

Trust or Hierarchy?

Changing Relationships Between Large and Small Firms in France

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ABSTRACT. An influential position in the contemporary study of industrial reorganisation discusses the construction of inter-firm trust as a way to adjust the organisation of firms to the flexibility required by the market. The conventional picture of the relation between large firms in France and small firms who supply them, suggests that it is very hard for them to construct such trust-based networks. Instead, it is one of atomised sub-contracting: the large firm gives very detailed specifications for the job that needs to be done, and the sub-contractor executes. In recent years, however, several accounts have suggested that this arms-length relationship between larger firms and suppliers is changing.

The argument of this paper is that, while the relationships between suppliers and large firms are indeed undergoing tremendous changes, the category of trust does not appear to capture the nature of these changes very well. The combined use of their market power and the political resources that large firms have at their disposal, allow them to remain the stronger partner in what always was an asymmetric power relationship. The argument is supported by detailed discussions of just-in-time delivery, quality issues and the role of the large firms in organising small firm finance.

1. Trust and co-operation

Industrial activities increasingly involve close co-operation between two or more discrete actors who contribute to the same final product. In most car companies, for example, the actual value created by the company that owns the brand name, is below 30%; the rest is supplied by (often) smaller firms who supply specialised parts such as seats, brake systems or dashboards. The same is true for most household appliance, computer

and telephone manufacturers, apparel firms and chemical companies (Harrison, 1994). In all these cases, important components of the final product are out-sourced to supplier firms, who are responsible for the part or process that they contribute.

Co-operation, however, is difficult: none of the parties to the exchange know in advance what exactly will be expected of them and what they can expect of their partners; the result of this uncertainty is, at least in principle, that neither of them is willing to commit any resources to the co-operative project (Milgrom and Roberts, 1992; Williamson and Winter, 1993). In other, more formal terms, since complete contracts, which cover all the contingencies involved in complex manufacturing (and services) are impossible to design, co-operation is, especially in the current industrial climate, with its rapid technological change and unstable markets, an increasingly difficult task to accomplish (Sabel, 1993b).

The current literature on industrial reorganisation provides two answers to the problem of how to induce co-operation between independent economic actors. The first is related to the newly emerging field of the “economics of organisation,” and suggests that the problem can be solved through the creation or adoption of incentive structures that push the actors toward co-operation. Self-interested behaviour can be organised in such a way that it does not lead to a stalemate in which both parties forego the benefits of co-operation, but to a situation in which co-operation itself follows from the structure of interests and incentives that the actors face (Milgrom and Roberts, 1992; Streeck, 1991). If companies are afraid, for example, that their competitors will poach the workers that they train, they will rather not train the workers in the first place, and the end result

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is – since all know this – that none of the firms in the industry train. If, however, wages are set at the level of the industry instead of individual firms, the possibility of poaching is seriously reduced, and it suddenly becomes a very rational thing to train workers (Finegold and Soskice, 1988).

The other answer relies on the opposite idea that incentive structures alone cannot do the job: as soon as either of the parties involved, doubts the genuine intentions of (one of) the other actors involved, the carefully crafted equilibrium collapses into non-co-operative behaviour. What is needed, therefore, is not an incentive structure that steers everyone's interests toward co-operation, but the redefinition of the parties' identities so that their interests are aligned, at least for the co-operative project (Sabel, 1993a).

Even though many things separate these two views, they both rely on one central idea, namely that trust or trust-like institutions (such as "credible commitments") are a necessity to solve the dilemma associated with the stalemate. If one of the parties cannot convince the other that they will not change the terms of exchange unilaterally – by withholding their resources after the first has committed theirs – neither will go the first step and all forego co-operation.

France is an interesting place to study the questions that arise with this type of innovative organisational models. The conventional picture of the relation between large firms in France and small firms who supply them is one of atomised sub-contracting: the large firm gives very detailed specifications for the job that needs to be done, and the subcontractor executes: inter-firm Taylorism, one influential research report in the mid-1980s called this situation (Rochard, 1987). It is – unsurprisingly – very similar to the relationship between workers and management, which relies on detailed instructions from superiors, and workers' tasks are limited to those instructions. Both pictures are so similar because essentially the same mechanism is at the basis: a profound lack of mutual trust (Crozier, 1964; Fox, 1974; Maurice, Sellier et al., 1986; Sabel, 1982).

In recent years, however, several accounts have suggested that this arms-length relationship between larger firms and suppliers is changing, alongside, and perhaps propelled by, changes in the relations between workers and shopfloor

management. The recent literature on French industry in effect abounds with discussions of the development of trust between large and small firms (Linhart, 1991; Linhart, 1992; Lorenz, 1988; Lorenz, 1993; Veltz and Zarifian, 1993), the creation of partnership relationships between suppliers and final producers (Gorgeu and Mathieu, 1993), and even the emergence of industrial districts (Courlet and Pecqueur, 1992; Ganne, 1992). Most of these accounts agree that these changes are the consequences of the search for increased competitiveness which followed the French economy's relative opening up to the international economy since the early 1970s.

Yet these optimistic accounts misinterpret the current situation in French industry. For most of these authors, any sign which suggests that inter-firm relationships are changing, is rather optimistically regarded as a step toward a trust-based order without much further discussion. In his analysis of inter-firm relationships, for example, Baudry (Baudry, 1994; Baudry, 1995) interprets the growing importance of ISO 9000 quality control standards as a clear sign of growing confidence by the large firms in the capacities of their suppliers. Yet a closer look (such as the one below) at how ISO 9000 structures the relations between firms, suggests that they are in fact a very inexpensive way for large firms to increase their control over their suppliers because of the increased transparency that they impose on the latter.

Similarly, in a series of studies, Lorenz concludes somewhat optimistically that relations between large firms and their equipment builders in the machine-tool industry have increasingly turned into the type of long-term links that are usually associated with trust-base co-operation (Lorenz, 1988; Lorenz, 1992; Lorenz, 1993). Again, however, a second reading of the evidence conveys a slightly more nuanced picture: up until very recently, the central problem of the French machine-tool industry was precisely that they had no domestic market – French firms overwhelmingly bought their machines abroad – and therefore almost disappeared (Verdier, 1986; Ziegler, 1997). In fact, the relations between large firms and machine-tool builders were so problematic that the state felt, until very recently, that it had to step in with a major industrial policy package

to save the industry. For the sake of clarity: all this does not imply that things have not changed in France; it merely says that “trust” interpretations are over-stylised and overly optimistic. In short, instead of taking them on face value, they definitely warrant a closer look.

