Alpes, around Montpellier and in the vicinity of many large and medium-sized cities. There is presumably no French city with some claim to fame, which does not proudly display a "*technopôle*." The basic idea behind the technopoles is to bring together, in the same geographical area and financially and logistically supported by the local governments through a publicly-run "enterprise center" and tax advantages, small firms that are potential leaders in new technologies. Thus the local governments have, in principle, the means to "create" high-tech industrial districts by attracting innovative firms, and then put some of their financial and institutional weight behind them through the local economic development agencies.³

However, leaving aside a few minor exceptions, these high-tech parks rarely amount to anything more than a local "post-industrial" settlement, populated by firms in search of cheap land, new technical and traffic infrastructure, and tax breaks. The famous "local knowledge," which Marshall saw as perhaps the most important "soft" feature of industrial districts, and to which, in the spirit of a non-exclusive public good, all firms contribute, is simply absent or, at best, marginal to their operations. (Becattini 1991; Brusco 1986).

The two other examples are considerably better-chosen to discuss the creation of industrial districts through state policies. Both Rhône-Alpes and the area around Montpellier are relatively well-defined regional economies which specialise in high-tech products and services. Yet the fate of Rhône-Alpes –the area roughly ranging from Grenoble over Lyon to St Etienne– remains heavily tied to the large firms in the region: Hewlett-Packard, Schneider, Thomson, ... around Grenoble (Courlet and Pecqueur 1992), and the petrochemical giants around Lyon. These large firms act in many regards as industrial anchors to the region, by providing employment stability and securing the local industrial tissue through their supplier policies. As I will argue below, these are precisely the defining features of contemporary regional economic development in France. Montpellier, finally, remains as a proper example of a "new" high-tech industrial district –yet on its own, almost like a cathedral in the desert (Storper and Harrison 1992). If one considers the amount of political energy and tax money spent on these industrial policies over the last decade and a half, one

³ The links with the rest of the French state apparatus, and especially its economic development agencies and international trade office, can then be used, in addition to the local tax breaks, to give firms a competitive advantage in foreign markets.

should wonder why, even with such a strong state, the outcomes were so poor. The answer —neo-Toquevillians argue— is precisely the lack of mutual trust of the pertinent actors in the regions, and hence the absence of a strong social bearer to implement the policies (Levy 1994).⁴

Despite the obvious economic benefits associated with small-firm based industrial districts, and despite the government policies which were designed to create such dynamic high-tech small-firm regions, France therefore entered and left the 1980s without them. Even the most benign assessment of new regional production structures would be forced to admit that the government policies towards the regions failed in most of their stated goals. French industry remained the fief of the large, mass production firm, in the 1980s as much as in the 1950s.

Underneath the appearance of total large-firm victory, however, another movement was underway. As the large firms grew, they decentralised their production, frequently supported by state policies, into the provinces, and thus laid the basis for a later regionalisation of production.

2.2. The proto-regionalisation of production during the *trentes glorieuses*

As the 1960s moved on, and the previously existing industrial districts one after another disappeared under the steamroller of the modernising state, a different movement was under way at the same time. Since large firms grew rapidly under the postwar French growth regime, they were expanding production and building production sites. For two very different reasons, the regions where they originally were located —Ile-de-France (the area around Paris) and the Northern regions against the Belgian border— turned out to be difficult places for further expansion. In search of a combination of room to expand and more peaceful industrial relations, the large firms left the industrial heartland and relocated in the provinces.

The first reason for this exodus was geographical. Precisely at the time that mass production became a success in France, the Paris area, where many plants originally were located, became saturated with other “space-intensive” activities such as public services, banking and other administrative activities. As a result, the square footage needed for an expansion of mass production activities, was no longer available and firms were forced to look for alternatives.

⁴ Note how similar this argument is to Putnam's (Putnam 1993) famous argument on local democracy in Italy: the presence or absence of "social capital" —associational life.

The car industry is, as so often in France, a case in point (Loubet 1995). As early as 1951, Citroen, the car maker, moved out of the Paris bassin into the Rennes area in Bretagne. The reasons the company gave for this move were two-fold. The first, and without doubt the most important practical consideration, was simply that an expansion within Paris, supposedly the preferred option, had become impossible. The success of the 2 CV required space far above what the capital could offer, and Citroen was already using its plants in and around Paris at the limits of their planned capacity. The famous Javel plant on the Seine in the center of Paris and the Levallois-Michelet plant just outside the *periphérique* were literally overflowing, and more room was impossible to find there (Caro 1993).

In longer-term perspective, however, the second reason, which has to do with the labour force, was at least as important an argument as the lack of expansion space. As France grew, so did Paris, the center of the country in every respect, and the labour market in Ile-de-France became unusually (and unpleasantly) tight for large companies. In Bretagne, however, where agriculture was slowly declining (Berger 1972), there was an abundant workforce. This not only meant that labour was relatively cheap there; because of the relative absence of other industrial employers, it also meant that the practice of poaching trained workers was quite uncommon. Yet the political argument was probably the most important. Moving production to Bretagne meant above all, in the French context, moving production out of the seedbeds of social unrest that the northern part of the country had become. The Breton workers recruited by Citroen were unfamiliar with all kinds of habits and customs of industrial workers (Le Bourdonnec 1996: 147). They were perhaps not trained (*formés*), but that had to be weighed against the fact that they were not yet “*déformés*” either by socialisation into the industrial world (Caro 1993: p.29-30).

When the local government offered subsidies, tax breaks, a renewed infrastructure and helped selecting suppliers, the company rapidly decided in favour of the Rennes location. A few years later, satisfied with the experiences of the first plant, Citroen even opened a second plant: the Rennes workforce, in the words of a local manager, was “numerous and cheap, ..., docile, and showed a spirit which created a calm social climate.” (cited in Caro 1993: 48, own translation).

A similar story can be told for the other car companies, and for other industries as well. Renault did exactly what Citroen did when their plants in the immediate vicinity of Paris were unable to accommodate the jump in production during those years and relocated in Normandie and other areas in the 1950s (Oberhauser 1987; Oberhauser 1988). Peugeot followed a somewhat different path, but ended up in the same place: the company settled in Mulhouse and Sochaux precisely because it did not want to be located in the north in the first

place (Loubet 1995; Pialoux 1996). In other industries as well, delocalisations to low-wage, socially peaceful areas took place. Toulouse became the center for the aerospace industry, and the consumer electronics firm Moulinex, followed by other electronics producers, became the single most important employer in lower Normandie (Loubet 1995; Pialoux 1996: 27-28). In short, during those years, France witnessed a true decentralisation of production into the provinces.

Yet alongside this decentralisation of the production structure, the center took firmer control over strategic issues. Even though the actual production sites increasingly were moved into the provinces, the corporate headquarters, strategy, planning and R&D departments of many firms remained in the Paris area. The engineers in Ile-de-France thus developed new products, designed new production methods, and decided on market strategy, while the newly recruited workforce far away from Paris executed these orders (Baleste 1995; Veltz 1996). The firm-level Taylorism so characteristic of French companies in those years (Crozier 1964; Friedmann 1956) was mirrored in a geographical Taylorism which physically and socially separated conception and execution (Veltz 1996).

Underneath the centralised large firm-world, in short, a different order existed, which integrated the large firm and the small firm world, and linked Paris to the provinces. The division of labour was clear: designing the disclosure of the French territory was a matter for the planners in Paris; implementing it on the terrain was a matter for the large firms. Frequently, these large firms became for the local communities where they were implanted the only (or at least by far the most important) window into the wider world. In much the same way as the village notables constituted the most important political link with the center, the large firm became the prime medium for the economic integration of different regions within France.

2.3. The search for flexible adjustment in the 1980s: from *proto-regionalisation* to dependent regional economies

Gradually, and partly in response to the social unrest of May 1968 and the early 1970s, this dual territorial industrial structure obtained a more permanent character. In order to safeguard production during strikes, firms now also began to experiment more seriously with a reorganisation of production through sub-contracting out larger parts of production with local suppliers (Berger and Piore 1980; Linhart 1981; Sabel 1982; Salvati 1981). As a result, the proto-regional production order slowly consolidated into established regional production networks.

