

Robert Schuman Centre for Advanced Studies

Markets Institutions as Communicating Vessels Deregulation
and Changes between Economic Coordination Principles

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1. Introduction and Summary

From Sweden to New Zealand, and from Pennsylvania to Mongolia, governments have been trying to deregulate their economies, or at least are attempting to do so. Everywhere, the free unfolding of market forces through deregulation and privatization has become a key issue of socio-economic policy. The US under Reagan and Britain under Thatcher took the lead in attempting to reduce state intervention and regulation of the economy. Their policies were continued under their successors, and their example was — in particular after the demise of the “real existing socialism” in Eastern Europe — also followed by many other countries including countries with formerly heavily organized and regulated economies, such as Sweden, New Zealand, and the Netherlands.

Illustrative for this broad policy trend can be the Dutch deregulation program. Its symbol and manifesto is the project “Market Forces, Deregulation and Legislative Quality” (MDW) of the Ministries of Economic Affairs and of Justice. However, in addition there is a wide variety of policy and legislative initiatives which are also aimed at reducing economic regulation and at extending the scope for market forces and competition. The new measures include: a major revision of the Economic Competition Act (from an abuse to a prohibition regime), a weakening of business licensing legislation, the relaxation of employment protection, the promotion of competition in the pensions market and the increased application of market forces in the insurance sector, the revision of legislation on shops’ closing hours, the privatization of the sickness benefits system, the introduction of market forces into the implementation of the Disability Insurance Act, the debate on mandatory collective bargaining agreements and their statutory extension, the tendering out of bus services and telecommunication concessions, the encouragement of competition on the railways, in telecommunication, and in the supply of energy, the deregulation of the taxi market, the abolition of fixed tariffs for real estate agents and notaries, the elimination of the professional monopoly enjoyed by lawyers, competition in health care, relaxation of driving hours in road haulage, the discontinuance of proportional allocation of cargoes in inland navigation, the revision of the Food Quality Act, allowance of private television, and even the termination of the statutory minimum size of the beer glass.

“Less rules, more market”, seems to be the maxim of such deregulation policies. The somewhat trivial assumption seems to be that deregulation will automatically result into more market competition. And that that is a good thing. The present essay questions the self-evidence of such assumptions. It is built up from the following theses:

1. Markets need institutions, and one of the most important functions of such institutions is to reduce risk and uncertainty. Such uncertainty reduction is needed for economic transactions, and hence for prosperity and growth. E.g.: to reduce uncertainties about and increase the trust of transaction partners in the generalized means of exchange — money — institutions such as central banks have been created.
2. Various coordination and allocation mechanisms can perform this function: markets themselves (i.e. commercial service providing firms), communities, associations, firm hierarchies, the state, and courts. Most economies do have all of these coordination mechanisms, but they do so in different combinations, and with some mechanisms being more dominant than others.
3. Through a process of evolution, of competition and selection, over time certain institutions have survived c.q. have been developed in the joint processes of state and market formation, because they tended to be more effective and efficient in reducing risk and uncertainty. In many cases it turned out that a monopoly was needed, and that was most legitimate in the hands of the state. Hence, over time the state has assumed responsibilities for the currency, for standardization, product quality control, etc. This view contradicts the well known economic theory of regulation (Stigler 1971, Posner 1972) which argues that public regulation will be less effective and efficient, because it is considered to be the unintended outcome of uncoordinated rent seeking behavior by various special interest groups.
4. Deregulation is a policy trying to turn back this historical trend. Its intent is to reduce the relative importance of social and economic regulation, i.e. of statute law, created by the state. Its proponents could argue that even if thesis 3) above is right, the historical circumstances which selected out state coordination as the more effective mechanism for reducing uncertainty, may have changed; and that institutions have a tendency to become sclerotic. Hence a regular “cleaning of the stable” is necessary.
5. Against this I will argue that deregulation does not reduce the need for risk and uncertainty reduction. It will merely lead to changes in the “mix” of coordination mechanisms in an economy. And these changes may be different from what has been intended.
 - a. Often less statute rules do not result in more market. Instead, deregulation may lead to an increased importance of firm hierarchies, of associations, or of case law. Associations may fill the void created by the state with self-regulation; firm hierarchies may introduce their internal rules; transaction

partners may want to write more “complete contracts” and have to organize monitoring and enforcement; more commercial conflicts will come for the courts; and case law — which may be just as, or even more, detailed — will replace statute law. Countries that have deregulated see already an increase in liability litigation.

- b. Where stiffer competition law limits the regulatory possibilities of associations (cartels!) firms could replace “associations” (horizontal and voluntary forms of cooperation) with “firm hierarchies” (vertical and involuntary cooperation). While anti-cartel legislation prevents an associations of shopkeepers to coordinate prices, such is quite acceptable for a large supermarket chain or even for a franchise. Such chains and franchises introduce much and detailed “internal regulation”, regarding product assortment, handling, etc.
 - c. Furthermore, more market competition may require more rather than less regulation. Studies indicate that sectors that have been “deregulated” and privatized, such as telecom or in Britain the railroads, need sector regulators, that provide even more detailed regulations than the former state monopolies had. Therefore, the unintended effect of deregulation policies — and/or of policies trying to enhance market competition — could very well be more rather than less rules; only rules in different forms — e.g. case law by the courts rather than social and economic statutory regulation; or rules emanating from other actors or representing different coordination mechanisms, such as internal rules of large firm hierarchies, or self-regulation by associations. In this sense one could perceive the various coordination mechanisms as *communicating vessels*: less of the one may lead to more of another — only not, as intended, more market.
6. Such a shift between coordination mechanisms is usually not neutral. It is quite likely that other institutions that gain in importance as a consequence of deregulation are less effective and less efficient. Coordination of economic action by firm hierarchies or by courts and case law introduces new and higher costs, and can be less effective in reducing risk and uncertainty. Such will be demonstrated with reference to the ever higher transaction costs in the US due to the tendency of juridification, in the absence of general civil law: ever more detailed contracts, more monitoring activity, more litigation, higher costs of lawyering, of compensatory and punitive damages in liability cases; and less and less legal certainty. Where one tries to reduce the “bureaucracy”, one may end up with a more costly and less efficient “lawyerocracy”.

7. The conclusion relevant for policy makers is: “look before you leap”. It can do no harm to think twice about possible unintended consequences of deregulation. Attempts to turn the long term historical trend of increasing importance of public regulation should be aware of the costs and benefits of the various economic coordination mechanisms, and of the possible driving forces behind this historical trend. What is needed is a comprehensive approach, being aware of, and balancing the pros and cons, of the various economic coordination mechanisms. A “hydraulics of communication vessels” is needed, in a double sense of the word: as *knowledge* about the relations between the institutional vessels; and as *praxis*, as a master plan — “Wasserwirtschaft” — of such vessels, based on such knowledge.

And a bit closer link between policy making and social science can do no harm. As the French economist Robert Boyer and the American economic-sociologist and historian Rogers Hollingsworth note in their study on the relations between social institutions and economic performance: “We are witnessing a major paradox. Governments are relying more and more upon markets in order to solve the many difficult issues which they are confronting, at the very moment when theorists are discovering that the efficiency of markets is restricted to a very small set of products” (Hollingsworth and Boyer, 1997: 1).

2. Markets and their Need for Institutions

2.1. Are markets natural social orders?

Many proponents of market competition seem to consider markets to be natural and spontaneous social orders. And these supposedly can flourish and develop best in the absence of any intervention. The assumption is that there can never be too much freedom on markets. “Many economists correlate freedom only with negative rights — the absence of governmental interference” (Scully, 1992: 11). Maximum freedom, openness and competition provide the most optimal allocation of goods and production factors and those in turn the greatest prosperity possible. The self-regulatory capacity of parties on markets is often overrated and there is not enough awareness of the potentially disruptive effect of conflict and competition. For this there is no room in the standard economic models. And neither is there for the possible benefits of ordering and moderation.

Whereas many economists assume natural order, by contrast, political theorists and lawyers often start from an opposing assumption. According to them, the “natural” societal condition is one of chaos, destruction, insecurity, and an unlimited and all-destructive battle of all against all. The political philosopher Hobbes described in 1651 the “natural conditions of humanity” with

the famous and timeless words:

"Agaïne, men have no pleasure, (but on the contrary a great deale of grieffe) in keeping company, where there is no power able to over-awe them all ... So that in the nature of man, we find three principall causes of quarell. First, Competition; Secondly, Diffidence; Thirdly, Glory. The first maketh man invade for Gain; the second, for Safety; and the third, for Reputation ... Hereby it is manifest, that during the time men live without a common Power to keep them all in awe, they are in that condition which is called Warre; and such warre, as is of every men, against every man." (Hobbes, 1968, orig. 1651: 185)

Conflict, violence and deception are also the “natural” condition on unregulated markets. They are of all times and places. Just a few out of an endless list of examples. The “robber barons” (Josephson, 1934), the railroad magnates, mine owners and steel barons of the late 19th century in the US did not refrain from having their competitors eliminated by professional gunman or from fighting trade unions and their leaders literally with fire and sword. The Dutch 19th century capitalists went less far, as they were already constrained by regulations, but they too did hire once in a while a fighting squad to threaten strikers. At the moment, capitalism probably shows its most unrestrained face in Eastern Europe, where the institutions that formerly regulated economic exchange have lost their legitimacy and new ones have yet to be developed. Whereas Eastern Europeans were told for a long time that capitalism was a crime, now they believe that crime is capitalism. The Volkskrant reported on the wild-west methods of taxi-drivers in Prague:

"The exorbitant growth of the number of taxi's (there is no legal limit) has led to all out war for the best of the approximately five-hundred taxi-stands. In the tourist center, the law of the jungle reigns. Places at the Wenceslas square are defended with all available means. Competitors find their tires slashed or are molested. One driver was kicked to death in broad daylight on the Wenceslas square when he summoned a colleague who pushed a lady out of his car because she wanted only a very short drive." (De Volkskrant 3-12-1994).