What appears to have happened in French industry is a slightly more complex and more subtle transition than a simple move from relations based on distrust to a consolidated new trust-based order. From an authoritarian, distant relationship – “inter-firm Taylorism” – the links between large firms and their suppliers moved to an equally hierarchical but much closer relationship, which, lacking a better term, I will call large firm paternalism. It involves serious investment from the large firm in the suppliers’ operations, which could potentially lead to more autonomy for the latter by making the relationship more symmetric. Yet it does not, because the suppliers remain, even in this new set-up, extremely dependent upon the large firm. Large firms therefore helped the small firms – who were often their captive suppliers – upgrade their operations – which were organised around the needs of the large firms in the first place – but by doing so also made them more dependent upon their own operations. In many instances, the large firm had become the main (if not sole) interface between the suppliers and the world beyond the industrial-technical relationship: the banks, regional and national authorities, technology transfer institutes and training centres. Thus, the new situation in France should not be understood as an expression of growing inter-firm trust: it makes better sense to think of it as a profoundly modernised version of the old, hierarchical model in which the large firms controlled their suppliers. And this, in turn, means that, in contrast to the new conventional wisdom, hierarchical inter-firm links still have a future in today’s “post-Fordist” world.

Why did these hierarchical relations survive? And how does their existence address the wider issue of trust as a basis for competitiveness? The first question is answered by taking a closer look at the properties of the supplier relationships themselves, and at their historical development. Following Teece’s categorisation (Teece, 1986), French suppliers have no or very few specialised assets.¹ The products that they supply could, in

principle, be found on a market without tremendous loss for the buyer. The large firm, on the other hand, does have specialised assets, an asymmetry that follows logically from the fact that joint product development almost never takes place – despite the enthusiastic rhetoric in France of “partnership.” This endemic asymmetry then simply translates into further structural power disparities.

One could argue, however, that suppliers could simply exit this highly unequal relationship. In fact they cannot easily, because of the way supplier networks have historically developed, namely as large firm-centered autarchic green-field areas, which have given the buyers a large group of captive small firms in the region, who are entirely dependent upon their supplier relations with the larger firm (Hancké, 1997). While this explains historically how the asymmetric relations could develop in the first place, it also suggests why, if the supplier wanted to change the basic structure of the relationship, it would almost certainly be impossible.

It follows therefore that French industry has found another trajectory toward competitiveness than the trust-based route. Given the capacity of the large firms to shift their adjustment needs onto their suppliers, itself a result of the historically given lack of exit options of the latter, and given the asset asymmetry, large firms are able to obtain the same results of widespread out-sourcing as their counterparts in other countries, but without having to invest heavily in a long-term trust-based relationship. In short, trust may well be a basis for competitiveness, but it is unclear if it is a necessary condition.

The next three sections give details on three fields that are crucial in the relationship between large and small firms. The first is the emerging new patterns of sub-contracting, which require – the second theme discussed – a new organisation of quality control links between firms. In both these instances, adjustment in large firms determines the general contours of the changes. The final theme discusses how the large firm supports the small firm in finance.

Suppliers are by all measures important firms in France. Compared to other European countries, a larger proportion of SMEs in France are suppliers: in 1991, 43% of the small firms realised over one-third of their turn-over as sub-contract-

tors – the corresponding figures for the U.K. and Germany are below 20% (de Saint Louvent, 1991).

This paper brings together a lot of diverse material from many different sources. Part of the evidence was gathered through interviews, most of which lasted between one and three hours, with managers, supplier firms and unions in the car industry between 1993 and 1996, and with engineers in the electricity industry in 1996. These interviews were then supplemented with an analysis of newspaper articles detailing the changes in the French car and electricity sectors since the mid-1970s. The newspapers also provided background material on other industries, such as consumer electronics, household appliances aerospace, and on the regional character of supplier networks.

2. New subcontracting relationships

Since at least fifteen years, but traceable to the social upheaval of 1968, large French firms have massively moved toward subcontracting. In part, this is, as Berger and Piore's seminal analysis (Berger and Piore, 1980) suggested, related to the labour problem that large firms face. As a result of their Taylorist organisational heritage, French firms were, up until very recently, highly vertically integrated corporations, in which minor disturbances could usually be accommodated with buffers, but where larger ones had tremendous effects on production. Strikes and other social unrest, not uncommon in a highly politicised and polarised society such as France, immediately paralysed large parts of production that were dependent upon the supply of parts from other sections in the company. Subcontracting, many large firms learned, was a solution to this problem.

At least as important as the social control dimension of the turn toward subcontracting were the costs associated with vertical integration and large buffers. Being able to physically relocate a large part of production and not having to bear the carrying charges for it in the shape of capital tied up in stocks during periods of high interest rates, made a large difference in the company results. In order to regain a measure of control over these problems of labour discipline and immediate costs, therefore, many large firms in France began to increase their subcontracting arrangements, both

in numbers and in terms of the intensity of the relationship.

Initially sub-contracting was also really only just that: a relatively inexpensive way out of a labour problem and tightening economic constraints. Over time, however, changes appeared in the nature of the subcontracting relationship itself, which reflected changes in the relationship between the large and small firms. Individually, these changes appear as relatively modest *ad hoc* adjustments; together they suggest that for both the large firms and the SMEs subcontracting arrangements have, at least to some extent, redefined the boundaries of the organisation.

2.1. Just-in-time delivery systems

French large firms were among the first in the West to turn to just-in-time delivery systems on a large scale (Gorgeu and Mathieu, 1993). In the early 1980s, large firms in France found themselves caught in a squeeze: government policy, geared at fighting inflation, forced interest rates up – bank lending rates went from an already high 15.5% in 1977 to almost 21% in 1981, remained above 20% in 1982 and above 17% for at least three more years – thus making credit extremely expensive.² French large firms were also very dependent on bank credit (Hall, 1986; Shonfield, 1965; Zysman, 1983). As late as the early 1980s, French firms were the most highly indebted of all OECD-countries: the ratio of retained earnings over bank financing as a source of investment was the lowest in the G5 (Taddéi and Coriat, 1993, p. 31). The firms therefore immediately felt the effects of the anti-inflationary government policy both before 1981 and after the turn in the socialist government's economic policy in 1983. Inventory stored in large rooms is in essence nothing less than a large amount of tied-up and unused capital. Poor inventory administration thus became a very expensive management problem and firms realised that inventory reduction was a necessity in order to reduce financial dependence on banks in the short run. JIT became the logical solution to this logistical problem.

Over the last 12 years, large firms in France dramatically reduced their dependence on finance through the banking system. In 1984, the self-financing ratio (retained earnings/debt) was below

30%; in 1989, it had increased to almost 54%. And by 1993, the self-financing ratio had increased to the point where debt had become simply marginal as a means of finance: large firms today finance between 90 and 97% of investment with their own cash flow (Taddéi and Coriat, 1993).

JIT delivery systems survived the firms' revival of their financial health in the late 1980s and the drop in interest rates in the 1990s, because French firms discovered the other benefits of JIT delivery such as the discipline it imposes on the production process resulting from its increased fragility and transparency. When firms moved away from finance through banks almost entirely in the first half of the 1990s by issuing stocks and increasing investment from retained earnings, the JIT systems remained firmly in place as one of those inadvertent lessons learned as a result of solving other problems.