Fast forward to the 1980s then, when the French large firm-led model faces considerable strain, as a result of the sudden catastrophic financial situation that many large firms find themselves in. In part as a result of increased competition from new mass producers, but more even a product of the exhaustion of the French growth model's micro-economic and organisational bases (Boyer 1979), French industry as a whole, almost regardless of sector or product, faced a competitive crisis of a scale unseen before (and since) in OECD countries. Between 1980 and 1984, the "*fleurons*" of French industry collapsed under their own weight: unable, under the inflationary growth regime of the 1960s and 70s, to retain capital for investment, they found themselves in a structural crisis by the early 1980s (Glyn 1995). A few examples: *Peugeot SA* (quasi-bankrupt in 1983 after its acquisition of Citroen, Talbot, and its financial stake in bankrupt Chrysler), *Renault* (FF 12 Mrd loss in 1984, and therefore virtually bankrupt), the steel companies *Usinor* and *Sacilor* (FF 4 Mrd loss in 1986), *Thomson* (FF 2 Mrd loss in 1982). Other large firms went bankrupt and disappeared forever from the industrial map: *Creusot-Loire* (Cohen 1989), *LIP* (Levy 1994) and the shipyards of Nantes. In short, French industry was on the verge of total collapse (Schmidt 1996; Smith 1990).

Ironically, the economic policies of the socialist government after the U-turn of March 1983 exacerbated the situation of the large firms. Since the companies had been unable to build up financial reserves in the previous years, and relied on banks for credit, they faced a gigantic debt burden. In the early 1980s, debt/equity ratios were higher in France than in any other OECD country (Taddéi and Coriat 1993), and as a result the macro-economic stabilisation policies, involving high interest rates to fight inflation, and the decision to remain within the EMS with a stable currency (Cameron 1996; Halimi 1992; Halimi 1996) sanctioned the already highly uncompetitive large firms. In order to find a solution to this severely uncomfortable problem, large firms had to devise ways to reduce costs both rapidly and structurally. It was against this macro-economic background that the previously existing but unused regional production structures were mobilised in support of the large firms' adjustment path.

Whereas before the suppliers were regarded primarily as solutions to internal labour problems, this idea was extended so that they played a core role in the large firms' search for external flexibility as well. And in this new role, the existing regional production networks performed a different function than they did before. First, in order to obtain increased flexibility, large firms gradually introduced (or better: imposed) just-in-time delivery systems. Given the nature of the large firms' cost problems (first and foremost very high debt, see Hall 1986; Zysman 1983), immediate solutions for reduction of capital costs were eagerly sought, and shifting the burden of carrying inventory onto the suppliers was a quick and easy way out –the equivalent, almost, of appealing to the National Employment Funds in order to finance massive lay-offs (Salais 1988; Salais 1992). The second step built on the first: in order to get the most out of

the JIT delivery structures, large firms began to impose stricter quality norms upon their suppliers. As a result, suppliers now undergo, with great regularity, quality audits, quality checks, visits by quality consultants, etc. (Baudry 1995; Gorgeu and Mathieu 1993; Gorgeu and Mathieu 1996a; Lorenz 1993). However, the large firms also provides them with help in upgrading quality, training workers, obtaining licenses, or technology transfer. The third step, finally, consisted of attempts by the large firms to merge their suppliers into larger firms, capable of taking over product development, and providing training alone, without help from the large firms (Hancké 1996). Gradually, therefore, the suppliers became a central piece of the large firms' adjustment strategies.

What is described here as a variant of an almost generic story of the reorganisation of small and large firm relationships in all OECD countries, takes on an entirely different meaning in light of the above narrative on proto-regionalisation. France witnessed, indeed, the transition from local production networks into full-fledged regional industrial systems. Through all the technical links described above, the suppliers became a part of the large firms' operations, and therefore more dependant upon them. Yet at the same time these policies also made the suppliers stronger in the tasks they were supposed to perform. Thus, by integrating the suppliers' activities closely into their own operations, the large firms increasingly began to treat them as prolongations of their own production operations in the regions without paying the prize in large firm loyalty to the supplier that it would in other, more symmetric systems (see Aoki 1988; Sabel 1993a). The technical integration, which offered the weak small firms ways to upgrade, therefore tied the latter's fate more closely to that of the large firms; what emerged were autarchic regional production networks, hierarchically organised around large firms.

The examples discussed above and updated, add the necessary empirical detail to this general argument. Both the areas around Rennes (Citroen) and Sochaux (Peugeot) –but the same is to a large extent true of Flins, Sandouville or Cléon (Renault)– are constructed like cartwheels, with the large car assembly firm in the middle, and the most important JIT suppliers within an hour or so on the freeway (Gorgeu and Mathieu 1994; Gorgeu and Mathieu 1996b). All car manufacturers have installed a wide variety of instruments to monitor and correct supplier quality (Gorgeu and Mathieu 1991; Gorgeu and Mathieu 1995). The local industrial structure that thus emerges, has a virtual employment monopoly in the region, which explains the relative willingness by local authorities to accommodate the wishes of the car assemblers (Auto-Hebdo 1992; Gorgeu and Mathieu 1996b; Pialoux 1996).

The electrical household appliances sector fared in roughly the same way. In 1969, Moulinex had two large production sites in lower Normandie, one in Caen, another in Alençon, which made all the parts and then supplied these to the smaller final assembly plants elsewhere in Normandie (La Vie française 20

June 1969). When the crisis hit in the mid-1980s (a crisis which combined organisational problems and international competition), the company started laying off workers in the smaller plants and (slowly) turned to external subcontractors (Le Monde Affaires 7 March 1987). In the summer of 1996, Moulinex announced massive lay-offs, which reverberated throughout and beyond lower Normandie, almost until Angers —some 200 km away. In several production sites situated in an area of some 100 km around Caen, Moulinex directly and indirectly (the company has over 2000 suppliers in the area) employed the bulk of industrial workers in the region, and the social plan had an enormous social impact on the entire region (Le Monde 17 June 1996; Libération 16 June 1996).

The same or a similar story can be told for the chemical industry just south of Lyon and around Marseille; for the aerospace industry in Toulouse; or the tire maker Michelin in Clermont-Ferrand (see Baleste 1995; Baleste, Boyer et al. 1993 for these vignettes). Sometimes the storyline differs from the one above in details —for example, Clermont-Ferrand *always* was highly dependant upon Michelin, even 60 years ago, and Aérospatiale located in Toulouse before the Second World War; and the aerospace company destroyed its existing supplier basis in order to create a new one (Morin 1994)— but the basic outcome is always the same: in their search for cost reductions and flexibility, the large firms turned France into a collection of hierarchically organised autarchic regional production systems. The opposite, in short, of what is commonly understood as industrial districts.

How exactly did the large firms achieve such a reorganisation? How did they accomplish the authoritarian modernization of their suppliers and their subsequent quasi-integration? The answer lies in the failed government policies. While the decentralisation policies —in the largest sense, i.e. including administrative decentralisation, economic and industrial policy, and training programs— failed in their stated goals of creating dynamic industrial districts, they did offer large firms a novel institutional framework for their modernisation. How the large firms “hijacked” the government policies and used them to their own advantage, is the topic of the next section.

3. The institutional technology: the regional policies of the 1980s

Large firms may want to reorganise, yet there are good reasons to believe that they may simply not be able to. The history of French industry since WW II is punctuated by and organised around protectionism, state aid and subsidies, and as late as the 1970s and early 1980s, the state was still the central actor in French economic life. In fact, judging from the policies of the first half of the

decade, it was almost certain that any reorganisation of industry would have to take place through the state (Berger 1981; Cohen 1989). In order to move out of the low-trust, low-tech equilibrium in which they were trapped after the French version of Fordist mass production had run its course, the large firms therefore needed more than just goodwill and detailed plans. What they needed was an institutional framework onto which they hooked their new needs and that they could use to implement policies which dealt with these. Conversely, their needs had, to some extent at least, be redefined with exactly these institutional starting points in mind.