The examples should make clear that markets cannot exist without rules and organizations, without a legal framework.

It might be countered that it is now generally accepted among economists that there are many types of market failures that reduce the effectiveness and efficiency of market allocation. Much of modern day micro-economics deals extensively with such market failures as information asymmetries, moral hazard problems, externalities, or the underproduction of collective goods. It is accepted that regulation may be necessary to correct for such market failures. But that there are “market failures” even before there are markets, that markets may need rules to exist at all is often overlooked. This might be because

throughout history markets have become more and more regulated, so that the problem of order on markets is no longer perceived (and reflected upon) as a problem. It has become taken for granted, in particular in the deregulation debate.

In so far as there are economists that do realize that markets are no spontaneous orders, these are yet mainly located in the margins of the discipline, such as economic history (North and Thomas, 1973; North, 1990), institutional economics (Hodgson, 1988,1993a and 1993b, Williamson, 1975 and 1985; Eggertson, 1990) and economic sociology (Granovetter, 1985; Granovetter and Swedberg,1992;, Smelser and Swedberg,1994; Etzioni and Lawrence, 1991, see for an overview Steiner, 1995).

As a consequence, fundamental categories, such as market, competition, or optimal allocation, which have long been taken for granted by many mainstream economists, are again being problematized. “Social theory is experiencing something of a revival within economics... Economists are again addressing such issues as the relationship between agency and structure, between economy and the rest of society, and between inquirer and the object of inquiry. There is renewed interest in elaborating basic categories such as causation, competition, culture, discrimination, evolution, money, need, order, organization, power, probability, process, rationality, technology, time, truth, uncertainty and value, etc.”, thus editor Tony Lawson at the presentation of a new contribution to his series “Economics as Social Theory” (Maki 1993, frontispice).

2.2. Functions of Institutions: The Generation of Incentives

Of course economists are right in emphasizing that economic actors need incentives in order to engage in transactions, to buy, sell, invest, or look for work. The basic incentive is of course the human need for food, shelter, protection, and derived from that, for money, power, and wealth. And they are right in arguing that markets and competition enhance this incentive. The fear of losing out in the competitive struggle stimulates economic actors to take initiatives, to engage in more transactions, and to do so in a quicker, more decisive, effective, and efficient manner. It stimulates business to invest and innovate, and to look for new markets. It stimulates workers to invest in their skills and to search the labor market for better opportunities to acquire income and influence. That makes for more efficient allocation, i.e. that scarce resources find their way to those that put them to the best use.

Furthermore, of course freedom is important for allowing and instigating economic actors to engage in transactions, investment, and innovation: freedom to think, to experiment, to associate, to discover, to try out new and daring, uncommon and not obvious combinations, to travel through unknown lands, to delve into mysterious spaces. Freedom also to exchange information, to travel, to chose one's profession and to follow one's interests. Such freedoms enhance creativity. This is of course all very true.

However this argument tends to overlook the obvious fact that freedom can exist only in an ordered context, where basic needs are safeguarded. And that incentives need to be amplified — by organizing and protecting competition.

North and Thomas (1973), North (1990), Scully (1992) have all pointed out that property rights have to be secured in order for economic transactions to occur. The incentive of serving self interest works only when one has some minimal security that what is being exchanged can also be disposed over, at the exclusion of others. Similar securities are needed for the enforcement of contracts. Pay is only an incentive for a worker when he can have the relative security that what has been promised will actually be paid.

The “whip of competition” is neither a naturally occurring phenomenon. It has to be organized. First of all, there must be a minimum number of firms competing. But left to itself many markets tend to monopolization. Mergers and take overs take place in order to realize economies of scale, to save on transaction costs, or merely to accumulate economic power. Sunk costs and technological expertise give the incumbents such a large advantage, that newcomers experience great difficulties entering stabilized markets. One merely has to reflect on the history of the American oil, chemical, automobile — and aircraft industries, the railroads and air traffic (Chandler 1962, 1977) to realize this. Anti-trust policy is needed to secure a minimum number of competitors. By law monopolies of Standard Oil in the US and IG Farben in Germany had to be broken up.

Competition requires furthermore that customers are able to compare prices and qualities of offers of producers. The market must have some minimal transparency. That does not come by itself. Producers often have an interest in creating intransparency. Or they produce so many price/quality combinations in their search for market niches that customers loose overview. The examples are there for the asking: airline fares, automobile models, and most recently computers and mobile telecom services. Although the differences are marginal, the diversity of products, tariffs and services is so great that hardly any

consumer can get a complete and comparative overview. Incomplete and asymmetric information can frustrate the working of markets. Institutions are needed to correct for these “market failures”. E.g. some authority who creates uniform units for prices and possibly also for quality. In this way in the past many standards have been created, for products, services and production factors, varying from the decimal system of weights and measures, to standards for advertising mortgage interest rates, to diplomas standardizing skills.

Many markets have their own specific standards that organize them. Agricultural auction marts organize the coming together of supply and demand. The rules determine who can (and sometimes also who have to) sell on this market. Usually that right is limited to members of the cooperative, but they are forbidden to sell outside of the auction hall. Thus supply and demand come together only on that specific place at a specific time. The rules also determine who can buy, and how the price is determined. Other nice examples of socially constructed markets are Wall Street and the London City. Only registered traders that satisfy a number of conditions can trade on these markets, and they have to do so according to quite detailed prescriptions, including bans on insider trading. These rules all serve to make trading transparent and to give everyone equal and honest chances. Institutions are hence needed to organize the incentive of competition.

2.3. Reduction of Risk and Uncertainty

Incentives and fear of competition, however, are usually not enough to get economic actors to engage in transactions and to invest. They must also believe that this is a meaningful activity, that there is some minimum chance for success. The chance of success should not be too small. If economic actors do not see much possibilities to realize their interests, they are not likely to take action and to engage in transactions. And less economic activity implies less prosperity and growth.

Unemployed may be stimulated to look for work by lowering their benefits; however they should also believe in the possibility of really finding work. If five years of applying for jobs have not rendered any results, they will not be very active any more. Competition or tax incentives may entice entrepreneurs to invest. However, if they see no useful technology available or new market niches they may refrain from investing. In particular, there should be some reason to believe that the relevant circumstances on their markets will not have changed too drastically in a number of years, when their investments should finally start generating profits.

Nobody gets motivated by the prospect of performing Sisyphus labor.

Whoever does so is certainly not a rational acting homo economicus. An economic actor should see some minimal possibilities. It is as with gambling. One gambles, because the chance of winning big can be a strong incentive. However, it is particularly thrilling and addicting if one indeed wins occasionally, if only a little bit. Because that increases the belief that one day one might win big. If one never wins even a little bit, gaming becomes soon pretty boring. That is known in Las Vegas. One wins regularly, and casino's advertise with pay-out ratios of 97 or 98 percent. That makes it so addictive, that the casino's can get rich from the difference of two percent.

Belief in the possibility and sensibility of investment and innovation depends in particular on the nature and degree of *uncertainties and risks* (the difference between both being that uncertainty cannot be predicted, whereas risk can to some extent. That implies that probabilities can be calculated — and hence insured. See on this still the classic statement by Knight, 1921) The greater the risks and uncertainties, the more economic choices become a gamble. And the greater the gamble, the greater the chance that no action will be taken at all, that transactions will not take place. Reduction of risk and uncertainty brings stability and predictability, and makes economic transactions more likely and hence also prosperity and growth (North 1990: 3ff.).

In the “natural” economic disorder the uncertainty and risk are much too great. In a situation where everybody is everybody's competitor — read enemy — no transactions take place and no growth can be generated. In the words of Hobbes:

"In such condition, there is no place for Industry; because the fruit thereof is uncertain: and consequently no Culture of the Earth; no Navigation, nor use of the commodities that may be imported by Sea; no commodions Building; no Instruments of moving, and removing such things as require much force; no Knowledge of the face of the Earth; no account of Time; no Arts; no Letters; no Society; and which is worst of all, continuall feare." (Hobbes, 1968, orig. 1651: 186)

There are many sources of risk and uncertainty. A major and elementary one regards property rights. Safeguarding those through regulation is not only necessary in order to provide economic actors with incentives, but also to allow for transactions to take place in the very first place. A potential buyer will want to be sure that the seller is the real owner of the good to be sold. How uncertainty over property rights can bring an economy to a standstill became clear at the unification of East and West Germany, when it was unclear for a while who was the rightful owner of real estate: the original owner who had fled to the west and who had been disowned by a regime which had now lost legitimacy and legality; or the person whom the GDR-regime had assigned the property and who now lived in it. As long as this remained uncertain, no one

wanted to buy real estate and that prevented investment in business as well.

Uncertainty exists also as to the transaction process itself. How should a price be determined? Is the price demanded the price that the seller expects? Or does he start higher in the expectation of coming out at a lower price? Is bargaining expected? Various cultures have developed different unwritten rules for this. At a Turkish bazaar both parties expect lengthy bargaining. In a West European supermarket such is considered highly unusual. But with trade in real estate this is again accepted practice in western societies.