In implementing these new organisational models, however, French firms generally did not all follow the same patterns. Whereas Renault used the opportunities offered by JIT delivery systems to revise its relationships with suppliers in what can generally be described as a more collaborative stance, other French firms followed a pattern that looked far more familiar from the point of view of the conventional wisdom. Citroën, the smaller division of the PSA car group, followed a high-tech, labour-substitution route in modernising its operation: its final assembly plant in Rennes hand-picked its suppliers in the 1960s, disciplined them to fit its own production system, and currently forces them to meet very detailed technical specifications and a very stringent delivery schedule. Each of the supplier plants – all within a 50 km radius – has on-line computer links with the central assembly plant, and they follow the schedule imposed by Citroën. The company has been able to establish and exercise such control, because it is, in the low-industrialised area around Rennes, the only large manufacturer (*Auto-Hebdo*, 1992; Gorgeu and Mathieu, 1995b).

2.2. Forced supplier mergers

Large firms in most assembly industries have, in recent years, changed their expectations towards their suppliers far beyond just-in-time delivery. The reason at the core of this change is that

assembly production can relatively easily be modular, i.e. reorganised in such a way that final assembly is merely putting together a relatively small amount of pre-assembled systems. A typical example taken from the car industry is the dashboard and heating/cooling system. Under the old assembly system, the suppliers would bring the gauges for the dashboard, pipes for the heating and cooling system, the connections between dashboard and frame, etc; the main job would be done in the final assembly factory itself. Over the last decade, this all changed: assemblers typically have begun to demand from suppliers that they deliver the pre-assembled dashboards *and*, if possible, its connections to the heating/cooling system, which can then relatively easily be linked to the engine and almost latches onto the frame. All in all, the total *final* assembly operation has been reduced tremendously. Something similar happened to chairs, drive train and gear box, exhaust systems, etc. Assembling a car, in short, has today become the orchestration of a series of sub-assemblies.

Beside the savings associated with “*system assembly*”, as a result of the reduction of direct assembly hours, another, probably far more important source of savings has emerged for the large firms: the reduction of development costs. It is, in the car industry for instance, often so that more than one quarter of the total cost associated with a new model, is incurred *before* a single car is assembled. Between one quarter and half of the total cost of a car model is accounted for as development costs. All the parts have to be designed, functionally related, checked for interactions, proofed for energy, noise, etc. The new assembly method basically does away with those costs. Since the suppliers have become “*system suppliers*,” they are themselves largely responsible for developing the systems that they supply. They are told the functional requirements and dimensions of a “hole” in the car body, which they then have to fill following the technical specifications from the buyer.

Without surprise, for most of the suppliers to the car manufacturers, this has seriously increased the pressure they face to remain competitive. Even though large firms in France generally prefer relatively stable supplier relationships, as large firms elsewhere do, the main obstacle to deep-trust relationships is that the large firms are the stronger

party: they craft the relationship with their suppliers in such a way that the latter are, in principle, interchangeable. In general, suppliers hold no proprietary knowledge that the buyer depends on and the large firm can therefore use its exit possibilities as a hard bargaining tool.

In large measure this is related to the fact that joint product development does not take place. Ideally, if the relation between large small and their suppliers has turned into a systems suppliers link, the firms start to exchange information to jointly develop products. However, in France, suppliers are not important in the development of new products. The *Twingo*, for instance, an innovative small city car introduced by Renault in 1994, provides a perfect illustration of how these asymmetries play out in practice: even though the car was developed by an interdepartmental project group inside Renault (Midler, 1993), outsiders, i.e. parts suppliers, only began to play a role when the specifications for the parts were drawn up. When the suppliers raised price objections, Renault made it very clear that it controlled the operation, and forced the suppliers to meet the stringent requirements that Renault imposed.

However, arms-length relationships of this kind inevitably imply that deep co-operation between the two is limited. Why would the supplier invest too heavily in machine-tools, software, and training, that are necessary to maintain the relationship, if he or she has no certainty that the buyer will not change suppliers for price-related reasons? In sum, the profound asymmetry in the relationship makes even the benefits of the “mutual hostage” situation, which induces (long-term) co-operation and thus leads to flexibility and innovation, impossible to obtain – to say nothing about the benefits of deep-trust relations.

In order to solve this problem and simultaneously find a middle ground between the advantages associated with long-term subcontracting relationships and price-based contractual relationships, large French firms have adopted a policy of inducing suppliers to merge so that they reach a critical size. This assures that they have the necessary capabilities that the large firms now require. They have independent R&D capacities, can meaningfully organise robust quality control systems such as ISO 9000 as well as workers’

training, and can engage other large buyers as well as regional economic development authorities.³

In the car industry, for example, and partly as a result of this induced merger policy, both the large firms – Renault and PSA – want to reduce the total number of suppliers, turn them into systems suppliers and force them to merge (under those conditions they may even receive financial and logistical support from the large firms, as discussed below). Over the last decade, the number of first-tier suppliers of the two large car manufacturers thus fell from 2249 for PSA in 1985 and 1800 for Renault in that year to something like, respectively, 860 and 780 in 1995, and the trend for the future is further downward.⁴ The idea behind this policy is simply to reduce the number of suppliers with turnover figures below FF 50 Mio (roughly \$10 Mio in 1993); this would allow the large firms to retain the benefits of the new supplier methods while dissociating themselves from the costs of product development, training, etc. And, since the goods and services ordered by the buyer are “off-the-shelf” goods, there is no danger of the asymmetrical relationship ultimately turning against the large firm.

Large firms thus retain a large amount of control over the process, ironically enough precisely by keeping an arms-length relationship. Instead of gradually evolving into virtual corporations (Davidow and Malone, 1992; Sabel, 1991),⁵ where through the permanent re-negotiation of a product and how it is made, the boundaries between the core firm and the supplier lose all practical meaning, the large firms in France define what will be produced and how. In practice, the reliance on the suppliers does not extend much beyond the quality assurances that the large firms seek and the insistence on the suppliers to become system suppliers – but within tightly defined criteria.

By definition, JIT is impossible without an increased sense of quality. Parts are delivered when needed, according to the client’s specifications, and quality control at the point of delivery, i.e. when the parts finally change hands, is close to impossible. Usually, firms address this problem by trying to find ways to assess the suppliers’ quality potential *ex ante*. This practice, as the next section will show, is crucial in the way the rela-

tionship between large and small firm is structured.