The policy framework of the 1980s regionalisation policies⁵ provided exactly what the large firms needed. After these had lived their first life, and either had entirely failed in their initial goals, or had turned out to be primarily expensive employment programs for the administrations charged with their implementation, they were picked up again by the large firms, who had decentralised production into the provinces during the better part of the *trente glorieuses*. Through a re-interpretation of these policies in light of their own organisational capacities and needs, the large firms were able to redeploy them, often in ways unforeseen –but nonetheless eagerly supported– by the policy makers. This objective coalition between the large firms and the policy makers is relatively easy to understand. It was in the large firms’ interests, since these “second chance” policies allowed them to readjust using public money and under the authority of the state; for the policy makers, on the other hand, it meant that the source of failure the first time around –the lack of a strong non-state actor in the regions to implement the reforms– was by-passed. The large firms could now act as the institutional vehicle for change.

Before developing this argument, the section that follows quickly reviews the evolution of regional policies in France first, and the policies of the 1980s in particular, with special reference to the fields which are relevant for the reorganisation of the links between large and small firms –industrial and technology policy and training– and why and how they failed. The final part then discusses how, after their first life, these policies got a second lease on life, but not until an implicit bargain was struck between the state and the large firms, who reappropriated them and were allowed to reorganise the policies in such a way that they became solutions to their own problems.

⁵ “Regionalisation” refers here to the generic process of transferring policy-making capacity, in its broadest sense, from the center (Paris) to the regions. Some confusion is possible, since in France the term “*régionalisation*” is almost exclusively used for the policies of Deferre, i.e. the administrative decentralisation, which revamped, and thus *de facto* created the current version of the *régions*.

3.1. The failure of decentralisation and the reappearance of the large firms

The origins of the 1980s decentralisation date back as far as the 1950s and 60s, when the rapid industrialisation of France risked creating profound regional inequalities. While the area north of Paris, Nord-Pas de Calais and Picardie (i.e. roughly everything between Paris, the Channel, Reims and the Belgian border) rapidly became France's industrial heartland, the rest of the territory equally rapidly turned into an economic desert (Gravier 1947). In order to correct past and avoid future territorial inequalities, the French state created, in 1963, a central agency for regional development, the DATAR (Montricher 1995), and targeted industrial development, by means of subsidies and other supportive policies, in areas beyond the Nord-Pas de Calais and Ile de France. Thus the policies supported the previously discussed general decentralisation of production by the large firms during this period.

After the Left electoral victory of 1981, decentralisation and regional industrial policy received a new impetus. Decentralisation —despite the Jacobinism that is commonly, and historically somewhat incorrectly (since it was Napoleon and not the revolutionaries of 1789 who imposed the centralised state structure), associated with the French Left (see Hayward 1983)— was one of the central points in the Left program, and after the Left's double victory in May and June of 1981, the government moved rapidly to push through a series of institutional reforms that addressed this issue.

The reforms of the 1980s are strongly associated with the name of Gaston Deferre, the then mayor of Marseille, who seized the momentum of the Left's electoral victory by proposing legislation that was to reshape the relationship between Paris and the regions. The background to the reforms was at least threefold. First, it was political: Deferre (and prime minister Mauroy, mayor of Lille) wanted to rid large city-mayors of the central state's irritating micro-management; secondly, it was social, in that the reforms should be regional development instruments aimed at reducing the territorial inequalities that had built up over the postwar period⁶; and, but only after a certain time, their rationale became economic as well, since the policy makers realised that France's overall economic performance was strongly dependant upon a dense tissue of sophisticated SMEs, and creating a local support structure for such small firms was impossible to organise from Paris. Thus the reforms installed a

⁶ A short note is in order here: presumably a combination of the country's constitutional structure --the unitary state-- and Parisian interests prevented the implementation of another, considerably simpler method of reducing inequalities, such as fiscal federalism, whereby the rich areas contribute to the public services in the poorer areas according to an (inverted) distribution key (the poorer the region, the more it receives, as with the EU structural funds). This solution was not entirely unimaginable: electricity in France, for example, is distributed according to this principle of "péréquation:" Since delivering electricity is easier and cheaper in the cities, the city customers pay slightly above cost, so that the customers in the poorer areas can pay relatively less.

network of regional and local institutions, whose aim it was to assist small firms in their modernisation drive and create new opportunities for economic growth in the local communities.

The laws were passed in 1982; they gave the existing regions more autonomy, by turning the regional assemblies (parliaments) into the most important political actors. From then on, at least according to the law, the president of the directly elected regional parliament was the most powerful political-administrative figure outside Paris, above the departmental and regional prefects, who represented the capital. The reform was crowned by direct elections for the regional assemblies in 1986.

Analytically, the reform entailed, beside a regional extension of the traditional financial aid to companies, a regional planning system, envisioned as the regional *pendant* of national industrial policies, which implemented broad centrally defined goals, and would operate in four areas. First, they should encourage innovation, through the dissemination of information, and the organisation of technology transfer and licenses. Thus regional technology centers were founded or revamped, and the Ministry of Industry regionalised part of its operations through the regional industry directions DRIR(E). Secondly, regional authorities would help small firms with their search for (export) markets; again the DRIRE, in cooperation with the Ministry of Foreign Trade, would be the institutional actor on the terrain (Grefte 1992). Third, gradually the professional training system would be regionalised, thus allowing the regions to adapt their schooling system to local needs. In 1992, this policy was taken to its logical conclusion when the Five-Year Law was passed (see, for a lengthy discussion and a first evaluation, the Comité de coordination 1996). Fourth, in the wake of the financial reform of 1984, attempts were made to redesign the financial system in order to bring creditors closer to the under-financed and financially isolated SMEs (see Chanel-Reynaud and Cieply 1996; Grefte 1992). Finally, the relations between the regions and the state were organised in the “contrats de plan” (the law of 17 July 1982), which linked regional and central planning.

The effects of these policies have been the topic of much debate in and writing on France. By and large there are two positions in the evaluation debate. The first, which emphasises the long way that French political-economic organisation has come since the heyday of the centralised state, is, in all, rather optimistic (Grefte 1992; Montricher 1995; Schmidt 1990). The other points out how the institutional heritage associated with the central state shines through in every success. Even when regional policies seem to yield results, in reality, the central state reappears in another disguise (Giblin 1995; Levy 1994). On balance, and with, perhaps, the regionalisation of the training system as an exception (see Hillau and Caro 1996; Lamanthe and Verdier

1996; Mouy 1996), most authors seem to agree that the regionalisation policies have come up short of what they promised.

Technological innovation and financing are clear cases in point. Even though many can point at hopeful examples, there seems to be widespread agreement that the regional authorities do an extremely bad job at providing the type of technology expertise required by the small firms. A comparison of the permanent background case, Germany, helps understand why: whereas in Germany, industry plays a central role in the organisation and administration of these programs, and has a determining say in the final outcome (Lütz 1993), in France, industry—in any guise, i.e. as firms or industry associations—is simply absent from the process. Hence technology policy is, one could say (with only some exaggeration), designed in the Ministry of Industry in Paris, transferred to the regions by the DRIRE, and carried out by sophisticated engineering schools. The organisational interface which connects all these worlds to the industrial world where the technologies have to be implemented, does not exist in France.

The problem with the policies on small firm financing is very similar: SMEs belong to a different world than financial agents. The latter want stability and are risk-averse, whereas the former are flexible (that is precisely their advantage over the large firms), and operate in market niches that are left by the large firms. As a result, any solution which does not operate at different levels simultaneously, by providing a translator of the problems of the former into words understandable to the latter, is bound to run into problems (Hancké and Cieply 1996; Rivaud-Danset and Salais 1992).

The difficulty was, in its most general terms, that the policies put the entire institutional arsenal in place in the regions, but “forgot” to think of the actors who made sure that the system also performed as designed. Why the actors who could provide these translations between different industrial worlds (Rivaud-Danset and Salais 1992; Salais and Storper 1993) were not there, is a question which goes back to Tocqueville, who lamented the lack of intermediary associations in revolutionary France (Levy 1994); the postwar state-centered industrial and economic policy exacerbated this problem by degrading interest groups into an extension of its own activities. As a result, when the state wanted to decentralise its own operations, and delegate authority to groups in civil society, there was nobody there to actually carry the policies through. The result was, in sum, a new version of the stalemate society.