2.3.1. Differences in Place and Time as Source of Uncertainty

The uncertainty increases, the moment transactions go beyond simple exchange. What to do if I want to sell something, but the one who needs my good does not have anything I want? While a third person has something I need, but he is not interested in what I have to offer. Such transactions, whereby my transaction partners are different individuals — and whereby transactions are often separated over time and space — require of course an abstract generalized means of exchange, such as shells, gold, coins, or cheques. The agreement that these represent a specific value is such an institution that makes these transactions possible. But the partners need some certainty regarding the value of the gold or cheque — and regarding the durability of this value. Someone who wants to sell something today against “money” will want the certainty that he get the next day about the same counter values in goods for that money. If not, he will not be inclined to sell for this “money” and transactions may not take place. Like uncertainty about property rights also galloping inflation can halt transactions and dislodge an economy completely.

Future-transactions involve by definition risk. Today an agreement is reached, but only in some time will delivery take place: of the house or the ship that has yet to be built, of the holiday for which one has only the necessary free days in half a years time, of the raw materials and machines that will have to be delivered “just in time” in exactly 40 days from now. Such a contract creates extra risks. The supplier is unsure whether the customer will really accept the product upon delivery and hence presses for pre-payment or at least a down payment, also because he has to make costs in the meantime. That creates risks and uncertainty for the buyer. Will the holiday trip meet the expectations? Will the hotel be really as close to the beach as promised? What if the travel agency goes bankrupt before the trip starts? Will the service be delivered or will I get my money back? Such risks and uncertainties can be translated into transaction costs: the costs that have to be made to reduce risks and uncertainty to an acceptable level.

More in general is the factor time a major source of risk and uncertainty (Traxler and Unger, 1994). This holds in particular for entrepreneurs who have to invest enormous sums in research and development, or in complex and huge manufacturing technology, which takes years to build and which will generate profits only in, say, ten years from now. What all cannot be different by then? Consumer preferences may have changed, new alternative products may have appeared, unforeseeable technical innovations may make the own investments obsolescent, political regimes may be different. The uncertainty over time implies that the rationality behind short term investment decisions is often another one than that behind long-term decisions and that hence institutions that help reduce risk and uncertainty can have a major impact on such rationalities.

2.3.2. Distrust and Fraud as Sources of Uncertainty

An important and specific source of uncertainty concerns the behavior of the transaction partner. Can he be trusted? Won't he deceive me? Will he live up to his promises? Or should I expect him to be an opportunist? In case of a futures contract: will he deliver the expected goods in time and of the expected quality and on the conditions agreed? Even in a direct exchange this is far from being certain. Do I really get 40 liters of gasoline in my tank when the meter indicates so? Can the meter be trusted or has it been manipulated? Anybody who has traveled in Mexico with a car will know that that is not self-evident. Is the meat hormone free, the eggs without salmonella, and do they really come from free roaming chickens? How much room do the latter actually have? What if we do not agree on a transaction? How will conflicts be settled? Is there any chance of me getting an honest process or will the law of the jungle reign?

Differences of opinion are not imaginary. Partners will not be inclined to trust each other a priori. On the contrary. Each one knows that the other is after his own interest. Competition, which on the one hand provides positive incentives, can on the other hand increase distrust. It can become also an incentive for fraud and violence. Distrust is the “natural” state on any unregulated market.

Actors need a minimal trust in the honesty of others, trust that these others will abide by the rules of the game, trust in the quality of the goods, that they will not be poisonous or spoil quickly, trust also that the value of the money they trade their goods for will still have the same value tomorrow, trust in the correctness of information, and so on.

2.3.3. Conclusion: a Balance between Incentives and Uncertainty Reduction

Economic actors need incentives in order to be stimulated to take initiatives, but they must also be able to believe in the sense of such initiatives. Incentives bring flexibility, movement. They stimulate actors to look for new profit possibilities. Uncertainty reduction brings stability and predictability. It allows people to make rational decisions, including especially the making of long-term investments. Therefore, institutions are needed, rule systems that reduce distrust and transaction costs. Without them, transactions become less likely.

In that sense, institutions are the “dykes” of an economy. Dykes are physical constructs that create physical space and reduce risk and uncertainties within it due to flooding; they make life within the polder possible, and make it sensible for economic actors to invest in farms and factories in the polder. Similarly, institutions are social constructs that create social spaces, markets, and reduce risk and uncertainties in them; they make life on markets possible, and make it sensible for transaction partners to invest in manufacturing and trading.

Uncertainty must be reduced, but not so much that the incentives disappear or that moral hazard problems arise. The demands from the need for incentives and for uncertainty reduction can be contradictory. Incentives depend on some degree of insecurity, the insecurity provided by competition. Therefore, institutions have to strike a balance between the need for incentives and flexibility on the one hand, and the need for security and stability on the other. There has to be some fear, but also some security. Economic actors should feel pressured to invest, but also feel able to do so, that this makes sense. And exactly where the balance between these contradictory needs lies depends on the cultural importance of both needs for incentives and for uncertainty reduction, which tends to differ between societies.

3. Institutional Alternatives for Uncertainty Reduction in Transactions

3.1 Individual Strategies

Transaction partners can of course first try to solve their problems of uncertainty and lack of information themselves. They can conduct their own checks. They can gather information from the neighbors of the transaction partner to find out whether the latter really owns the house he wants to sell, or whether he is often drunk. One can hire life guards and threaten with fighting squads, not an uncommon method in criminal circles to reduce the uncertainty of transactions. Less drastic is to demand securities from the trading partner, like a bank guarantee or a bank deposit. Loans are given against collaterals or after inquiries

have been made with the employer. Landlords demand a deposit from renters. And customers could take a scale to the supermarket to check on the real weight of the chocolate hail in the box. And do you see yourself already filling eight times a five liter jerrycan with gasoline, in order to be sure that you tanked forty liters? Or a microscope along to the butcher to check the meat on salmonella? It seems far fetched, but in the past, when institutions that provided for such control were still lacking, this was not uncommon behavior. Because the chance of opportunistic behavior of the other is so great on markets. On medieval markets, gold and silver pieces were weighed very carefully, because others had often tried to file a little bit off.

An interesting example is provided by the early Dutch cotton trade. There was a time, around the middle of the 18th century, when traveling salesmen put out yarn to house-sitting weavers in order to weave it into fabrics. Yarns and fabrics formally remained the property of the putter out. The weavers tried, by weaving a little less tight, to keep some yarn for themselves. The putter out was of course aware of this and hence weighed carefully yarn before and fabric after. The weavers counteracted by making the cloth a little damp, in order to make it heavier. That forced the putter out to not only weigh the fabric, but also to estimate its degree of humidity. That required time, energy, and skill and led easily to conflicts between weaver and putter out. Records of many of them can be found in the archives.

A second individual strategy to reduce uncertainty is to conclude contracts. By making clear agreements before and fixing them formally, so that they can be verified later on, one can also try to reduce risk and uncertainty. However, that too requires information: *ex ante* about what exactly to fix and how; and *ex post* about whether the contract partner has lived up to his commitments. The observation of contracts has to be monitored, and if necessary enforced. Therefore one has to dispose over sanctions. If the partner is dependent on resources that are at one's disposal — future orders or supplies, work, knowledge — and that partner has little or no alternative suppliers, then an efficient sanction is the threat of withholding such resources in the future. In the absence of a long-lasting and non-anonymous relation — required for such sanctions — one may have to seek recourse to the threat of violence. In criminal circles, where one can not so easy call upon the strong arm of the state, this is not an uncommon means for contract enforcement.

Fighting squads cost money, the measuring of gasoline takes time, and salmonella are difficult to recognize for the layman. Individual strategies to counter distrust and reduce uncertainty cost time and money, They are literally “transaction costs”, which tend to be high, because the individual cannot profit from economies of scale. Therefore, they can seriously frustrate transactions.

3.2. Institutions

Societies have over time developed institutions which serve to reduce such transaction costs and which aid in reducing risk and uncertainty, thus facilitating transactions and increasing prosperity. Building upon typologies made earlier by Williamson 1975, Ouchi 1980, Streeck and Schmitter 1985 and Hollingsworth 1993, the following allocation and coordination principles, which can perform these functions, can be distinguished:

1. The market, that is, commercial firms making a business out of the reduction of risk and uncertainty
2. Communities or clans, i.e. informal groups based on primary relations such as the family, and whereby “trust” is an important lubricant
3. Associations, a more formal and goal oriented form of social cooperation, as compared with communities
4. Firm organizations, which internalize transactions (or private hierarchies)
5. The courts, which coordinate through case law. This is the state in a more passive role: it reacts to conflicts brought to it by market parties
6. The state, or a public hierarchy, which coordinates through statute law, both basic civil/commercial private law and social and economic public law. This is the state in a more active, initiative taking role.

Common to all these coordination mechanisms is that they are forms or organized cooperation. They differ however on a number of dimensions. First of all on that of informal — formal. Formalization of group relations by the creation of a formal organization in general enlarges the binding character of the group and with that its capacity to create uncertainty reducing regulations. Secondly, groups can be structured internally either horizontally or vertically. In a horizontal structure the members are more or less equal, in a vertical one there is a hierarchy of super- and subordinates. A vertically structured group has an internal central authority, which improves decisiveness and hence its capacity for regulation. Thirdly, formal organizations can either be private or public. Being public means that this organization has access to, c.q. can be supported by the monopoly of the state on the legitimate exercise of force. With that, the degree of bindingness increases further. Because courts act only upon initiatives from civil society (conflicts that are being brought before them), they can be considered a mixed public-private institution. Statute law, created on its own initiative by the state, can be considered a more pure public institution.