3. Quality control: control through quality

As in every other OECD-country in this era of increased international competition, quality has appeared at the core of industrial organisation in France as well. As such it appears primarily as an expression of increased international competition: increased openness to international markets forced French firms to address quality (and productivity) problems much more strongly than the protective economic regime that supported them during the Golden Age. Yet some specific elements of the French case suggest that this new orientation to the market is not the only element at the core of the increased attention to quality, but that quality is also being used as a instrumental tool which allows large firms to increase their control over the small firms while retaining the benefits of a co-operative relationship. The emphasis on quality in the relationship between the large firms and their suppliers creates a situation where the small firm simply has to accept, in order for the relation between the two firms to survive in the longer term, that the large firm collects all the information needed to negotiate from a stronger position inside its own walls, but does not commit itself to the long-term relationship envisioned in this exchange of information. The conventional information asymmetries thus simply do not exist.

This section will discuss how quality structures the relationship in different ways: through the quality audits that large firms organise among their suppliers, through the *ISO 9000* certification in France and how this is related to the process of industrial reorganisation more generally, and, third and finally, through the quality consulting programs that large firms organise for their suppliers. What characterises the three mechanisms is that they are simultaneously a response to market changes and that they define the relationship between the large and the small firms. The quality audits are relatively straightforward means of control by the large firms, since they re-establish what separated the buyer and the supplier all along, i.e. that the small firm is much more dependent upon the goodwill of the large firm than *vice versa*. *ISO 9000* norms have a similar effect, with

the additional benefit, as I will illustrate, that they are sanctioned, in a subtle and indirect way, by the state. The quality consulting programs that I discuss, finally, do the same: while securing quality, they also force the supplier to accept the reorganisation measures proposed by the large firms. All three however, force the supplier to be open for the intrusive eyes of the large firms.

3.1. Quality audits

The dual nature of the new collaborative relationships is most obvious in what is known in France as the quality audits. Large firms require from their suppliers that they meet certain minimum quality standards, especially in just-in-time delivery situations, where the final producer is simply unable to check every piece individually.

The instrument of choice for the large firms to insure such quality guarantees is the quality audit, a relatively wide-spread practice among large firms in France in their relation with their suppliers. On regular intervals, the large firms send out a team of their own experts to examine the supplier's operations in great detail. The team examines all the processes that play a role in the production of the part or the service that the supplier delivers, and that bear on quality, delivery, price or other relevant aspects. By focusing on aspects of the production process instead of the spot-checking associated with product quality, the larger firm assures a proper understanding of the supplier's capability to follow the technological path that the large firm takes or may take in the future.

However, and much more importantly, the quality audit is not limited to what is immediately relevant for the part or service under the supplier's responsibility. The team also examines most other components of the firm's operations: training and recruitment, balance sheet, finance, links with other SMEs and larger firms, product development capabilities and market strategies, technology, etc. In short, the so-called quality audit, as should be apparent from this short list, is in reality a true audit of the entire company. This information, read through the eyes of the experienced auditors typically found in these auditing teams (all have many years of factory as well as headquarters and financial experience, which also explains why

there are only few of them), will allow them to assess the potential of the supplier for long-term process and product innovation with relative confidence.

For the large firm, the audit thus solves three very different problems simultaneously. First of all, it alleviates the problems associated with the informational asymmetries between large and small firms. There should, because of the audit, not be any relevant information hidden from the large firm. As a result, the large firm can discuss price, product and other changes with the SME using relatively complete information. Second, the audit reaffirms the distinct identities of the two firms. However strongly the links between supplier and buyer may have developed over time – through just-in-time delivery systems, financial ties, technical exchanges and joint training systems – at the time of the quality audit, the two firms are very different and may even stand in an antagonistic relationship. Three, the audit provides guarantees that the supplier has the capabilities needed to remain a viable partner in the future, more or less regardless of the product strategies that the buyer pursues.

The quality audit thus can be interpreted from two angles. It is undeniably an instrument for the large firm to control the smaller one. Since the SME has no choice but to accept the inquisitive demands of the large firm without really being able to raise objections, limit the extent of the audit or demand a *quid pro quo* in the form of a commitment to a contract, the supplier is undoubtedly the weaker party in the relationship. Yet at the same time, the audit is also a help for the small firm: if the large firm assesses positively the prospects for future collaboration, the audit is also a tool that can be used to improve the SME's operations.

3.2. Quality certification

The quality audit remains an expensive tool. In recent years, therefore, many French firms have adopted the universal third-party certified ISO 9000 quality standards and have drastically decreased their auditing of those firms which are ISO-certified.⁶ ISO 9000 norms are, in contrast to for example DIN norms or the previous generations of ISO norms, almost exclusively procedural

in character, i.e. they are based on an assessment of how a product is made, not what it is like, and therefore meet the requirements of the large firms in France.⁷

French supplier firms, in turn, are especially keen to be ISO-certified. In any international comparison, French productivity appears as among the highest in the EU, and because of the relatively low wages, unit labour costs are very low in France (ref.). This makes French products highly competitive in international markets, if product quality can be assured. Aware of this, the French state has used the economic clout which results from the ownership of large firms and the organisational savvy vested in the state bureaucracy to force suppliers to be ready for ISO certification.

The certification is the job of a private agency, the *Association Française pour l'Assurance de la Qualité* (AFAQ), sponsored by the industry federations and the large firms, and whose goal it is to test, audit and improve the quality system in the companies. The AFAQ, in turn, sends a team consisting of a certified quality auditor and an industry expert. For both of these, professional knowledge is the basis for their appraisal: quality norms are very different in a poultry farm than in ceramics or car parts, and hence the double angle of quality and industry technological knowledge. For their certification, the firms pay the AFAQ a fee (Baudry, 1994).

One obvious problem that this system faces is how to legitimise such a structure, which consists solely of private agents, in a country like France with a strong "public" tradition, without the large firms resorting to brutal force (a move which would almost certainly be deemed illegitimate by the SMEs and their associations). The answer lies in part in a *quid pro quo* for the suppliers: if they accept the importance of the AFAQ certification, they will be rewarded with orders from the large firms, and can compete on an even footing with their European competitors. Even more important, however, is a subterranean transfer of authority from the state to the AFAQ. As a result of an agreement signed between AFAQ and AFNOR, the (quasi-)public agency responsible for standardisation (*Agence Française de Normalisation*) and *vice versa*, all ISO 9000 certificates delivered by AFNOR are accepted by AFAQ, and all AFAQ quality certificates are also ratified by the

AFNOR. The AFNOR, in other words, and outside the immediate purview of most firms, accepts the AFAQ as its partner and extends its publicly sanctioned authority (it is founded as an agency “*declared of public interest*”) to the AFAQ. The legitimacy of the AFAQ is thus reinforced from two sides: the professional knowledge of the auditing team and the public agency responsible for the implementation of product quality standards.

As a result of these certifications, many large firms have entirely eliminated their quality audit for ISO 9000 certified suppliers, as illustrated by a record made public by the AFAQ in May 1994.⁸ Of the 59 very large firms listed, over half have entirely eliminated their quality audits, and of the remaining ones, most have done so in part. With the partial exception of suppliers who provide parts critical to the safety of the production process, as e.g. in chemicals or the nuclear industry, the elimination of customised quality audits and their displacement with universal third-party quality evaluation systems, seems to be a process taking place across most sectors.