However, this final conclusion is at odds with the findings previously reported in this paper. Clearly something happened with the policies at the regional level, since the large firms reorganised their links with their suppliers—often the very SMEs envisioned in the regional industrial policy proposals—

in ways that were highly consistent with the policies. What happened was, indeed, what this cryptic observation suggests: the large firms gave the regional policies a second life, by redeploying them in light of their own needs. The large firms, with their regional production networks, became the *de facto* interpreters which connected the different worlds: the financial world, the technology centers, the training programs and the small firms.

The large firms were able to do this, because their dominant role in the regions, on the one hand, turned them into strong industrial and economic actors that the regional authorities eagerly listened to, while the way they dominated their suppliers and sub-contractors, allowed them to obtain a tremendous amount of transparent information on the SMEs' operations. Thus the large firms became the interface between the regional policy apparatus and the SMEs who were supposed to be served by the regionalisation.

Yet, importantly, becoming such an interface was far from a totally selfless act. In order for the large firms to engage in this kind of institution-building, they had to make sure that their actions on the whole served their interests. The surest way to do this was to simply "hijack" the policies, and give them a very clear goal—which, in turn, would be perfectly compatible with, or frequently simply mirrored, the problems that they had discovered with their suppliers but were somewhat unwilling to pay for themselves. The large firms, in other words, used the second-order effects of the previously "failed" policies to re-build and modernise their own supplier base.

What follows discusses two cases, which are taken from similar regional industrial networks to the ones discussed before, and which will illustrate in more detail what is meant here. The first deals with technology policy, while the second deals with further training programs. Both demonstrate how the large firms are acting as the interface between the different worlds: between the technology centers and the small firms, and between the small firms and the training centers. Each time, the same mechanism is at the basis of the large firm's role. By virtue of the information that the large firm has on the operations of the small firms and because of the way these large firms have access to the regional administrations, policies can be reoriented in such a way that they entirely fit the large firm's goals. For the regional authorities this provides a success case where before failure was most likely, and for the small firms it provides a problem-oriented method for them to modernise. The large firms, finally, get a free ride on public resources.⁷

⁷ It is useful here to recall the words used by Andrew Shonfield (Shonfield 1965: 128) in the mid-1960s to characterise the French political economy: "an act of voluntary collusion between senior civil servants and senior managers of big business."

3.2. Technology policy : „trust is good, control is better“

In the region of Franche-Comté, in the east of the country, Peugeot (PSA), the car maker, has the largest single factory of France. Located in Sochaux, it is an assembly plant which employs some 20 000 people directly, and certainly over another 20 000 indirectly. In the area, the Peugeot plants (there is another one located in Mulhouse, in the adjacent department of Haut-Rhin) account, directly and indirectly, for roughly two-thirds of all industrial employment (Pialoux 1996; Le Monde 7 March 1996).

By the turn of the decade, the local engineering school ENSMM, the University of Franche-Comté, the regional industrial development agency DRIRE and a few other local agencies had set up a technology center that was to provide the local SMEs with access to state-of-the-art technology.⁸ As part of a wider regional evaluation study, the local authorities had identified iron and steel surface treatment as a domain where much could be done. The industry is extremely polluting, and therefore a good candidate for modernisation. Furthermore, there was a social rationale for modernisation as well. In part as a result of the working conditions, which are extremely bad, these companies can only attract the least skilled workforce. Thus production process and labour market reinforce each other. The working conditions are truly backward, as a result of the use of production methods that date back to the early ages of industrialisation. These companies therefore were a perfect place for intervention along the new regional lines. Upgrading skills and standardising quality control killed many birds with one stone: it made the industry more competitive while upgrading technology and decreasing environmental hazards.

The idea of upgrading was not new. Over the previous years, a number of studies had raised the issue, and had even suggested technical solutions. The problem that the regional authorities faced was of another nature. How could they integrate the SMEs close enough into the study and decision-making process, so that their genuine needs were met? How could they design programs and then implement them? And how could they convince firms to participate in the programs? Normally, this is the type of mobilisational role that an industry or trade association plays. The industry association acts as a collective voice for the local firms, surveys the study and organisation process, and convinces its local affiliates to participate. The problem in this case was that no industry association was present, and the national one in Paris did not bother to come to the provinces to act as the voice of industry there.

In the absence of industrial associations, the local authorities did most themselves. They organised public hearings, surveys, and tried to identify the

⁸ This example is drawn from Levy 1994: 300-317.

response to training and quality control programs. As a result, only a fraction of the local firms signed up for the training programs and quality courses, and these were not even the companies that probably most needed it. Furthermore, the firms that participated disproportionately came from the car industry, i.e. they were suppliers to Peugeot. The metal suppliers to the watchmaking industry, and those that treated steel as one stage of a broader in-house production process, stayed away from the program. The reason for the former's high participation rate was of course their dependence upon Peugeot, who forced them to participate, since it fitted perfectly with a technological jump that the car maker was preparing.

At about the same time that the local authorities tried to mobilise the small firms, Peugeot was revising its corrosion control standards, and an internal study had suggested that perhaps the existing steel suppliers were not ready to meet these new standards. Thus PSA commissioned, with the financial help of the public authorities, a study at the University of Franche-Comté which would evaluate the suppliers in light of the new corrosion standards that Peugeot was adopting in its next generation of cars. The study found that the local suppliers would be capable of meeting these new standards only if they upgraded the skills of their workforce, and introduced more formalised production methods and standardised quality control instruments.

This explains why, among the steel producers, the suppliers to the car industry were over-represented in the technology programs. Using the regional policy attempts, Peugeot was able to define the exact needs of its supplier firms (through the study commissioned at the University), and then use the results to modernise part of its supplier base with the help of the regional authorities -- and not even pay a lot for the whole thing (PSA paid FF 200 000, the regional authorities over FF 1 Mio --Levy 1994: 308-12)! Then, in a second phase, once the local suppliers were upgraded, Peugeot could use its direct clout over them as a way of pushing them into sustained quality control programs to assure that quality did not slip. The PSA purchasing department SOGEDAC is notoriously tough with its suppliers (Gorgeu and Mathieu 1996a), and demands, as practically every other large firm in France, that all suppliers be certified according to ISO 9000 quality standards (Hancké 1996; Hancké and Casper 1996). Thus PSA not only determined what exactly the problems of the suppliers were, it also managed to impose solutions —all of which, while being to the benefit of the suppliers, was to PSA's as well, of course.

In sum, by virtue of its central position in the region, PSA was able to turn what was increasingly looking like a total regional policy fiasco into a relative success. As a result of the intervention, the regional policies were certainly considerably better adapted to the needs of local industry than before, workers in the supplier firms were better trained, which enabled the companies to make better steel, and PSA got better steel and better suppliers. What PSA did, was

simply fill the void in the policy design that resulted from the lack of strong industrial associations. It could do so because of its pivotal role in the triangle constituted between the large firm, the small firm and the tech center. A similar set-up explains the second example, this time drawn from the training area.

3.3. Training policy: the customisation of public schooling

The regionalisation of training has been a hotly debated issue in France. In response to what the country considered as a major competitiveness crisis (Taddéi and Coriat 1993), and enviously looking at Germany, French authorities set up a series of further training programs. For reasons that are very similar to the establishment of technology centers, Paris decided to delegate its implementation to the regions: in exactly the same way that the Paris technocrats—in a move of untypical modesty—decided that they were unable to define what the technology needs of the industries in the regions are, they decided they were unable to tell as well how much and which training the firms needed. Rather than guessing in the center, therefore, it would be wiser to create structures that decentrally determined what training meant (in a centrally defined framework, of course, since every Frenchman and -woman has the constitutional right to the same education). This devolution of training policies found its preliminary culmination in the Five-Year law of December 1993 (Comité de coordination 1996).