Combinations of these three dimensions produce the various institutions that can coordinate markets. Except for the market itself these are:

Table 1. Comparison of Economic Coordination Principles

Coordination Principle			
1- The Market, Commercial Services			
2- The Community or Clan	informal	horizontal	private
3- The Association	formal	horizontal	private
4- The Firm Organization	formal	vertical	private
5- The Court	formal	vertical	semi-public
6- The State	formal	vertical	public

As one comes further down the rows, the coordination principles have a greater capacity for creating and maintaining more specific rules and regulations that are to reduce risk and uncertainty. It is an ordinal rank order of weaker to stronger developed principles. On these now a bit more.

3.3. Commercial Services on Markets

Can the market itself provide solutions for the problems of risk and uncertainty? To a certain extent it can, for sure. The history of the market economy, capitalism, and industrialization is one of institutional innovations that have helped to reduce extremely high risks and uncertainties to more manageable proportions in order that higher risks can as yet be taken and sizable amounts of capital can be made available for such enterprises.

That started already on medieval markets. In order to satisfy the need for quantity and quality controls, new trades developed, such as those of gold and silver weighers. Future transactions were put in writing in order to increase the clarity of the agreement and to allow for ex post control. At a time when few people were able to read and write, this need led to the development of the profession of official writer, out of which later the function of the notary public developed.

With the general differentiation of the economy since the end of the 19th century the business of uncertainty reduction has also been further differentiated. Enterprising businessmen saw market niches. Others have followed and are still following. Uncertainty reduction has become big business. As less and less people are involved in the primary and secondary sectors of the

economy, an increasing share of output and employment is produced by economic sectors that specialize in the reduction of risk and uncertainty, that is, in controlling others on behalf of still others. Much of what is called “commercial services” is concerned with this activity. It has become one of the fastest growing sectors of the economy. As with other products and services, division of labor and specialization have also led to higher productivity and cost reduction in the business of risk and uncertainty reduction. In due time, reduction of risk and uncertainty has become a major service sector. Businessmen have specialized on the collection of information (detectives, credit registration bureaus, consultancy firms, marketing agencies), on the evaluation of it (credit rating organizations), the distribution of information (advertising, more neutral: consumer organizations), the certification of the truthfulness of information on behalf of transaction partners (accountants, auditors, notary publics), the drafting of contracts (lawyers and notary publics), their monitoring and enforcement (assault groups, debt collection agencies, process servers, bailiffs), the covering of calculable risks (insurance companies, options trade), the investigation of the suitability of job candidates (professional recruiting agencies, head hunters, psychological testing bureaus), private trade marks and private certification agencies reduce the risk among consumers regarding the stability and nature of product quality, etc.

The market itself can also contribute to uncertainty reduction. Important in this respect are the stock and option exchanges. But also the labor markets and parties on it (temporary work agencies) contribute. The stock market allowed for the easy marketability of ownership shares. “Marketability of assets and the existence of efficient markets for the sale of these assets meant that owners were not undertaking commitments equal in duration to the life of long-lived capital assets. On the contrary, they could realize their financial gains or cut their financial losses whenever doing so appeared to be expedient. In this way a capitalist proprietor’s long-term risk was converted into an investor’s short-term risk.” (Rosenberg, 1994: 97).

However, commercial solutions do have their problems. For many forms of uncertainty reduction they are less appropriate. Commercial businesses are also prone to the seductions of opportunistic and corrupt behavior. They are often paid by only one of the transaction partners and “whose bread one eats, those words one speaks”. Product information supplied by advertising agencies for their producers tends to be incomplete and biased. It still entails uncertainty for others, be it at a different level. Who controls the controllers, the accountants, risk analysts and insurers? Could their professional associations do it? And who controls those?

Furthermore, private institutions usually cannot do without the backing of an external authority. One can try to build up a trade mark image. However, as long as this is not protected and competitors are free to market products, also of lesser quality, under the same brand name, the image can not serve its purpose. That is, free riders can destroy the reputation of an image or brand of a group of producers. Bad products drive out good products from the market, and bad entrepreneurs good entrepreneurs. Brand names need protection. Lawyers cannot do much without a system of law and without public agencies and functionaries, such as public prosecutors, judges, policemen, bailiffs and prison guards, who enforce that law.

A third problem of market solutions is that, where uncertainty reduction requires generally valid and accepted norms and standards, the competition which is typical for market solutions is likely to create problems. Commercial organizations compete among others by trying to impose their own technical standard on the market. That may produce a plurality of standards, i.e. confusion. However, the customer is interested in one universal standard, rather than the best one. One can still live with less efficient standards. The US has still weights and measures with which it is difficult to calculate. However, lack of universal standards seriously hinders trade and production, as it reduces complementarity and interchangeability of products, as was the case in the early days when every city and region had its own weights and measures. Efficiency requires here an organization with a monopoly position on setting technical standards.

Finally, commercial solutions still imply large transaction costs, be it that these costs have now to be paid to commercial organizations. Compared to individual firm strategies for uncertainty reduction, “outsourcing” to specialized organizations offers economies of scale. But yet other forms of uncertainty reduction, by institutions to be discussed below, can provide further savings. Furthermore, such alternatives are often more effective. With the result that many commercial uncertainty reducing institutions have been replaced sooner or later by other institutions. More on those now.

3.4. Community and Trust

A “cheaper” means to save on transaction costs is “trust” between the partners. An efficient economy runs — like society in general — largely on trust.

Trust is not self-evident. It cannot be based in a belief in the “natural” goodness of man or so. Certainly not in capitalism, where competition tempts if not forces transaction partners to cheat each other if possible. Those who do not join in cheating, may find that they loose out in the competitive struggle in an

unregulated economy.

There can be three bases for trust between transaction partners: a) somewhat durable mutual dependencies; b) cultural norms; c) institutions.

Transaction partners who are mutually dependent on each other for some length of time, such as a shipbuilder and its supplier or a textile manufacturer and his workers, can develop trust in these longer lasting relations. Game theoretical experiments have shown that cooperation and trust can be rational strategies between players who know that they will also remain dependent upon each other in the future (“iterative games”). Furthermore, parties in a durable relation can develop gradually mutual expectations, which can, in the context of their dependence, be regularly affirmed and hence fortified. In time, such expectations will develop into unwritten rules. The history of capitalism shows however also that sooner or later the temptation or pressure of competition can get so great that such mutual expectations are broken and trust disappears. Loss of foreign markets to competitors can force employers to reduce wages and to lay off workers with whom they have had a mutual commitment of decades. That might make it very difficult to win back that trust, as the Dutch textile entrepreneurs learned. In the 1930s they halved the wages and fired thousands of long-term employees. After World War II they needed again workers, but many did not trust the manufacturers any more. Such is in particular likely to happen on large markets where transaction partners are relatively anonymous for each other, that is, the ideal market in economic theory.

Trust is not something that can be easily created. It is there, or it is not (and if it is, one better be careful about it). Trust is more likely to be found in a “community” with a certain identity. One strategy to reduce uncertainty is hence to conclude transactions preferentially with people that one trusts because one shares a common group identity with them, or because there is for other reasons a durable mutual dependency relation. That could be members of the same (extended) family, religion, ethnic group or minority. The chance that they will commit deceit is smaller than with anonymous transaction partners on a market.

Trust is enhanced by the diffuse and multiplex character of relations in such groups. The members are in different roles related to each other, as family, as neighbors in the same village, as churchgoers to the same church, as carers in sickness, as members of the same hobby club — and as partners in economic transactions. The polymorphic character of these relations offer ever so many channels for social control and social interdependence. Misbehavior in economic transactions can be punished by — to mention two extremes — excommunication or refusal in bed.

Transactions remain here limited to within a certain homogeneous social group. The social structure of that group is the institution that reduces uncertainty and transaction costs. Subsequently Ouchi (1980), Piore and Sabel (1984), Sabel (1992), Porter (1990) and Fukuyama (1995) have pointed to the importance of clan and culture for economic transactions. The classic examples are the industrial districts of mid-Italy, textiles in Prato and ceramic tiles around Sassuolo. But examples can also be found elsewhere in time and place: the communist silver smiths in Oneida in New York State, or the Jewish confection industry in New York City.

It will be clear that dependence on this institution limits the scale of transactions. One is therefore tempted to think that this institution only works for more primitive, less differentiated societies, and that they would be outdated in the present time of globalization. Nothing is further from the truth, as the competitive advantage of the social community structure of the Italian districts shows. Multinational network organizations like Benetton owe their existence to them. Geographically dispersed communities can serve as channels for internationalization. Such was a competitive advantage of the Jews in former days. Family and religious ties in the diaspora were channels for trust relations, even to third persons. In a time when there was hardly any international banking, Jews could give off bills of exchange on family members in distant cities.

A group identity is also a source of social norms, of what is acceptable and not, also in economic transactions. Jews won't trade on the shabbath, Catholics were originally not allowed to charge interest, and Calvinists were expected to be thrifty and not to indulge in luxuries. That too increases the predictability of the intentions and choices of transaction partners. Many cultures and religions have norms that condemn deceit. This has as effect — if not intention — to mitigate mutual distrust among the members of the group.

As norms differ, so does mutual trust and distrust between groups. Cultures differ also as to the those whom one trusts, family members, strangers, organizations, the state. According to Fukuyama (1995) Chinese and Italians have in common that they trust their family, but distrust "strangers", that is, those in the society at large. He calls these "low trust" societies. Germans, Japanese and Americans by contrast have relatively more trust in people and agencies outside of their family relations, including associations and the state. He calls them "high trust" societies.

Cultures — also on submarkets — develop unwritten rules that prescribe how transactions are to take place, how one should negotiate, how one can appeal and how conflicts between transaction partners should be settled. In short, such rules structure mutual expectations between transaction partners. On a Turkish bazar both parties expect that the buyer will bargain. In a department store in a western society this is unusual and is not expected. But one should even in western societies bargain in the markets for real estate and second hand cars. Is it possible to return goods that do not satisfy and get one's money back? In the US that is no problem, but in the Netherlands that is uncommon. Here the rule “buying is buying” reigns informally.