AFAQ and other similar certification programs for suppliers have had major consequences for the relationships between large and small firms. For many large firms, institutionalised quality certification through agencies with quasi-public authority such as AFAQ and AFNOR appears as the midway between the customised individual quality audit and the blind selection of suppliers on price and contracts. However, that this does not imply an unequivocal repeal of the tighter links between large and small firms is illustrated by a practice which, to some accounts at least, appears to be growing in importance. The example below is taken from Renault, but it is easily applied to most other assembly industries, since reorganisation in most of them takes a similar form.

3.3. *Quality consulting*

Since a few years, and as institutional support to the draconian cost reduction programs that Renault initiated after its dramatic financial crisis in 1984, the French car producer has developed an internal service which provides consulting services to suppliers. The main task of the service⁹ is to help the medium-sized suppliers, with a turnover

between FF 50 million and FF 1000 million, to streamline their operations and make them “leaner” (sic). One of the suppliers, for example, was helped by these Renault consultants to improve its die-changing operations, in order for the company to be able to reduce its inventory: the review of the supplier’s production revealed that 30% of the total value of loans was tied up in the administration of inventory, so any productivity gains had to be sought there.

The way this consulting program works in practice, is that after a deal has been concluded between the Renault purchasing department and the supplier, the Renault consultants take over entirely, without a presence of the purchasing department. These consultants, two or three at a time for three days or so, then try to get a general sense of how the supplier is doing, and check most of its operations. The end result of this diagnostic exercise is a detailed balance sheet, with strong and weak points, and a proposal for the supplier about where to take action to streamline its operations.

The consultants typically propose action in two areas: logistics and technology. Examples of the first are the inventory reduction mentioned above or help in training for shorter change-over times for dies and moulds. Examples of the second type of action are new investments to raise the general technological level of the firm or, more specifically, automate some parts. The key rule for those investments is that the pay-back period for the investment should be less than one year. After six to eight months, finally, the consultants draft a long-term progress plan with the supplier for the next year and a half and beyond. This plan concludes the action of Renault’s consultants. In the long run, the consultants hope to reduce the dependence of the suppliers on Renault by preparing them for a merger, while raising their general productivity and thus reduce part prices.

Not all companies have such a benign and generally supportive attitude toward their suppliers. PSA, the other French car manufacturer, for example, has adopted a program that is much harder for the suppliers: its only aim is to reduce prices, its instrument hard bench-marking techniques, and the supplier is basically left on its own for changes, without consultants. SOGEDAC, as the PSA department is called, which deals with

improvement in supplier performance, essentially follows the low-trust pattern conventionally associated with French production models. They send out a questionnaire about any part of the company they consider relevant: immediate competition, product strategies and market positioning, industrial strategy (logistics, investment, product innovation, work organisation, training and labour relations), and the firm's financial situation. After the questionnaire is filled out, a four-person team visits the supplier for three or four days and checks all the answers. The only goal, as said, is to reduce prices, and the information collected through the questionnaire is well-suited for that.

Since a few years, Renault and PSA jointly own an agency which selects suppliers and monitors their quality on a permanent basis. In principle, costs are irrelevant for the activities of this agency: the agency only deals with supplier quality. However, even though the initial reason for this is product quality assurance, in the French industrial landscape, it simultaneously performs a very different function. Through this joint selection, the reputation of suppliers is shared knowledge in the network of large firms, and thus becomes a major sanctioning tool for them (Baudry, 1995; Gorgeu and Mathieu, 1995a).

These three quality-related organisational innovations all tell a similar tale: they redefine the relationship between the large firm and its suppliers, largely to the benefit of the large firm. First of all, they solve basic informational problems. Large firms now have a remarkably clear view of the operations of their suppliers, how they produce goods with stable quality, their cost structure and how they price them. Secondly, the buyers also have a good idea of the technical capabilities of the supplier for future collaboration. This also reduces the uncertainty for the large firms. And, third, these solutions allow for closer financial links between large firms and their suppliers. That is the topic of the next section.

4. Financing suppliers

A recurrent theme runs through all that has come before. Suppliers are simultaneously forced and helped by their buyers to become more competitive, but in a way that ultimately makes them more dependent upon the buyers. The reorganisation of

ties between the two is therefore very ambiguous. This final section will shift the focus away from the production arrangements in the narrow sense, and deal with the important role that large firms have begun to play in the financing of their suppliers (Cieply, 1995).

For a variety of reasons, all reducible to fundamental information asymmetries, financing SMEs is a troublesome affair for all the usual actors involved. First of all, SMEs are, with few exceptions, in an extremely volatile product market situation, so volatile that it is almost impossible for banks to be able to assess the risks related to investment adequately. How would a bank be able to tell how well they are equipped, in today's competitive environment, to cope with their ever more demanding clients? Under a mass production regime, such assessments may be relatively unproblematic – even though it remains a big feat for banks (or anybody else for that matter) to monitor small firms, merely because of sheer numbers – but in an era of increased competitiveness in the mass market segments and volatile markets even for big firms, assessing risks becomes close to impossible (this is very similar to what drove the large firms in reviewing their quality control procedures). The universal problem of monitoring small and medium-sized firms takes on a particular urgency in France where, even in the 1980s and 1990s, firms remain closed to outsiders.

Since SMEs are very frequently still family enterprises, owners prefer to keep all information on the operation of their firm from outsiders. The necessary information to assess the survival chances of the firm is often kept even from the work force, despite legal provisions for information dissemination to works councils. The problem is equally pregnant for the banks, who are supposed to extend loans on the basis of what can only be regarded as very thin information. As a result, SMEs have, in the past, not been the innovative high-growth firms, a situation which fed back – negatively – into the relationships with the banks. The result was a vicious circle of under-financed SMEs who remained relatively traditional producers, and were unable to convince the banks to extend loans to them, which in turn blocked them from developing their innovative capacity.

In principle, the practical alternative to bank financing is the stock market. For several reasons, however, SMEs are extremely unfavourable candidates for that. The first is the problem of Malthusianism and the lack of openness of the small firms. One could, in the limit, envision the *pater familias/company owner* discussing the future of the company with a banker, even though the fear of the omniscient French state checking the books as well (through the ownership of banks) will certainly create some hurdles to the depth of trust in this relationship. But it is almost impossible to imagine a French family-owned SME to issue shares and be subject to strict accounting and publication rules. Second, SMEs are usually simply too small and unstable to be able to issue stock credibly.¹⁰ If banks are unable to assess risks, how would others be able to do so? Banks, moreover, lend against collateral – of which the small firm has less. And, finally, the stock market has up until very recently basically been entirely marginal in financing French companies – true for the large firms, but even more so for the small firms.¹¹

Yet small firms do have access to capital, of course, and in recent years financing sources have not tended to dry up, despite the predicament that appears to make smooth financing impossible. How, then, is SME financing organised? The answer is found in the key role that the large firms play in this process. In essence they act as the gate-keepers in the system.