As part of this broad policy initiative, the regions started to experiment with what are called in France “alternating learning” methods, i.e. training programs which combine (as in Germany, the shining example) theoretical classroom training with practical training in companies; in a similar way to what exists in Germany, the training alternates between training proper and “real” work (i.e. on products or services for the market).

The policies had some implementation problems, and in much the same way as with the technology policies, the absence of strong industry associations explains in part what these problems were. The German training system, from which the French innovations borrowed heavily, relies on the active participation of both employers associations and the labour unions (Streeck 1987). Thus the French system was designed with these same actors, who were the central interlocutors in the French collective bargaining system anyway (Jobert and Tallard 1996; Reynaud 1978; Saglio 1995; Sellier 1984), as the administrators of the system. Yet, for a variety of reasons, the employers’ associations and the labour unions are in fact, despite the seemingly perfect fit between their organisational structures and those required by the policies, not at all well-equipped for this task.

The first reason has to do with the very organisational structure of the actors: the unions and the employers' associations both are, indeed, the parties around which the collective bargaining system and some of the parity-based co-management structures ("*structures paritaires*") in public enterprises and public administrations, such as EDF-GDF, the Social Security system, and the SNCF are constructed (Duclos and Le Gorrec 1994/95; Duclos and Mériaux 1996), but these are central tasks, not regional ones (which also implies that in some of these cases, the industry federations are not the pertinent actors anyway). The predominance, in fact, of the central structures is so big, that regional structures are either non-existent, or have no autonomy, since they are regarded as the logical local extension of the respective centers in Paris.⁹ Thus the regionalised training policies had, not unlike the technology policies, no institutional actor to put its weight behind them.

Second, further training has traditionally been something of a secondary issue for both labour unions and employers (Gehin and Méhaut 1993; Maurice, Sellier et al. 1988). In part, this is related to the Taylorist organisation of French companies, which hardly encourages workers to invest in training (Crozier 1964; Linhart 1991); but it also follows from the refusal of the labour unions to be associated with the co-management of French capitalism (Ross 1982). When, then, in the 1980s, the company became a central arena (again), and entrepreneurial ideologies began to dominate the political debate (see the special issue of *Sociologie du Travail* 1986), this took the labour unions somewhat off guard, and the result was that the policies were implemented without them. In short, because of both cultural and institutional reasons, the regionalisation of further training policies was bound to be a somewhat mitigated result.

Yet the policies were far from a complete failure, however, and in order to understand why this is so, one needs only to look at how the regionalisation policies in training matters articulated with the need for restructuring of the (by then solidly decentralised production networks of the) large firms. Throughout the 1980s decade, the workforce of large firms went through a slow but fundamental change. A detailed analysis of requests by firms for funds to finance their restructuring through the Fund for Industrial Modernisation (FMI) and the National Employment Fund (FNE), clearly demonstrates that French firms were slowly moving away from the mass markets and the traditional, highly hierarchical structures that had accompanied this market strategy (Salais 1992). The modernisation of the companies was the result of two policies. The first consisted of massive lay-offs, in large measure financed by the state, whereby a disproportionate amount of older, less qualified workers was sent in early retirement and part of the empty slots were filled with young, highly qualified technicians (Midler and Charue 1993). The second was retraining the existing relatively low-skilled workforce.

⁹ I owe this point, with its application to training, to Olivier Mériaux.

Because of the regional specialisation which was a result of the large firms' territorial reorganisation, the latter immediately turned to the regional authorities for many of their training needs. For many of the large firms, relying on the local training institutes allowed them to off-load part of the cost onto the region, and link their company-specific demands to the locally existing educational institutes. Thus the regional authorities offered the large firms financing and/or an existing infrastructure; if the training takes place in a technical school, it (may) even result in a state-certified diploma. Given the relative weight of the large firm, it is easy for them to influence the educational ministry to "create" new, almost measure-made diplomas or provide the conceptual mould for the development of training curricula; and, finally, the existing educational infrastructure can be mobilised rapidly to upgrade the skills structure of their suppliers.

An example will help understand this.¹⁰ The region Provence-Alpes-Côte d'Azur (PACA), in the south-east of France, has only few large firms: statistically, the area is the third lowest large firm-industrialised region in France (out of 22), after Franche-Comté (the region where Peugeot—the technology center example above—is located), and Auvergne, an almost exclusively agricultural region, which makes excellent cheeses --and tires in the Michelin factories.¹¹ One steel company, a subsidiary of a large French company, employs roughly 4000 workers (figures for 1994), and, following a rule of thumb, is estimated to employ roughly the same number indirectly in supplier firms. This makes the company the single most important industrial employer in the region.

In view of a restructuring plan, the company drew up a profile of its workforce, and came to the surprising conclusion that the majority of its workforce lacked basic skills, and was definitely underqualified for the course that the company was taking. Very early on, the company decided not to lay off workers; changes in the skill structure would have to be accomplished with the existing workforce. The first step of the requalification was simply to put all the low-skilled workers into the regular state-organised technical education system, in order for them to obtain the minimal educational level deemed necessary by management.

The second step came when the company felt the need to reorient the training program and bring it closer to the needs required in the steel industry. Instead of general technical and vocational training, the company wanted more industry-specific training, and, with this in mind, created, in cooperation with the education ministry, a local training institution, whose task it was to set up

¹⁰ This example is entirely drawn from Hildebrandt, Quack et al. 1995.

¹¹ Michelin, the tire maker, is the only large firm in the Auvergne, located in Clermont-Ferrand, and thus is in a virtually similar situation as Peugeot in Franche-Comté, Citroën in Rennes, Aérospatiale in Toulouse, and the anonymous steel company in PACA.

specialised programs, one a CAP (*certificat d'aptitude professionnelle*, a low-level technical diploma), and a BEP (*brevet d'études professionnelles*, a higher-level quasi-technician's diploma).¹² Both are official, state-recognised diplomas. The training was done not in the local technical lycées, but in the company training center, and the company sent its own engineers and foremen as teachers.

The customisation of training policy did not stop there. As a direct result of its own reorganisation, the large steel firm also demanded from its suppliers that they upgrade the skills of their workforce. In a move parallel to the colonisation of the further training program described above, the large firm used some of the regional resources to help retrain its suppliers' workforce: the in-house training program offers courses in new production techniques to its suppliers.

In short, both directly and indirectly, the large firm put many of the regional resources to very good use—for itself, first of all, but also for its suppliers, and therefore indirectly for the rest of the region as well. Most surprising in this short narrative on the role of large firms in PACA is perhaps that the boundaries between the public educational system, on the one hand, and the company-specific training system, on the other, are permanently blurred. To upgrade its workers, the company sends them to the local state school; with the Ministry of Education, the company negotiated a special diploma; and the company training center organises, with its own teachers, the training, in cooperation with the local schools. Taking into account the symbolic value of the public educational system in France—the “*école de Jules Ferry*,” the place where *égalité* starts—this permanent negotiation between private and public actors is all the more surprising.

3.4. Regional policies in perspective: public actors and private goods

These examples have two things in common: why the policies failed and how they got a second lease on life. They failed for a set of simple reasons. First of all, being designed in faraway Paris, they were ill-conceived, mainly because the technocratic policy-makers are simply unable to grasp all the necessary information on the situation in the regions and then reorganise these into policies. Secondly, once transferred and implemented, there are no social actors in the regions both autonomous and strong enough to carry through the policies without permanently having recourse to the central state. Hence the

¹² More clarity about the acronym jungle of different types of diplomas and training certificates in France can be found in the contributions to the workshop on “Négociation et construction des diplômes de formation professionnelle: une confrontation Allemagne-France,” Aix-en-Provence, LEST, 22-24 May 1996.

policies always come up short of their stated goals. The technology policy misses its target because it lacks an institutional sounding board and the training policy is hard to implement because the identities of the actors and their organisational expression are at odds with the regional structure of the training program. There are other examples that could be brought in as well, such as, for example, the financial instruments which were designed throughout the successive decentralisation reforms since the Second World War, and which all turned out to be unable to bridge the gap between the financial world and the SMEs.