Often however cultural norms and values do not suffice. Agencies are needed to back up such norms, to formulate and interpret them clearly, and to monitor and enforce them. Norms without supporting agencies are rarely long-lasting. Certainly in capitalism. The pressure of unrestrained competition can get so fierce that even originally good willing and obedient members of the group feel forced to forget about the norms. Therefore, institutions are needed to keep capitalist competition in check. Institutions that regulate and enforce what are legitimate and illegitimate fighting methods. Murder, thievery and manifest fraud are certainly not such methods. But not only because they are immoral, but also dysfunctional: the risk of competition can get to great, that incentives no longer work and nobody is willing to engage in transactions. There are various types of agencies that can generate and back up such rules.

3.5. Associations

A first one is self-organization and self-regulation by the sector concerned. They may form a kind of “private” government in the form of an association, which enacts and tries to enforce “laws”, in the form of internal rules. There have been many forms of them.

An early form of horizontal cooperation have been social clubs, with predominantly businessmen as members, such as the Free Masons, local elite societies, and presently service clubs such as the Rotary, the Lyons, or the Kiwanis. They too have played a role in uncertainty reduction. They were places where the local elite, including potential business partners, could meet informally, exchange information and opinions, and check mutual expectations. It still is a golden rule to building contractors to be member of several local clubs. They have to “network”, establish relations to local dignitaries and politicians who may have jobs to tender out, and check if not try to influence expectations of possible clients. Furthermore, such clubs are locations where local social elite identities and social ties get established. In that sense business clubs are a combination of the two allocation principles “community” and

“association”.

More important however are the specialized interest associations of economic actors: trade associations, trade unions, and consumer organizations. Unlike clubs they have business-like goals, such as political interest representation, providing services to members, creation sectoral collective goods, and self-regulation, including cartellization. There are many of them, and many types. In various ways they help to reduce uncertainty. Some examples may be indicative.

The Dutch Association of Insurance Companies has created a code, which prescribes to members how they have to list returns and risks of life insurances in order that potential clients can better compare offers. This is a typical attempt to increase market transparency. The increased competition has namely led to a diversity of calculation methods which has complicated comparison. Dutch associations of contractors and travel agencies have created guarantee funds, which give clients the certainty that the future trip or house bought from a member in the fund will really be provided, even if the firm goes bankrupt before. Cartels mitigate competition, and thus reduce the pressure on market parties to behave opportunistically. Dutch dairy associations have created a system of quality control, which should secure the trust of consumers, both domestic and foreign, in the quality of Dutch dairy products. The association of electricity companies has created minimal safety standards for electrical products, which should provide consumers with the certainty of buying safe products and which should prevent higher transaction caused by connecting products of different standards; and so on.

Associations of consumers and workers too help reduce uncertainty. The Dutch consumer organization compares products on price and quality, and has negotiated contracts with the Bankers association which regulate liability in electronic payments. This should reduce uncertainty for customers over whether the amount of cash received from an ATM machine will actually be the same as the amount deducted from their account. Uncertainty over this did at first lead to hesitation in the Netherlands among consumers to use such machines. Trade unions conclude collective wage agreements and help reducing distrust among workers that all employers are after is to exploit them. Sometimes such associational regulation has been sanctioned and supported by the state, as with the statutory extension of collective wage agreements and of the dairy quality control system.

3.6. Private Hierarchies

In the absence of community and trust — as in an internationalizing and consequently more anonymous market — and with too high costs of commercial uncertainty reduction, entrepreneurs can also limit uncertainty through mergers and take overs with transaction partners. Competitors can be conquered — as in horizontal integration — or customers/suppliers — as in vertical integration. Transactions that were to take place before on a market henceforth take place in a bureaucratic organization, which thus increases in importance as allocation and coordination mechanism. Actors actually enter into transactions with themselves, and this allows them of course to reduce uncertainty about intentions and possible opportunistic behavior of others. Greater size means also more market power, and allows economic actors to influence or even steer developments on markets, which reduce uncertainties for long term investments. Even uncertainties about the value of money can be reduced, by creation one's own value-units for internal exchange. Competing technical standards, which produce uncertainty, can be coopted and adopted, or abolished, or pushed out of the market by the greater market power of the larger firm. Philips might not have lost out with its video 2000 standard, if it had been able to take over its Japanese competitors, which produced VHS. The example shows how high the transaction costs of losing out in battle over technical standards can be.

This is all of course common knowledge since the work of Williamson (1975), who, following Coase (1937), tried to find an answer to the problem mainstream economics then could not solve: “why are there organizations if markets are such efficient coordination mechanisms?”. Why aren't large firms outcompeted by very small ones on markets? His answer was that market failures like information asymmetries create possibilities for fraud and deception, that strategies to reduce such asymmetries involve costs — transaction costs — and that organizations can help reduce such uncertainties and costs. Therefore organizations can be more efficient. Lazonick (1991) goes a bit further and states that “what mainstream economists view as “market failures” I view as “organizational successes”... By their unquestioning acceptance of the ideology that views the perfection of market coordination as an economic ideal, the new theorists of “imperfect markets” have become intellectual captives of the myth of the market economy” (1991: 8).

3.7. The State I: The Courts, and Case Law

Many economic transactions sooner or later give occasion to conflicts, over the quality of the products supplied, over the payment of product or labor, over the observation of contracts. Such conflicts have come, possibly after outburst of violence and social unrest, sooner or later to some arbitrator for settlement.

Already early on, the state has — given its responsibility for social order — provided such arbitrators: the judiciary financed and employed by, but relatively independent from, the other state powers. For the implementation and enforcement of its decisions the judiciary is supported by the legitimate monopoly of the state over the exercise of force. As judges orient themselves in their decisions to earlier decisions by other judges, these have acquired power of precedence. The accumulated decisions have produced de facto regulation: case law, which regulates economic transactions, and which has substantially contributed to the reduction of uncertainty. Already in this manner has the state become involved in the regulation of economic transactions. Even governments that are otherwise wary of intervention in the economy and advocate a liberal “nightwatch” state, have in this way, willy-nilly, become market regulators, and are becoming more so every day.

3.8. The State II: the Legislative and Executive Powers, with Statute Law

Is the uncertainty reducing role of the state via the courts still a passive one — it reacts to conflicts which are brought to it from civil society — sooner or later the state has also come to intervene and mediate more actively in economic transactions. That has happened through the production of abstract civil law and social and economic public law. In part such statutes were a codification of already earlier formed case law; in part it was also new law. To quite an extent such has happened at the instigation of market parties. Thus much of social and economic regulation in the Netherlands has been created at the initiative of trade associations and trade unions — and sometimes even replaced earlier forms of self-regulation by such associations.

Various motives got the state to do so. First of all its interest in and responsibility for the maintenance of social order. Legal protection of workers could reduce their risks and uncertainties on the labor market and were to contribute to a reduction of social conflict. Threats of strikes and revolutions can be considered as back ups of attempts at private regulation of transactions of the labor market. Not coincidentally has much social regulation come about in periods of great social unrest, like the revolution year 1919 and the crisis of the 1930s. Protection of consumers were to prevent conflicts between consumers and suppliers. In both cases the state again was addressed in its primary responsibility of maintainer of law and order and conflict settler.

Another motive of the state for intervention was its interest in economic growth and prosperity. Reduction of uncertainty in transactions could promote such transaction, and thus eventually also the tax income of the state itself. Such early economic intervention was an important legitimation of the state. In fact, the process of state formation can be considered as a history of uncertainty

reducing interventions on behalf of the market. The formation of states and capitalist markets have been parallel and interlinked processes. One might even maintain that uncertainty reduction is the central “business” (and legitimation) of the state.

There were various reasons for a special role of the state. First its monopoly on the legitimate exercise of force, and interlinked its monopoly on taxation and on the enactment of for everyone binding regulation. Many forms of uncertainty reduction require such a monopoly. Either because one generally valid institution, one general and uniform standard; or because such a monopoly was necessary to prevent and discourage free ridership. Many forms of state regulation are typically collective goods.

A second reason for state involvement was that, of all actors, it could most legitimately claim to represent a “general interest”. And that was important for the legitimation of uncertainty reducing regulations. Potential transaction partners need a minimal trust that the rules of the game are relatively neutral, that they do not advantage certain parties over others. Furthermore, only such a more or less neutral party can provide legitimation to private uncertainty reducers, such as certification agencies of insurers. History has shown that there is a need for neutral certification of the certifiers, and neutral control of the controllers.

Thirdly, centralization of the exercise of force to back up contractual obligations had also advantages of economies of scale – as compared with private bodyguards or even armies.

Just to mention some examples: The state monopolized sooner or later the provision of a generalized medium of exchange such as money in order to guarantee its value. It “stamped” specified amounts of gold and silver – certifying their value. The use of money still reflects a trust in the state and its Central bank – notwithstanding the saying on the rim of a well-known coin that it is “in God we trust”. Product quantity control also became the domain of the state. The weighing of goods in transaction in medieval cities eventually became a state monopoly: the institution of the city municipal weighing house was introduced. Later the weights and measures gauging office (IJKwezen) evolved out of this. Now private individuals do the weighing again themselves, but with instruments calibrated by state agencies. Similarly, product quality is controlled by public authorities. The Leyden fabric controllers (“lakenkeurders”) of the 16th century have evolved into a variety of control agencies: the Food Inspectorate, the Meat Control, the Drug Inspectorate. And they control detailed norms, fixed in public law, varying from the “Meat Inspection Law” to the “Baby Food Ordinance”.