The large firms who buy the products or services that the small and medium-sized firms provide as subcontractors, are the only players in this set-up who do not face the problems associated with the structural information asymmetries. First and foremost, the large firms actually organise a tremendous information flow between them and their suppliers. Formally, they make regular quality appraisals, either directly or through the quality certification, but they in fact know a lot about the *general* condition of their suppliers. Because of their new policies, they come as close as is possible to actually “*constructing*” their suppliers. Although in principle they face the same type of informational problem that banks face in assessing the potential of their suppliers, because of their power over and proximity to the SMEs, it is considerably harder for

the suppliers to hide information from the larger firm. A parallel information circuit thus has developed, with the large firms at its center: the large firm acts as an intermediary in the relation between the suppliers and their financing sources.

The large firms, first of all, directly support the small firms financially by lending to them or by assuming large parts of investment costs.¹² Training programs are organised collectively by large firms and their suppliers; help is provided, under the guise of quality consulting, to increase the suppliers’ competitiveness (a positive sum game since the large firms also benefit from that, as we saw above); and SME investments are written off in part through increased prices (or better: stable prices when they should drop because of improved productivity).

Frequently, large firms also lend money to SMEs when they take over parts of production that the larger firms intend to out-source. When the venture turns into a true spin-off, the large firms forgives the entire loan or a large part of it if the SME hires (part of) the work force made redundant by the reduced production in the mother firm.

Finally, and perhaps the most important function, the large firms are, as a result of their informational advantage, trusted by the banks as sources of information on the SMEs. This information flows through the high-level networks of state, financial, and industrial elites that run the French economy at the highest level.

A short excursus explains what is meant here. As a result of the frequent moves by high-powered administrators between state agencies and industry, and given that business and state elites share an educational and social background in the *Grandes Ecoles*, a network exists where a lot of diffuse information – about companies and about people – circulates.¹³ Banks, the third party in the triangle, are therefore never totally without information about companies, since industrialists also serve in the Ministry of Finance, on boards of banks, etc. In practice, what happens is that the frequent moves in and out of industry and the state create a *reputational network*, since everyone’s track record in these circles is quasi-public. In order to have a career in this network, which covers state, finance and industry, one has to retain a good reputation. Given the strategic significance of the network for individual careers, maintaining

a reputation in it is of vital importance: this implies no bad loan advice or major errors as CEO of large companies.

Within the large firm, the purchasing function, comprising both the purchasing department and the supplier selection and support services discussed above, are the candidates for a translation of the rough technical data into more synthetic data, which can be used by the financial departments. Quality control, quality audits and management information systems are all designed with one idea in mind: to provide management with summary information about parts and products usually expressed in ways that are both useful and readable to those outside the immediate production sphere as well, most importantly to those who negotiate contracts with suppliers (frequently lawyers and top management services). This is the point where information which was originally destined for workers and engineers only, has become extremely synthetic, standardised and data which can easily be mobilised and used by many different people with different goals – even the banks.

Using the resources of this network, the presidents or top staff of large firms provide “informal” support to the supplier in need of capital by providing the bank or other financiers with its own assessment of the supplier’s capacities; this assessment is looked upon by the financing bank not so much as an objective evaluation of the SME, but as an element in this reputational network. Since no other direct source of information is available to the bank, and since the small firm has no immediate alternative to obtain finance, the system depends crucially on the reputation of the large firm CEO. Because of the network organisation at the highest level of the French economy, the large firm becomes the bearer of the SME’s reputation and the safeguard to the entire system. Quality certification does exactly the same, but in a less personalised way, by signalling to the financial world that, by the standards of the large firm, the supplier has a sound organisation.

Finance is therefore another element in what reappears as an extremely asymmetrical relationship between large firms and their suppliers. But, as with all the other elements in the new relationships between large and small firms, it cuts both ways: at the same time that it delivers to the supplier in

exchange for loyalty, it also reproduces the fundamental power inequalities between the large and the small firms. For it is at the time of relying on the large firm’s goodwill to support loan requests that the small firm sees the benefits of allowing the large firm a lot of control over its operations in all other respects.

5. Conclusion: rethinking industrial reorganisation

The relations between large firms and their suppliers in France have undergone tremendous changes over the last decade and a half. Instead of one-on-one price-based, arms-length relationships, they have turned into sophisticated production networks based on the capacity of the supplier to provide technologically sophisticated parts, delivered just-in-time, against a low price. Instead of large buffers of low-quality products, the buyers now obtain small quantities of high-quality products. And instead of being permanently underfunded and therefore struggling for their survival, the small firms have access to a whole array of new financing sources as a direct result of their links with the large firms.

Most authors contemplating these changes have been quick to assume that this was the first series of steps in a linear process of adjustment from less to more trust in the relationship between large firms and their suppliers – a situation described as partnership. The discussion in this paper, however, suggests that this linear interpretation misses a series of crucial elements in the relationship. By forging closer links with suppliers, the large firms did not give up their control over the relationship. In fact, once the supplier was at a sufficiently high level of technical and organisational capabilities, the large firm managed to re-establish control; as a result, the relationship ultimately looked more like a new and profoundly modernised version of the old model than a thoroughly new arrangement. Rather than a linear process, it should be understood as a cyclical process in which the modernisation of the large firms required a re-definition and reorganisation of the control mechanisms that characterised the relationship without abandoning them.

The basic initial asymmetries in the relationship accounted for this restoration of control once

the suppliers had reached a technical and organisational plateau. As a rule, the suppliers brought no or very few specific assets to the relationship, largely a result of the standardised product markets they were operating in, and of how the large firms deliberately designed their products in order to avoid dependence upon the supplier. Moreover, because of the historical development of (regional) supplier networks, the suppliers had, in fact, no way to exit the relationship; this made the control-based strategy of the large firms all the easier to implement. Because of the deep control mechanisms, partnership is the wrong term for this new relationship and large firm paternalism probably the best – albeit somewhat awkward. The large firm retains control in the relationship by contributing to a profound modernisation of the supplier network through technology transfer, training, quality programs, and investment aid.

The situation in France therefore contrasts sharply with the cases evoked in the contemporary literature on industrial reorganisation. According to the dominant arguments, trust or trust-like resources are a major source of competitiveness, because they provide a basis for innovation while precluding hold-up problems. From this vantage point, the situation in France is highly deficient. Trust does not structure the links between large firms and their suppliers; control through hierarchy is at the basis of the relationship.

Given the need for trust as a basis for competitiveness, French industry should be facing a permanent survival problem. Yet that is not the case. As in other European countries as well, French industry is facing competitive challenges from low-cost competitors and Japanese producers. But in the first half of the 1990s indicators of competitiveness such as corporate profitability, exports and productivity have not been lower in France than elsewhere (Glyn, 1995; Taddéi and Coriat, 1993), which suggests that, at least for the time being, the model appears viable.