These examples also share a basic architecture in explaining the ultimate outcomes. In all of them, the end results are in fact measure-made for the large firms. The technology policy discussed is undoubtedly the clearest case: it failed miserably in its initial goals, but after the large firm PSA stepped in to reorganise the policy in light of its own needs, it became a useful way to upgrade the car company's supplier base. The regional training program in PACA of the second example, although arguably less of an initial failure, got a boost after the large steel firm recovered it and streamlined it, entirely congruent with its own reorganisation. In a parallel way to what was discussed above, the existing public regional financial institutions were re-organised by the large firm in order to tie its suppliers even more strongly into its own operations. In the end, therefore, the regionalised production networks that the large firms set up, and the regionalisation policies that the government initiated, ended up reinforcing each other. One became, so to speak, an essential condition for the other, and the successful development of one depended on the relative success of the other.

Compare this with the outcomes of such policies in a country like Germany.¹³ In Germany, labour unions and employers, both private actors, discuss the structure of training policy. Employers make sure that the wishes of the firms are taken into account, i.e. that the training actually will provide the young people with jobs, while the labour unions make sure that the skills obtained are general enough to be of value outside the company where the training takes place (Streeck 1987). Consider training in this example a public good (Olson 1967), and the situation is one where private actors create, through the institutions that guide their strategies, public goods (Finegold and Soskice 1988). The same is true of technology policy (Herrigel 1993). All firms in a region contribute to institutions that allow the efficient transfer of technological knowledge from large to small firms and across small firms. Again: consider technology policy a public good, and the outcome is one in which private actors produce public goods. What seems to characterise the

¹³ The example is not entirely chosen at random: since Germany figures as an exemplar in almost all the policy debates on the reorganisation of industrial, training, and regional policy (even in labour relations reform), the comparison is especially instructive.

German political economy, is that its institutional make-up pushes private actors to produce public goods.

This simple idea sheds a remarkable light on what appears to be going on in France. The technology, training and financial policy are, in fact, all government policies --policies by a very public actor indeed-- which, by virtue of the way they are implemented and used in practice, seem to produce --with only a slight sense of exaggeration-- private goods for the large firms. The irony: whereas the institutional setting in Germany forces private actors to produce public goods, the institutional setting in France --the quintessential "strong-state" country in the comparative political economy literature-- favours the production of private goods through public policies.

4. Conclusion: modernisation without flexible specialisation

France's economy has dramatically adjusted to the challenges of the 1980s. Between 1980 and 1984, the country's large manufacturing firms in the export sector (with very few exceptions) went through a profound crisis. By 1990, most of them were in good financial health, and all had fundamentally reorganised their operations. They had reduced their workforces by between one third and half during the decade, doubled productivity, introduced (extremely careful and definitely very instrumental) team-based institutions of workers' participation, rethought the product design process and reorganised their links with suppliers.

This paper dealt with one aspect of this restructuring: the use that the large firms made of the regional policies in order to accomplish the latter task. In the 1980s, two movements encountered each other against the background of the large firms' financial crisis. On the one hand, the decentralisation of production which had started in the 1950s and accelerated after 1968; on the other, the new challenges that manufacturing was facing in the entire developed world. What emerged were the autarchical regional supplier networks found all over France today, constructed around one large firm in the center --frequently also the sole regional interface with Paris and/or the international economy-- and its direct and indirect suppliers and sub-contractors. These regional industrial structures exist in Bretagne, in Franche-Comté, around Lyon, Toulouse, in Normandie, in short, essentially in every area with some industrial activity in export sectors.

This system is without any doubt measure-made for the large firms. However, since they also need to invest in the relationship with their suppliers and subcontractors, the situation does not end up in straightforward

exploitation. Rather, it is a strange mixture of authoritarianism and cooperation - probably best described as large firm paternalism. The large firm gets the goods (and the services) it wants, in the desired quantity and quality, and at exactly the moment it wants. The large firm also has seriously reduced its stake in the design and production of those goods. In return for this, the large firm helps the supplier to upgrade its manufacturing operations, to find partners and thus grow, and to obtain finance (through the credit and newly created parallel financial systems). Yet while these supportive activities allow the small firm to upgrade technologically and even in principle to search for new markets, they also tie the small firm more closely to the large manufacturing firm than in the old arms-length relationship.

There is a contradiction in all of this, of course: the creation of tighter links between the large and the small firms, also potentially allows the small firms to free themselves of the demands of the large firms. By upgrading the technology base and the work organisation of their suppliers, the large firms open the door for gradually more independent paths that the small firms can take. The policy, for example, of imposing ISO 9000 certification upon suppliers not only serves a purpose in the actual primary inter-firm relationship between large and small firms. It also allows the supplier to position itself more favourably for international clients. By tying the suppliers more closely, ironically, the large firm has also created the conditions for more distance between them. How this contradiction will ultimately be solved, is as of yet unclear. Will the relationship ultimately stabilise around one of the two poles, will both parties design or find new ways of dealing with it, or will the small firms simply never be aware of their capacities to grow beyond the large firm's world?

Stepping back for a moment, and feeding this discussion into the comparative debate on regional economies alluded to above, this paper suggests that regional development models are heavily influenced by the "national" trajectory of the industrial model. It is not by chance that in response to the economic turmoil of the 1970s and 1980s, French industry ends up being organised in hierarchical regional economies; rather, this fits perfectly with the broader postwar evolution of French industry, which was organised around and pushed forward by the large firms, in a modernising coalition with the French state --as Shonfield already pointed out in the mid-1960s. The imperatives of international competition, or better perhaps, of the particular translation that French economic and political elites gave to that crisis (see Weber 1990 for an account) was in large measure shaped by the postwar experience, and thus revolved around the large firm as the major agent of change. It was not necessity, perhaps, which pushed French industry into this particular model, but it was not entirely open either. The past is reflected in the present.

If one compares this with the stylised pictures of regional economic development in Italy, Germany or the UK, one sees underneath the

(discernable) commonalities, very different development patterns emerging. In Italy, the industrial districts resurfaced after 1969, in large part conditioned by the pre-existing social and political structures of these regional economies and, perhaps, their “incomplete integration” into the dominant Italian development model (Locke 1995). The German regional model (Herrigel 1993; Herrigel and Sabel 1995) appears to be perfectly consistent with broader characteristics of the German political economy, such as the role of strong employer associations in forcing individual firms to contribute to public or club goods such as training and technology transfer (Soskice 1996). And the absence of such employer associations in the UK might help explain why mutually supportive regional networks of firms never re-emerged after their demise at the end of the previous century (Bagnasco and Sabel 1995). It is beyond the scope of this paper to develop this argument in full, but the comparative analysis of the development of regional economies in different capitalist countries, suggests strong continuities between the development path followed in different countries throughout the postwar period, and the trajectory of industrial adjustment after 1973. Different capitalisms, indeed, yield different forms of regional economic development.