A major function of civil law is to back up private property and contracts. In return, law sets conditions of contracts. State law also establishes the rights and responsibilities of the limited liability company, the insurance company, or the stock market, institutional innovations that developed in society but needed sanctioning by the state in order to effectively reduce uncertainty for the investors.

More in general many privately created institutions function — that is, transaction partners trust them — thanks to state supervision. People are prepared to pay for decades insurance premiums to private companies because state supervision of the sector provides some minimal guarantees against loss of entitlements due to bankruptcy on the insurance company. And passive public oversight on disciplinary law of the professions and on self-regulation by the stock exchange increases their trustworthiness.

State and semi-state agencies implement such regulations. Examples are of course the courts, also publicly appointed notary publics or the registry offices for land and ships, who fix property rights. Formal ownership of firms is registered by the Chambers of Commerce. Intellectual property is protected by patent law and brand law, an important precondition for entrepreneurs to invest in research and development and to built up brand images.

Actually, a large part of law, both civil and economic public law, serves to discourage corrupt and opportunistic behavior and to mediate in conflicts over transactions. The security that there are fixed procedures for conflict mediation which minimize the chance of arbitrariness and make outcomes somewhat predictable reduce the frequency with which mediation is called upon, and that in turn lowers transaction costs and facilitates transactions. It helps also in reducing conflict in labor relations.

The most important and most general function of the state regarding the reduction of uncertainty is to provide for a stable and predictable legal, political, and social environment for firms, which allow them to calculate risks better, in the knowledge that the basic parameters in the environment will not change so erratically. The provision of stability and predictability is of course a major function of the rule of law. This reduces the likelihood of arbitrary interventions by the state. Constitutional law limits the authority of the state and provides for procedural rules regarding rule-changing, which guarantee that such rule-changing will take time, be cautious and prudent, and allow for public debate and hearing of the subjects concerned. But not only constitutional law has a function here, social and economic public law as well. Labor law reduces strike incidence, and market ordering regulations and social security reduce the chance

of erratic and fierce demand fluctuations.

3.9. Combinations of Coordination Mechanisms

Finally, combinations of the various coordination principles have in turn created specific institutions that reduce uncertainty. A nice example thereof — and of central importance in the history of capitalism — is the invention of the limited liability company which gave out shares. This was produced by the principles market, hierarchy, and state, in combination. It is an organization, active on markets, in particular the capital market, and sanctioned if not created by the state.

This limited liability company allowed entrepreneurs to reduce their personal risk by “sharing” it with others. As a result, the group as a whole could take larger risks. Furthermore, the company limited liability of the partners by separating private and corporate property. The corporation became a separate legal entity that could own property and enter into transactions and assume commitments and debts. Its property was separated from that of its shareholders. That reduced the risk of bankruptcy for the latter. Claims on the company could no longer be laid also on the personal property of the participants. Given this significant reduction of the personal risk of the entrepreneur, the latter dared to engage, through his company, in more risky investments than he would be likely to do when he would still be liable with all his personal assets.

Of course this did imply greater risk for the transaction partner. He was less certain that commitments made in future contracts would be observed, that deliveries would be paid. To reduce such risks in turn formal rules were introduced regarding the procedures to be followed in case of bankruptcy and the rights of creditors. Furthermore, of course the larger capital reserves of the shared liability company provided transaction partners with added securities.

An institution that bears resemblance to the stockholding company is the insurance company. Where stockholders shared risks among themselves, the insurance company allowed basically the same on a larger scale: the sharing of risk between all those taking insurance. The insurance company is a go-between, that, on the basis of mathematical knowledge, did the work of calculating the probability of risks. And could hence, by reducing its risk through scientific calculation, risk to take the risk of others. Hence it is no accident that both developed simultaneously. And most likely in the Netherlands, where the emergence of “partenrederijen” and “compagnieschappen” was linked to large and risky investments in radical innovations, such as the construction and maintenance of windmills, the huge engines of proto-industrialization, or the organization of ship convoys to the Indies.

In the 17th and 18th century the oldest industrial region of the Netherlands, and most likely one of the oldest in the world, emerged along the Zaan river to the north-west of Amsterdam. For those days enormous capital goods, driven by wind power, sawed wood, pressed oil seeds, ground grain, and beat ingredients for paper manufacture. More than 600 windmills adorned around 1725 the flat and wet Zaan region (Boorsma, 1950). The growth of this windmillpark was made possible by risk distribution. The construction and exploitation of a mill was quite a risky enterprise. The in the flat country high uprising wooden constructions were rather vulnerable to storm, lightning and fire. On average once every forty years a mill burned down. Therefore the mill-owners had entered into agreements to distribute the risk. Rather than one owner owning one mill each of thirty owners owned one-thirtieth share in thirty mills. The owners cooperated in so called “partenrederijen”, corporate bodies that formally owned the mills (Van Braam, s.a.). Furthermore, they also cooperated in mutual insurance contracts, through which the owners collectively insured their property against fire. Such contracts were also early forms of associational self-regulation. The contracts provided for associations that imposed a number of preventive measures on the members, such as the presence of buckets and rope to fight fires. The associations actively organized the supervision on the observation of these rules (Walig, 1912).

Earlier on, similar forms of risk distribution had been developed in trade, in particular the trade to the Indies. The Dutch East-India Company (VOC) and West India Company (WIC) were also limited liability corporations, whose shares were in the hands of municipal chambers. In the latter leading merchants and their families participated. For each individual trip to the Indies within these chambers separate “compagnieschappen” were created. A successful return of a ship full of spices could reap extraordinary profits. That was the incentive to invest. However, the risk on these long and dangerous journeys was high. Only one in two ships returned. To reduce this risk, such ships were equipped collectively.

These were major factors facilitating investment in risky undertakings, and hence were major preconditions, provided by capitalism, for industrialization. All these techniques had in common that they made it possible "to convert a long-term risk involving large amounts of capital into a short-term risk that was limited to small amounts of capital" (Rosenberg, 1994: 97).

3.10 Effectiveness and Efficiency of Coordination Principles

Which of these coordination principles are now to be preferred, and under what conditions? Which ones are the most effective and efficient ones? Which have the greatest legitimacy? Present-day deregulators and privatizers seem to assume a priori explicitly or implicitly that “market solutions” will be more effective and cheaper. That remains to be seen. How could “organization” ever have been able to maintain the competition with the “market” as a coordination mechanism — and under certain conditions even have won it — if it would be less efficient?

History has shown that many market solutions to the problem of uncertainty in transactions have their deficiencies. New forms of order through the principles of association, hierarchy, courts and state have developed and have eventually been selected by history as the more effective and efficient ones. Market solutions often require if not replacement by then at least support of public regulation. It is not without reason that gold- and silverweighers on medieval markets were replaced by state certified coins and later Central Banks. Or that private quality seals were substituted by public hall-marks. The latter were simply “better”: more effective to enforce, less free rider problems, less ambivalent and contradictory interpretations, greater clarity and more uniform and equal application, economies of scale, etc.

Furthermore, many non-state solutions to the problem of risk and uncertainty, have eventually needed state support in order to be effective. Since Mancur Olson (1965) we realize better that associations find themselves confronted with what Olson called “the logic of collective action”, the threat of free riders. In practice associations were already much earlier aware of this. And have lobbied the state for support. That has indeed come, e.g. in the form of statutory compulsory membership (as for the Austrian, German and Swiss Chambers and the Dutch statutory trade associations), statutory extension of private contracts of and between associations (cartels, collective wage contracts, covenants in several continental European countries), or the statutory monopoly on the provision of specific services (e.g. export licenses, collection of statistical data).

The coordination principles of “community” and “trust” can often only exist thanks to the presence of supporting confidence building institutions created by the state, especially in the larger and more anonymous societies in which we live. Examples are quality standards and inspections, supervision of insurance and banking, or regulation that mitigates competition and bans some more aggressive form of it. That reduces the compulsion economic actors may feel to behave strictly as self serving and opportunistic partners, who seize every means to advantage themselves, in complete disregard of the interests of others.

4. Institutions as Communicating Vessels

Risk and uncertainty in economic transactions can be reduced by different coordination and allocation principles. That makes these principles functional alternatives for each other. They are likely to be a kind of communicating vessels. Less of the one leads to more of another. And that has implications for deregulation policies. Less statutory regulation does not necessarily mean that the outcome will be less overall regulation. It may increase the demand for coordination by other principles. Transaction partners will keep a need for reduction of risk and uncertainty. And ... that need may not necessarily be filled by the “market”, by commercial services. It could also lead to more “association”, more “hierarchy” or a greater role for the courts and case law. And it is questionable whether those alternatives for statutory regulation are to be preferred, whether they will be just as effective and efficient.

An opposite effect is also possible. I pointed out earlier that public regulation has often turned out to be necessary in order for other uncertainty reducing institutions to function well. Deregulation may therefore also have the consequence of undercutting such supports. Mutual trust between economic actors and trust in each other's products may wane when statutory product regulation gets abolished; associations may find it more difficult to ensure the observation of their self-regulation by their members if they lose statutory supports. It is questionable whether such costs compensate for the advantages of simpler and lesser regulation. A more flexible monetary policy can undercut public trust in a currency and lead to a drastic drop of its value on exchange markets. More flexible meat inspection can lead to sudden loss of public trust in meat. The BSE scandal might have been prevented if British agricultural standards would from early on have banned it to turn herbivores into carnivores, by serving them ground up congeners. The scandal illustrates also well how high the costs of ineffective risk and uncertainty reducing institutions can be. Similarly, people may be less likely to engage a cab or have a building firm do some renovation if the chance to be cheated because of deregulation increases.