Other possible paths of industrial adjustment, which do not rely on trust, therefore continue to exist. Historically, trust may have been the raw resource of the Baden-Württemberg model of links between small and large firms (Herrigel, 1993; Sabel, 1989), of the Italian districts (Brusco, 1986; Dei Ottati, 1994), or of the Japanese network corporation (Sabel, 1993a). In these cases, trust

is undoubtedly a useful way to build competitiveness; it is highly unclear, however, if it is the only possible way, as the trust argument suggests. For parallel but opposite historical reasons as in southern Germany or northern Italy, hierarchy was at the basis of the French model of adjustment in the 1980s: the large firms in France were able to impose their own version of modernisation precisely because the small firms lacked the resources to impose theirs. Whatever the disadvantages associated with this model, it may well continue to have a future as well. If the analysis in this paper suggests anything, it is that the trust path probably is not the only possible and available way, and that hierarchical relationships can also contribute to competitiveness.

This being said, it may not be the most efficient solution. One can convincingly argue that the French trajectory is probably more expensive than the other available adjustment models because of the monitoring and enforcement costs associated with the control mechanisms. But such an argument ignores another set of “costs,” of a more political nature, that are associated with the loss of control – the insurance costs against an unpredictable relationship or against a potential reversal of control, the reorganisation costs to overcome the incompatibility of symmetric supplier relations with hierarchical forms of work organisation, or the generic transaction costs associated with early, deep co-operation in product development. Introducing a broader notion of costs thus immediately draws attention to the potential benefits of a hierarchical solution.

Industrial organisation can therefore, despite growing internationalisation of markets and production, still take many different forms. It can lead to the Italian industrial districts, or to the socialised risk structure in Baden-Wuerttemberg, both of which involve substantial risk sharing and pooling of resources. But it can also follow an altogether different path, as in France, where the regional structures are very autarkic and where small firms are in many ways highly dependent upon the large firms. Why these structures can be and are different, is a question beyond the scope of this paper: institutional legacies and economic history undoubtedly play an important part in this (Ganne, 1992). Yet there is little doubt that they are different.

This leads to the concluding note: it suggests that, even in the era of globalisation, economic and industrial adjustment can and often does follow a variety of trajectories. It can be co-operative, expressing trust between quasi-equals; market-organised, based on contracts and arms-length relationships; or hierarchical, resulting from the power of one of the parties in the exchange. In short, adjustment in inter-firm relationships – and, extrapolating, capitalism at the end of the twentieth century – can have more than one face.

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Notes

¹ I thank Steve Casper for this point. See Chapter 5 in his thesis (Casper, 1997).

² A comparison with France's main competitors demonstrates the extent of the cost disadvantage:

Lending Rates in G5 countries, 1979-1985 (real interest rates in brackets):

	1979	1982	1985
France	15.5% (4.7%)	20.3% (8.5%)	17.8% (12.0%)
USA	12.7% (1.4%)	14.9% (8.8%)	9.9% (6.4%)
Jap	6.3% (2.6%)	7.23% (4.5%)	6.5% (4.5)
Ger	8.6% (4.5%)	13.5% (8.2%)	9.5% (7.3%)
Italy	14.6% (0.2%)	17.4% (0.9%)	21.1% (11.9%)

Sources: calculated from IMF *International Financial Statistics* and OECD *Historical Statistics 1960-1990*.

³ According to one account, this development of concentration may currently be reaching its logical next step. Most of the new suppliers' factories in the vicinity of large car assembly plants are in fact subsidiaries of large multinationals, and therefore not any longer the weak dependent SMEs described in the text. It is unclear how this will work out, since it appears to be important only for the new supplier factories (Gorgeu and Mathieu, 1995, 1996).

⁴ See *Le Monde* 7 February 1995 for details.

⁵ What is important here, is not so much that firms do not actually open up, but that in many regards they do precisely the opposite of what can be expected according to the

metaphor: they redraw and redefine the boundaries between the participating organisations more strongly than the idealtypical image of virtual corporations or Moebius strip organisations suggests.

⁶ What follows about ISO 9000 and quality certification relies on material gathered through conversations with the AFAQ, the *Association Française pour l'Assurance de la Qualité*, in October 1994.

⁷ A short technical excursus may be in order here to understand the role of ISO 9000 norms in today's firm. In essence, ISO 9000 norms are certified with the use of a checklist which determines if (1) firms measure quality performance, (2) do this in a relatively standardised way, roughly according to the ISO methodology, and (3) have put in place relatively standardised mechanisms that can correct registered problems. If firms can do this, i.e. when they have shown the ability to reflexively monitor their performance, they are certified by ISO (or AFAQ, as in France).

⁸ The list is: Note AFAQ/DG/J/251. māj 1994.10.19.

⁹ The material for this section was gathered during interviews at Renault in Billancourt (Paris) in October 1994.

¹⁰ Since very shortly, some attempts are going on to create a separate *Bourse* for SME stocks in Paris. From all accounts, there are major difficulties with this new stock market model, for precisely the reasons outlined above (see *The Economist* 25 February 1995 for details).

¹¹ Things appear to be changing now because the government is selling off the large state-owned firms through equity, which by its very nature increases the role of the stock market. However, as several assessments have concluded, instead of truly "privatising" the firms, what appears to be happening, both in the 1986 de-nationalisations and in those of the 1990s, is that a stable nucleus of shareholders emerged, consisting of a few other major large firms, which acted as a protective shield against hostile take-overs and overly demanding small shareholders. Not surprisingly, the political-economic elite which governs France's administrative apparatus and its large firms (see the note 13) plays a critical role in this reconfiguration of ownership in French industry. See Bauer (1988); MacLean (1995).

¹² In an ironic twist, the reverse is also true: small firms frequently "subsidise" their large firm customers, by accepting late payment for services or parts. This shows, once again, the power of the large firm over its smaller suppliers: they are able to let even underfinanced and undercapitalised small firms wait for the money that they are due.

¹³ The literature on links between political and economic elites in France is extensive. These networks were noted already by Shonfield, 1965; he called it "a conspiracy between big business and government" (p. 128). The best works which discuss elites in detail are: Suleiman, 1979; Bourdieu, 1989; Birnbaum, 1994. See also Swartz, 1985. Since some ten years, two researchers are tracking French economic elites, and recently they finished a report which not only demonstrated that managers in large French firms still primarily originate from state bureaucracies – true for industrialists as much as for bankers! – but also that the links between state, financial and industrial elites have grown stronger over the last decade. See Bauer and Bertin-Mouro, 1995 for the report, and *Le Monde* 7 February 1995 for a discussion of the report.