Bibliography

- Aoki, M. (1988) *Information, incentives and bargaining in the Japanese economy*. (Cambridge, Cambridge University Press).
- Bagnasco, A. and C. F. Sabel, Eds. (1995) *Small and medium-size enterprises*. (London: Pinter).
- Baleste, M. (1995) *L'économie française*. (Paris, Armand Colin).
- Baleste, M., et al. (1993) *La France: 22 régions de programme*. (Paris, Masson).
- Baudry, B. (1994) "De la confiance dans la relation d'emploi ou de sous-traitance." *Sociologie du Travail*. 36 (1): 43-60.
- Baudry, B. (1995) *Qualité des produits et coordination: une analyse économique du processus de certification industrielle des PME*. Paper presented at Deuxième Congrès International Francophone de la PME, Paris, 25-27 October.
- Becattini, G. (1991) "The industrial district as a creative milieu." (in) *Industrial change and regional development: the transformation of new industrial spaces*. G. Benko & M. Dunford. (ed.) (London and New York: Belhaven Press).
- Berger, S. (1972) *Peasants against politics*. (Cambridge UK, New York, Cambridge University Press).
- Berger, S. (1981) "Lame Ducks and National Champions. Industrial policy in the Fifth Republic." (in) *The Fifth Republic at Twenty*. W. G. Andrews & S. Hoffmann. (ed.) (Brockport NY: State University of New York Press).
- Berger, S. and M. J. Piore (1980) *Dualism and Discontinuity in Industrial Societies*. (Cambridge, MA, Cambridge University Press).
- Bovais, H. and O. Desmedt (1992) *Du miracle au Défi Vendéen: Les PME vendéennes face à la modernisation*. (La Roche sur Yon, Chambre de Commerce et d'Industrie de la Vendée).
- Boyer, R. (1979) "La Crise Actuelle : une mise en perspective historique." *Critique de l'économie politique*. 7-8: 5-113.
- Brusco, S. (1986) "Small firms and industrial districts. The experience of Italy." (in) *New Firms and Regional Development in Europe*. D. Keeble & E. Wever. (ed.) (London: Croom Helm).
- Cameron, D. R. (1996) "Exchange Rate Politics in France, 1981-1983: The Regime-Defining Choices of the Mitterrand Presidency." (in) *The Mitterrand Era. Policy Alternatives and Political Mobilization in France*. A. Daley. (ed.) (London: MacMillan).
- Caro, P. (1993) *Les usines Citroën de Rennes. Origines, implantation et évolutions (1951 à 1974)*. MA Thesis (DEA), EHESS.
- Chanel-Reynaud, G. and S. Cieply (1996) *L'Émergence et l'évolution des fonds de développement locaux et régionaux en France. L'Exemple Rhône-Alpin*. Centre de recherches M.F.B., Université de Lyon.
- Clenet, L.-M. (s.d.) *Catholicisme social et modèle économique vendéen*. manuscript
- Cohen, E. (1989) *L'état brancardier. Politiques du déclin industriel 1974-1984*. (Paris, Calmann-Lévy).

- Comité de coordination (1996) Evaluation des politiques régionales de formation professionnelle. Services du premier ministre,
- Courlet, C. and B. Pecqueur (1992) "Les systèmes industriels localisés en France. Un nouveau modèle de développement." (in) Les régions qui gagnent. Districts et réseaux: les nouveaux paradigmes de la géographie économique. G. Benko & A. Lipietz. (ed.) (Paris: Preses Universitaires Françaises).
- Crozier, M. (1964) Le phénomène bureaucratique. (Paris, Le Seuil).
- Duchéneault, B. (1995) Enquête sur les PME françaises. Identités, Contextes, Chiffres. (Paris, Maxima).
- Duclos, L. and P. Le Gorrec (1994/95) "Le paritarisme peut engendrer un certain corporatisme d'entreprise. Entretien avec Pierre le Gorrec, réalisé par Laurent Duclos." Travail. (32/33): 123-137.
- Duclos, L. and O. Mériaux (1996) Pour une économie du paritarisme. Fragment d'une hypothèse néo-corporatiste. Paper presented at Cinquième congrès de l'Association Française de Science Politique, Aix-en-Provence.
- Finegold, D. and D. W. Soskice (1988) "The Failure of Training in Britain: Analysis and Prescription." Oxford Review of Economic Policy. 4 (3): 21-53.
- Friedmann, G. (1956) Le travail en miettes. Spécialisation et loisirs. (Paris, Gallimard).
- Ganne, B. (1992) "Place et évolution des systèmes industriels locaux en France. Economie politique d'une transformation." (in) Les régions qui gagnent. Districts et réseaux: les nouveaux paradigmes de la géographie économique. G. Benko & A. Lipietz. (ed.) (Paris: Presses Universitaires France).
- Ganne, B., et al. (1993) PME et systèmes industriels locaux entre l'internationalisation de l'économie et les politiques d'aide au développement en France, en Italie et en Grand-Bretagne. Rapport final du Contrat PPSH 60 C. Groupe Lyonnais de Sociologie Industrielle.
- Gehin, J.-P. and P. Méhaut (1993) Apprentissage ou formation continue? Stratégies éducatives des entreprises en Allemagne et en France. (Paris, L'Harmattan).
- Giblin, B. (1995) "L'Etat et les collectivités locales: le bilan des années Mitterand." (in) L'Etat de la France. S. Cordellier & E. Poisson. (ed.) (Paris: La Découverte/CREDOC).
- Glyn, A. (1995) Does Profitability Really Matter? Wissenschaftszentrum Berlin für Sozialforschung, FS I 95-306.
- Gorgeu, A. and R. Mathieu (1991) Les pratiques de livraison en juste à temps en France entre fournisseurs et constructeurs automobiles. Centre d'Etudes de l'Emploi, 41.
- Gorgeu, A. and R. Mathieu (1993) "Dix ans de relations de sous-traitance dans l'industrie française." Travail. (28): 23-44.
- Gorgeu, A. and R. Mathieu (1994) La gestion du travail dans les organisations en juste à temps: l'exemple des nouveaux établissements d'équipement automobile. Centre d'études de l'emploi, 94/14.
- Gorgeu, A. and R. Mathieu (1995) "Stratégies d'approvisionnement des grandes firmes et livraisons juste à temps: quel impact spatial?" L'Espace géographique. 24 (3): 245-259.
- Gorgeu, A. and R. Mathieu (1996a) "L' "Assurance Qualité Fournisseur" de l'industrie automobile française." Revue d'Economie Industrielle. 75 (1).

- Gorgeu, A. and R. Mathieu (1996b) "Les ambiguïtés de la proximité: Les nouveaux établissements d'équipement automobile." *Actes de la Recherche en Sciences Sociales*. (114, September): 44-53.
- Gravier, J.-F. (1947) *Paris et le désert français*. (Paris, Le Postulan).
- Greffe, X. (1992) *La décentralisation*. (Paris, La Découverte).
- Halimi, S. (1992) *Sisyphus est fatigué. Les échecs de la gauche au pouvoir*. (Paris, Robert Laffont).
- Halimi, S. (1996) "Less Exceptionalism than Meets the Eye." (in) *The Mitterrand Era. Policy Alternatives and Political Mobilization in France*. A. Daley. (ed.) (London: MacMillan).
- Hall, P. A. (1986) *Governing the Economy. The Politics of State Intervention in Britain and France*. (Oxford, Oxford University Press).
- Hancké, B. (1996) *Industrial Reorganisation in France: Changing relationships between large and small firms*. Wissenschaftszentrum Berlin für Sozialforschung, Discussion Paper FS I 96-301.
- Hancké, B. and S. Casper (1996) *ISO 9000 in the French and German car industry. How international quality standards support varieties of capitalism*. Wissenschaftszentrum Berlin für Sozialforschung, WZb discussion paper FS I 96 - 313.
- Hancké, B. and S. Cieply (1996) *Bridging the finance gap for small firms. The role of information flows across large firm-based production networks in supplying finance to small firms: the case of France*. Wissenschaftszentrum Berlin für Sozialforschung, WZB discussion paper FS I 96 - 311.
- Hayward, J. E. S. (1983) *Governing France. The One and Indivisible Republic*. (London, Weidenfeld and Nicolson).
- Herrigel, G. (1993) "Large Firms, Small Firms and the Governance of flexible Specialization: The case of baden-Württemberg and socialised risk." (in) *Country Competitiveness*. B. Kogut. (ed.) (New York: Oxford University Press).
- Herrigel, G. and C. F. Sabel (1995) *Craft Production In Crisis: Industrial Restructuring in Germany During the 1990s*. Department of Political Science, University of Chicago, and Department of Political Science MIT,
- Hildebrandt, S., et al. (1995) *Berufsausbildung in Frankreich zwischen zentralstaatlicher Organisation und lokaler Regulierung am Beispiel der Region Provence-Alpes-Côte d'Azur*. Wissenschaftszentrum Berlin für Sozialforschung,
- Hillau, B. and P. Caro (1996) "L'action de l'appareil d'Etat et la prise en compte de l'environnement socio-économique local: le cas de la construction de l'offre de formation." (in) *Politiques Sociales et Territoires en Europe. Proceedings of the 16th Conference of the Association d'Économie Sociale*, 12-13 September. M. Baslé. (ed.) (Rennes: IREIMAR - CNRS - Université de Rennes).
- Jobert, A. and M. Tallard (1996) "Diplômes et certifications de branche dans les conventions collectives." *Formation Emploi*. (52): 133-149.
- Lamanthe, A. and E. Verdier (1996) "Décentralisation et construction des référents régionaux de l'action publique: le cas de la formation professionnelle des jeunes." (in) *Politiques Sociales et Territoires en Europe. Proceedings of the 16th Conference of the Association d'Économie Sociale*, 12-13 September. M. Baslé. (ed.) (Rennes: IREIMAR - CNRS - Université de Rennes).