Deregulation may hence lead to an increase in the importance of other coordination principles; some deregulation measures can however also undercut the effectiveness and efficiency of such other principles. In the first case it is a matter of *less* rules, *more* other coordination principles; in the second: *less* rules, *less* other principles as well. But in both cases there may be a loss of effectiveness and efficiency in the reduction of risk and uncertainty on markets. In the following I will discuss first some cases of “less rules, more others; and then some “less rules, also less others.

4.1. Less rules, more Community?

Less rules, more mutual trust and community, that may look like an ideal situation. The latter are not only usually “cheap” coordination principles, for many people they also have a more attractiveness: informal and social has positive connotations.

It is however questionable whether there will be many deregulation initiatives which could lead to such results: that an informal community takes over the role of formal regulation. Coordination through informal communities usually requires face-to-face contacts, typical for a local community (but of course also a locally centralized market such as the London stock exchange or the Antwerp diamond market). Such principles is not really an alternative for most markets in modern society, which tend to be large scale, separated in time and space, even international, and anonymous. Historically, the trend has also been the other way around. Markets and transactions on the basis of spontaneous trust and informal communities usually did not survive. Sooner or later such informal agreements were formalized to self-regulation by associations, created by such communities.

One area where communities could again become more influential is in the case of the deregulation of establishment licensing, which existed in many continental European countries. Proof of skills was needed in order to be able to open certain businesses. In the Netherlands these rules have been deregulated because they were considered unjustified market entry barriers (and it is considered in Austria and Germany). A more specific motive was to make it easier for ethnic minorities to establish a business. It is quite likely now that out of newly found ethnic businesses new business communities emerge, and that these may try to regulate their markets with more informal regulations. Such has happened in the 1930s in the Netherlands with Italians which created terrazzo businesses (and now completely monopolize it), and after the war with Chinese restaurants, Italian ice cream shops, and Turkish sewing ateliers in Amsterdam. These communities often tend to form their own informal establishment standards — regarding skills, implicit knowledge, social/ethnic origin and relations, capital, reputation and reliability. Such informal standards may become quite effective market entry barriers and their power of social exclusion may be much greater than that of formal statutory standards, which at least do not explicitly discriminate. I remember still well from the time that I studied in Toronto in the early 1970s that one could only get a well-paid student job in construction if one spoke enough Italian.

Whether such a development is desirable remains to be seen. Are informal market entry barriers not worse? The legal system created by the Enlightenment

and French Revolution that treats everyone formally equal has not for nothing been inspired by the desire to abolish group privileges and informal social inequalities.

4.2. Less Rules, More Association?

Deregulation may also be countered by business with a strengthening of self-regulation by associations. It even seems to be the explicit goal of some deregulation measures. If ever establishment licensing for butcher shops will be abolished it may not take long before consumers may see a sign on the door: “recognized by the Royal Association of Butchers”. There is no establishment regulation for brothels, as they are still formally illegal in the Netherlands; however, many brothels have a sign on their door: “Recognized by the Association of Safe Sex Relax Houses” (which means that they have to live by the rules of the association: regular health inspections for prostitutes, obligatory use of condoms, etc.). If the government gives consumers less guarantees about the quality of the entrepreneurs and their services, businessmen will try to do so themselves.

It is not sure whether self-regulation is always to be preferred over state regulation. Self-regulation certainly has advantages: broader legitimation among the businesses concerned, closer adjustment to practice, hence more practical and technically better, sometimes also more flexible regulation, etc. But there are disadvantages too. It may be less effective, as self-regulation may be undercut by moonlighting and dabbling outsiders, which as yet destroy the image of a sector. One rotten apple may spoil the whole basket. Since, with information asymmetries, the bad firms drive the good ones from the market. Especially when self-regulation is not allowed to have cartel-like elements, due to strict competition law. Because such cartel-like elements, e.g. exclusive trading agreements, can provide supporting sanctions to self-regulation.

A second disadvantage of self-regulation is that there is a greater chance that it serves particularistic interests. Therefore it may have less credibility among consumers. Product scandals tend to suddenly reduce public trust in such arrangements and invariably lead to a call for more state intervention, sometimes even from unlikely sides. When in 1997 the Dutch stock exchange was haunted by some sensational insider trading scandals the liberal leader Bolkestein, who otherwise pleaded for deregulation, demanded that self-regulation by the stock exchange would be replaced by stricter government control. That demand was heard already earlier in the US, where stock market scandals had been the order of the day and where investors defend their interests more assertively. Thanks to pressure from the US even the Germans have had to replace their reasonably effective self-regulation of financial markets by public regulation (Lütz 1997).

4.3. Less rules, (less Association), more Hierarchy?

Abolishment of statutory establishment licensing can not only be replaced by a private recognition regulation of a trade association, but also by attempts of a larger individual firm to establish a trade mark reputation for itself and its products. As this succeeds better, the firm will enlarge its market share, buy up competitors, and get larger. Conversely: as the firm is larger, its name recognition will increase, and as long as the firm succeeds to link positive associations of reliability, trustworthiness, efficiency, and quality to that name, this form of “quality certification” becomes more effective. In this way many firms have grown to organizational giants: Shell, Philips, Mercedes, MacDonalds, Nike, Benetton. Nothing wrong with that. Even excellent, from the perspective of uncertainty reduction.

One should realize however that deregulation policies may have such consequences for the relative importance of different coordination principles. A retreat of public quality regulation increases the importance of trade mark reputations and that tends to enhance concentration in the economy. In short, “hierarchy” increases in importance as a coordination principle.

Other deregulation measures can enhance such a trend. The Netherlands has changed its competition regulation recently from an abuse to a prohibition system. Were in the past price agreements between cement manufacturers, pickle producers and collective purchasing associations of independent retailers allowed; now is that no longer the case. Will that produce more “market”? Or will sectors be stimulated to transform horizontal forms of cooperation in trade associations and cartels into vertical ones? Franchises and collective purchasing associations are no longer allowed to set prices for their members; a large supermarket chain can do so however without restrictions for all its shops. Small building firms cannot collude before tendering; a large contractor can however freely exchange information among its subsidiaries. I.e. strict cartel legislation forces small firms in each others arms. A plurality of smaller firms, that cooperate in an association will be replaced by a more limited number of larger firms. Market agreements are then replaced by internal firm regulations, and those are of no concern to the cartel authority. Its business is inter-firm regulations, not intra-firm ones. A similar process has taken place earlier in the US. The relatively strict anti-cartel tradition of English common law has stimulated firms to form large trusts. Until the US introduced anti-trust laws. Such merger controls are however yet a far cry in many European countries.

There are still more deregulation measures that are likely to contribute to a concentration movement: relaxation of shop opening hours legislation; the

abolishment of zoning laws that limit the building of large stores at the periphery of cities (introduced earlier on to protect the inner cities); the deregulation of the liberal professions of lawyers, accountants, and notary publics, such as the ban on advertising and on contingency fees; etc.

Until recently, cartels, establishment licensing, shop closing hours, and zoning laws have protected the small retailers and small and made for diversity. Thus there is as yet a diversity of publishers and book stores. In every little town one still finds at least a book shop. They are protected by the statutory book price cartel, which fixes the retail price of books for two years and allows the bookstores a mark up of 40 percent. This enables them to keep a relatively large stock of books, and not just huge piles only of the bestsellers, as is the typical picture in many an American bookstore. Abolishment of this cartel will enable supermarkets to cream off the market with bestsellers, and be the death blow to many a smaller bookstore. They will go bankrupt or be taken over by a large bookseller. Or: the association of bookstores might transform itself into a business firm, a direct change of horizontal voluntary coordination into vertical compulsory. This has happened in the Dutch dairy industry, where cooperative associations of over 200 independent small dairies were transformed into one very large dairy manufacturer, with the associational staff becoming the company staff. Liberalization of markets will enhance competition and eventually lead to further concentration. The liberalization of the American airline industry has — after a short period in which the number of airlines increased — led to a merger and concentration movement, in which the consumer has less and less independent companies to choose between. A similar trend is likely to occur in the telecom sector: now still a proliferation of firms, however soon to be followed by a shake out and concentration.

Curiously enough, competition stimulates — because it increases risk and uncertainty — economic actors to try to reduce such competition. By cooperation, or by “conquest”. Feudal lords fought in earlier times a battle in which eventually one of them, the monarch, gradually acquired a monopoly on using violence. They did so by means of war, raids, occupations, negotiations, and marriage. Now business firms do the same, and they use similar means: price wars, raids on the stock exchange, and mergers. Liberalization both facilitates and stimulates this process. Will each economic sector sooner or later get its own Leviathan? With the merger of Boeing and McDonnell Douglas the airline industry is not very far removed from that anymore. As the public state withdraws, do we get a private business state instead?

What is more in the interest of consumers and citizens? It is not easy to evaluate the coordination principle “hierarchy”. Large firms no doubt have many advantages: economies of scale resulting in lower prices and standard high quality, reduction of uncertainty and transaction costs in internal economic traffic, trade mark reputations that provide certainty to consumers and facilitate transactions, a stronger competitive position of such large firms in internationalizing markets, enough capital to invest in a knowledge infrastructure, allowing for innovation and adaptation to changing circumstances, etc. Only large firms can invest the huge sums needed for developing high speed train systems or UMTS networks. And up to a limit concentration does not necessarily have to reduce alertness, flexibility and innovation. The cola wars illustrate that oligopolistic markets can still be very competitive.