References

- 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, *L'économie des relations interentreprises*, Paris, La Découverte.
- Berger, S. and M. J. Piore, 1980, *Dualism and Discontinuity in Industrial Societies*, Cambridge, MA: Cambridge University Press.
- Brusco, S., 1986, 'Small Firms and Industrial Districts. The Experience of Italy', in D. Keeble and E. Wever (eds.), *New Firms and Regional Development in Europe*, London: Croom Helm.
- Casper, S., 1997, *Reconfiguring Institutions: The Political Economy of Legal Development in Germany and the United States*, Ph.D. Thesis, Cornell University.
- Cieply, S., 1995, *La problématique du financement des P.M.E. La nécessaire intégration de l'incertitude exogène dans la théorie de l'intermédiation financière*, Centre de recherche Monnaie-Finance-Banque Université Lyon 2.
- Courlet, C. and B. Pecqueur, 1992, 'Les systèmes industriels localisés en France. Un nouveau modèle de développement', in G. Benko and A. Lipietz (eds.), *Les régions qui gagnent. Districts et réseaux: les nouveaux paradigmes de la géographie économique*, Paris: Presses Universitaires Françaises.
- Crozier, M., 1964, *Le phénomène bureaucratique*, Paris, Le Seuil.
- Davidow, W. H. and M. S. Malone, 1992, *The Virtual Corporation. Structuring and Revitalizing the Corporation for the 21st Century*, New York: Harper.
- de Saint Louvent, P., 1991, *Analyse de la perception de la banque par les petites et moyennes entreprises en Grande Bretagne, Allemagne et France*, Bossard Consultant.
- Dei Ottati, G., 1994, 'Trust, Interlinking Transactions and Credit in the Industrial District', *Cambridge Journal of Economics* **18**, 529–546.
- 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.
- Fox, A., 1974, *Beyond Contract. Work, Power and Trust Relations*, London: Faber and Faber.
- Ganne, B., 1992, 'Place et évolution des systèmes industriels locaux en France. Economie politique d'une transformation', in G. Benko and A. Lipietz (eds.), *Les régions qui gagnent. Districts et réseaux: les nouveaux paradigmes de la géographie économique*, Paris: Presses Universitaires France.
- Glyn, A., 1995, *Does Profitability Really Matter?* Wissenschaftszentrum Berlin für Sozialforschung, FS I 95-306.
- 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, 1995a, 'Les liens de Renault avec ses fournisseurs: Equipementiers et sous-traitants', *Actes du GERPISA* **14**, 41–62.
- Gorgeu, A. and R. Mathieu, 1995b, 'Stratégies d'approvisionnement des grandes firmes et livraisons juste à temps: quel impact spatial?', *L'Espace géographique* **24**(3), 245–259.
- Hall, P. A., 1986, *Governing the Economy. The Politics of State Intervention in Britain and France*, Oxford: Oxford University Press.
- Hancké, B., 1996, *Modernisation without flexible specialisation: How large firm restructuring and government regional policies became the step-parents of autarchic regional production systems in France*, WZB Discussion paper FS I 97-305, July 1997.
- Harrison, B., 1994, *Lean and Mean. The Changing Landscape of Corporate Power in the Age of Flexibility*, New York, Basic Books.
- Herrigel, G., 1993, 'Large Firms, Small Firms and the Governance of flexible Specialization: The Case of Baden-Württemberg and Socialised Risk', in B. Kogut (ed.), *Country Competitiveness*, New York: Oxford University Press.
- Linhart, D., 1991, *Le torticolis de l'autruche. L'éternelle modernisation des entreprises françaises*, Paris: Le Seuil.
- Lorenz, E. H., 1988, 'Neither Friends nor Strangers. Informal Networks of Subcontracting in French Industry', in D. Gambetta (ed.), *Trust, Making and Breaking Cooperative Relations*, Oxford, Basil Blackwell: France, 1974–1982, 1983–1989, industry, suppliers, networks.
- 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.
- Maurice, M. et al., 1986, *The Social Foundations of Industrial Power*, Cambridge MA: MIT Press.
- Midler, C., 1993, *L'auto qui n'existait pas*, Paris, Interéditions.
- Milgrom, P. and J. Roberts, 1992, *Economics, Organisation and Management*, Englewood-Cliffs NJ, Prentice Hall.
- Rochard, M. B., 1987, *La sous-traitance: entreprises et emplois. Le secteur de l'électronique professionnelle*, CEE-CEREQ-SESSI.
- Sabel, C. F., 1982, *Work and Politics*, Cambridge: Cambridge University Press.
- Sabel, C. F., 1989, 'Flexible Specialisation and the Re-emergence of Regional Economies', in P. Hirst and J. Zeitlin (eds.), *Reversing Industrial Decline? Industrial Structure and Industrial Policy in Britain and Her Competitors*, New York: St. Martin's Press, pp. 17–70.
- Sabel, C. F., 1991, 'Moebius Strip Organizations and Open Labor Markets. Some Consequences of the Reintegration of Conception and Execution in a Volatile Economy', in P. Bourdieu and J. Coleman (eds.), *Social Theory for a Changing Society*, Boulder CO: Westview Press.
- Sabel, C. F., 1993a, 'Learning by Monitoring', in N. Smelser and R. Swedberg (eds.), *The Handbook of Economic Sociology*, Princeton NJ: Princeton University Press.
- Sabel, C. F., 1993b, 'Studied Trust. Building New Forms of Cooperation in a Volatile Economy', in D. Foray and C. Freeman (eds.), *Technology and the Wealth of Nations. The Dynamics of Constructed Advantage*, London, New York: Pinter Publishers, pp. 332–352.
- Shonfield, A., 1965, *Modern Capitalism. The Changing Balance of Public and Private Power*, Oxford: Oxford University Press.

- Streeck, W., 1991, 'On the Institutional Conditions of Diversified Quality Production', in E. Matzner and W. Streeck (eds.), *Beyond Keynesianism. The Socio-Economics of Full Employment*, Brookfield VT: Elgar.
- Taddéi, D. and B. Coriat, 1993, *Made in France. L'industrie Française dans la compétition mondiale*, Paris: Librairie Générale Française.
- Teece, D., 1986, 'Profiting from Technical Innovation: Implications for Integration, Collaboration, Licensing and Public Policy', *Research Policy*, **15**, 285–305.
- Veltz, P. and P. Zarifian, 1993, 'Vers de nouveaux modèles d'organisation?', *Sociologie du travail* **35**(1), 3–25.
- Verdier, E., 1986, 'Formes d'entreprises et innovations relationnelles: conséquences pour l'intervention publique', *Formation Emploi* **15**, 3–17.
- Williamson, O. E. and S. G. Winter (eds.), 1993, *The Nature of the Firm. Orgins, Evolution, and Development*, New York and Oxford: Oxford University Press.
- Ziegler, J. N., 1997, *Governing Ideas. Strategies for Innovation in France and Germany*, Ithaca NY: Cornell University Press.
- Zysman, J., 1983, *Governments, Markets, and Growth. Financial Systems and the Politics of Industrial Change*, Ithaca NY: Cornell University Press.

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