- Le Bourdonnec, Y. (1996) *Le Miracle Breton*. (Paris, Calmann-Lévy).
- Levy, J. (1994) *Toqueville's Revenge. Dilemmas of institutional reform in post-dirigiste France*. Ph.D. Thesis, MIT.
- Linhart, D. (1991) *Le torticolis de l'autruche. L'éternelle modernisation des entreprises françaises*. (Paris, Le Seuil).
- Linhart, R. (1981) *The assembly line*. (Amherst, University of Massachusetts Press).
- Locke, R. M. (1995) *Remaking the Italian Economy*. (Ithaca NY, Cornell University Press).
- Lorenz, E. H. (1992) "Trust and the Flexible Firm: International Comparisons." *Industrial Relations*. 31 (3): 455-472.
- Lorenz, E. H. (1993) "Flexible Production Systems and the Social Construction of Trust." *Politics & Society*. 21 (3): 307-327.
- Loubet, J.-L. (1995) *Citroën, Peugeot, Renault et les autres. Soixante ans de stratégies*. (Paris, Le Monde-Édition).
- Lütz, S. (1993) *Die Steuerung industrieller Forschungs Kooperation*. (Frankfurt am Main, Campus).
- Maurice, M., et al. (1988) "The Search for a Societal Effect in the Production of Company Hierarchy: A Comparison of France and Germany." (in) *Internal Labour Markets*. P. Osterman. (ed.) (Cambridge MA: MIT-Press).
- Midler, C. and F. Charue (1993) "A French-style Sociotechnical Learning Process: The Robotization of Automobile Body Shops." (in) *Country Competitiveness. Technology and the Organizing of Work*. B. Kogut. (ed.) (Oxford: Oxford University Press).
- Minguet, G. (1985) *Naissance de l'Anjou industriel*. (Paris, L'Harmattan).
- Montricher, N. d. (1995) *L'aménagement du territoire*. (Paris, La Découverte).
- Morin, M.-L. (1994) "Sous-traitance et relations salariales. Aspects de droit du travail." *Travail et Emploi*. (60): 23-431.
- Mouy, P. (1996) "La formation professionnelle des jeune en France: la décentralisation en marche." (in) *Politiques Sociales et Territoires en Europe. Proceedings of the 16th Conference of the Association d'Économie Sociale*, 12-13 September. M. Baslé. (ed.) (Rennes: IREIMAR - CNRS - Université de Rennes).
- Oberhauser, A. (1987) "Labour, Production and the State: Decentralization of the French Automobile Industry." *Regional Studies*. 21 (5): 445-458.
- Oberhauser, A. M. (1988) *The Social and Spatial Reorganization of the French Automobile Industry: 1950-1985*. Ph.D. Thesis, Clark University.
- Olson, M. (1967) *The Logic of Collective Action*. (Cambridge MA, Harvard University Press).
- Pialoux, M. (1996) "Stratégies patronales et résistances ouvrières." *Actes de la Recherche en Sciences Sociales*. (114, September): 5-20.
- Putnam, R. D. (1993) *Making democracy work. Civic traditions in modern Italy*. (Princeton, NJ: Princeton University Press).
- Renard, J. (1995) "Pays de la Loire. Infrastructures: des projets aux réalisations." (in) *L'état de la France*. S. Cordellier & E. Poisson. (ed.) (Paris: La Découverte/CREDOC).
- Reynaud, J.-D. (1978) *Les Syndicats, les Patrons et l'Etat*. (Paris, Editions Ouvrières).

- Rivaud-Danset, D. and R. Salais (1992) "Les conventions de financement des entreprises. Premières approches théorique et empirique." *Revue française d'économie*. 7 (4): 81-120.
- Ross, G. (1982) *Workers and Communists in France. From Popular Front to Eurocommunism.* (Berkeley CA, University of California Press).
- Sabel, C. F. (1982) *Work and Politics.* (Cambridge, Cambridge University Press).
- Sabel, C. F. (1993a) "Learning by Monitoring." (in) *The Handbook of Economic Sociology.* N. Smelser & R. Swedberg. (ed.) (Princeton NJ: Princeton University Press).
- Sabel, C. F. (1993b) "Studied trust. Building new forms of cooperation in a volatile economy." (in) *Technology and the Wealth of Nations. The Dynamics of Constructed Advantage.* D. Foray & C. Freeman. (ed.) (London, New York: Pinter Publishers: 332-352).
- Sabel, C. F. and J. Zeitlin (1996 forthcoming) "Stories, strategies, structures: Rethinking historical alternatives to mass production." (in) *Worlds of Possibility: Flexibility and Mass Production in Western Industrialization.* C. F. Sabel & J. Zeitlin. (ed.).
- Saglio, J. (1995) "Industrial Relations and Human Resources in France." (in) *Employment Relations in a Changing World Economy.* R. Locke et al. (ed.) (Cambridge, MA: MIT Press).
- Salais, R. (1988) "Les stratégies de modernisation de 1983 à 1986." *Économie et statistique.* (213): 51-74.
- Salais, R. (1992) "Modernisation des entreprises et Fonds National de l'Emploi. Une analyse en terme de mondes de production." *Travail et Emploi.* (51): 49-69.
- Salais, R. and M. Storper (1993) *Les mondes de production. Enquête sur l'identité économique de la France.* (Paris, Éditions de l'École des Hautes Études en Science Sociales).
- Salvati, M. (1981) "May 1968 and the Hot Autumn of 1969. The Responses of Two Ruling Classes." (in) *Organizing Interests in Western Europe.* S. Berger. (ed.) (Cambridge: Cambridge University Press: 329-363).
- Schmidt, V. A. (1990) *Democratizing France. The political and administrative history of decentralization.* (Cambridge, Polity Press).
- Schmidt, V. A. (1996) *From State to Market? The transformation of business in France.* (Cambridge, Cambridge University Press).
- Sellier, F. (1984) *La confrontation sociale en France.* (Paris, Presses Universitaires de France).
- Shonfield, A. (1965) *Modern Capitalism. The Changing Balance of Public and Private Power.* (Oxford, Oxford University Press).
- Smith, W. R. (1990) "Nationalizations for what? Capitalist Power and Public Enterprise in Mitterand's France." *Politics & Society.* 18 (1): 1-38.
- Soskice, D. W. (1996) *Technology Policy and National Institutional Frameworks: the UK and Germany.* Paper presented at CEPR Conference on European Industrial Policy, Wissenschaftszentrum Berlin für Sozialforschung, April 1997.
- Storper, M. and B. Harrison (1992) "Flexibilité, hiérarchie et développement régional: les changements de structure des systèmes productifs industriels et leurs nouveaux modes de gouvernance dans les années 1990." (in) *Les régions qui gagnent. Districts et réseaux: les nouveaux paradigmes de la géographie économique.* G. Benko & A. Lipietz. (ed.) (Paris: Presses Universitaires de France).

- Streeck, W. (1987) *The Role of the Social Partners in Vocational Training in Germany*. (Berlin, CEDEFOP).
- Taddéi, D. and B. Coriat (1993) *Made in France. L'industrie Française dans la compétition mondiale*. (Paris, Librairie Générale Française).
- Veltz, P. (1996) *Mondialisation, villes et territoires. L'économie d'archipel*. (Paris, Presses Universitaires de France).
- Zysman, J. (1977) *Political Strategies for Industrial Order. State, Market and Industry in France*. (Berkeley CA, University of California Press).
- Zysman, J. (1983) *Governments, Markets, and Growth. Financial Systems and the Politics of Industrial Change*. (Ithaca NY, Cornell University Press).