However, there are also disadvantages to concentration. Uncontrolled concentration of power is everywhere in society a threat to freedom, and in this the economy is not excepted. In politics concentration of power has led citizens over time to create many checks and balances on such power: the rule of law, the trias politica, periodic democratic elections, judicial review, administrative law, an ombudsman, etc. Such checks and balances on the concentration of economic power is clearly lagging behind. Furthermore, concentration can and does reduce diversity and create more uniformity. Symbolic may be the average shopping street in many European cities: everywhere the same shields of the same chains and franchises. Concentration is not yet so far progressed as in Canada, where 80 percent of all restaurants are franchises, but the trend is in that direction. Finally, there are indications that large scale production can inhibit flexibility and innovation. Several studies indicate that. Saxenian (1994) e.g. showed in her comparative study of the computer industry of the American west coast (Silicon valley) and east coast (Route 128 around Boston) that the small scale, in flexible networks organized, and by local government supported, industry on the west coast was much more flexible, dynamic, and innovative, and performed better, than the industry on the east coast, which was organized in older, larger, and more closed hierarchies such as IBM and Wang.

Whether one puts the emphasis on the advantages or disadvantages of hierarchy, it serves to stress that the enhancement of hierarchies is contradictory to the intentions of many deregulation programs. Their intent is namely to increase economic dynamism: more new market entrants, greater mobility in and out of markets, more room for small scale initiatives. While this may be the short term effect, in the long run concentration will be stimulated. Furthermore, it may be pointed out that liberalization of market entry regulations will only have a limited effect. Market entry is also limited by other factors, which are in itself positive for the economy and the consumer: accumulated internalized

implicit and codified knowledge in the established firms, accumulated capital goods stock, trade mark reputations. Deregulation of banking and insurance will not lead to the creation of thousands new local banks and insurance providers, which come and go as nine day's wonders. And it is questionable whether such is desirable.

4.4. Less Rules, More Courts and Case Law?

Less rules does not mean less social situations that require regulation. Public regulation reduces uncertainty and contributes to the predictability in economic transactions. Codified civil law fixes property rights and the rights of contract partners. It provides for standard contractual rules, whether for a marriage, a will, or a business contract. Social and economic public regulation also fixes basic rights and duties of societal actors. That saves on transaction costs. What is already regulated in law does not have to be specified by partners in contracts. Labor law protects the interests of workers, so that it is less risky for them to engage in a labor relation with an employer. They are less dependent on their own power, and will hence be less easily given to strike, which in turn reduces uncertainty for employers. Similarly, consumer protection legislation corrects for information asymmetries and enhances the development of trust in products and their suppliers.

Less codified and statute law does not mean that there is less to be regulated, but that others actors and other institutions will have to do so. And if no one else, transaction partners may have to do so themselves. Where there is less certainty about mutual expectations and less legal protection of the interests of the parties concerned, they will have to try to provide such certainty themselves and specify their mutual expectations, rights and obligations. This requires detailed contracts, and active monitoring of these. Where mutual expectations are less clear and stable, the chance of conflict is also greater. Parties will bring such conflicts to court, where judges are forced to take decisions, which set precedent and become case law. Contracts and case law are hence an alternative for statute and codified law.

Comparison with a legal system where statute law and codified law is relatively less important, such as that of the US, can be illuminating. Dutch firms that go to the US to found a subsidiary are often shocked by the amount of contracts, the degree of detail, and other paperwork involved in establishing a business. It can take over two years before all the legal formalities are taken care of. In the absence of standardized business law, each individual contract has to specify in detail all the possible future states of the world — the more so of course as the general reliance on case law and litigation forces transaction partners to try to conclude as “complete” contracts as possible. I had a personal experience with this difference in legal systems. A family will, drawn up in the Netherlands took

only two pages. Dutch civil law regulated most. When my parents moved to the US a new will had to be drawn up. In order to specify the same, it became a document of 45 pages, trying to specify any imaginable but unlikely future situation, such as e.g. the chance that someone might come up and claim to be an illegitimate grand-child.

Where workers or consumers have less protection from collective law or collective welfare state provisions they seek recourse to tort law and engage in lawsuits. A case in point is the incidence of asbestos-based tort cases. Although the incidence of asbestos-related diseases among Dutch workers was five to ten times as high as in the US in the 1970s and 1980s (Kagan and Axelrad, in print: 5), Dutchmen rarely took to the courts. By 1991 less than 10 cases had been filed (Vinke and Wilthagen 1992), although Dutch law authorizes tort claims against employers. By contrast, an estimated 200,000 asbestos tort cases had been filed in the United States. The explanation is that victims had other roads open to them in the Netherlands. For about one century, compensation for damage caused by work accidents and diseases has predominantly been based on social security. Financial consequences of the risks of labor were collectivized. ... "In Great Britain, where asbestos victims" medical costs and lost earnings are taken care of by the National Health Service and government-provided disability pensions, the rate of asbestos-related tort suits has been far lower than in the US, tort recoveries are about half as large, and British asbestos firms have not been driven into bankruptcy." (Kagan and Axelrad, in print: 5)

A similar contrast is found in job protection. In the Netherlands, workers are protected against sudden dismissal. Employers have to ask State Labor Exchange Offices for formal permission to lay off groups of workers. The director of the Office decides. Only rarely is permission refused. The procedure is informal and flexible. Laid off workers are compensated by their former employer or by the collective unemployment insurance. This makes them much less prone to appeal decisions of employers in court. Not so in the US, where no such statutory job protection exists. Workers can be dismissed starting the next day. As a result, many workers sue their employer in court, claiming to be discriminated or sexually abused. A director of Ikea in Los Angeles, who had been Ikea director in Austria before, told me once that he spent as much on liability insurance in the US as he did formerly on social security in Austria. That is, "fringe benefits" for workers cost about the same. The difference: in Austria any laid off worker had the right to an unemployment benefit. In the US it was a gamble for the dismissed worker: He could win big and get sizable damages paid; or he could go out empty handed.

American research shows that where new collective regulations or provisions are created, tort litigation tends to decrease. Kagan (1984) noted that

in the period 1950 — 1984 the number of cases involving transaction partners trying to collect debts in American state supreme courts and trial courts declined sharply, despite the large increase in the volume of loans and delinquent debts, and despite the sharp increase in overall litigation. The explanation: There were new alternatives. In the past, “the farmer who could not pay off his crop mortgage was threatened simultaneously with the loss of his home and livelihood. The shopkeeper or small manufacturer who could not pay his debts faced similar ruin. For them it made sense to fight for survival in the courts if any plausible legal argument could be made.” Now farmers, businessmen, and workers have more alternatives, can easier find other jobs, “and their debts are backed by relatively reliable sources of income and various forms of social insurance”. (1984: 365)

The inclination of the Dutch to go to court has until recently been in comparison extremely low. Indicative was the low lawyer density in this country. In 1988 there were 35 lawyers per 100.000 inhabitants, almost ten times less than in the US, with a density of 312 lawyers. Other European countries score higher: Germany 190, Britain 134, Italy 81 (Lipset 1996: 50). Low was also the number of lawyers. In comparison to the size of the population not even half that of Germany (Blankenburg 1994; Blankenburg and Bruinsma 1994). The explanation is the presence of much legislation which is quite clear about what parties can expect from each other, the presence of collective social security provisions, of collective sectoral institutions that compensate the aggrieved, and of alternative arbitration institutes.

This is changing however. Litigation is increasing. Health and safety at work issues may stand as example. Injured workers file more often liability claims against their employers, for having been exposed to unsafe working environments or for being laid off. An important factor is the advance in scientific knowledge about the relation between work environment (e.g. hazardous substances) and illness, making for better, more convincing, evidence in court. Furthermore, some legal changes are fostering the decollectivization of the compensation for the risks of labor. Since 1967 an individual employee can again make a tort based claim against the employer, after this possibility was excluded by law for almost 70 years. Furthermore, the duty of proof in tort law, placed on the employee, has become less severe. Thirdly, the demands entailed by the duty of care grew with regard to employers. Employers are becoming increasingly responsible and liable for the risks of labor, and their responsibility and liability is based on a non-fault jurisprudence. Fourthly, there has been a cut back in social security based benefits since the 1970s. The measures taken are increasingly forcing both employers and employees to insure themselves by means of private insurance. As a consequence, tort law and private insurance companies are growing in importance with respect to compensating workers as

victims of occupational accidents and diseases.

Indicative for the juridification trend is the lawyer density. It has doubled in between 1988 and 1998: from 35 to 70 lawyers per 100.000 inhabitants. A new specialism, that of tort lawyer, is developing, and — in line with Dutch corporatist traditions — already an association of such lawyers has been founded. The first compensatory damages of more than 1 million guilders (half a million dollars) has been awarded.

This trend is likely to be enhanced by deregulation measures. More protective legislation and collective provisions may then, according to the research of Kagan, lead to less (lengthy) contracts and less litigation; the opposite is probably also true. Retreat of the legislator will increase litigation. Deregulation does not reduce the amount of conflict in society. On the contrary, it is likely to increase it. And such conflicts have to be managed.

Workers, no longer protected by statutory dismissal regulations or with less unemployment insurance are more likely to take to the courts. Ex ante, new workers may try to safeguard their interests in individual employment contracts, if they have the bargaining power (scarce skills) to do so. Deregulation of establishment licensing could lead to bunglers entering the market, and a consequent increase of fraud, deception and adulteration. Victims have an incentive to sue their suppliers in court, at least if these have not yet been bankrupt. Indicative is the case of Dutch victims of fraudulent marriage counseling bureaus and time-sharing sellers (sectors that were never regulated). They have formed an association to represent their interests in court. Initiator has been a lawyer, who smelled business. (Volkskrant 12-11-97) Liberalization of the legal profession, easier access to the bar, contingency fees, allowance of advertising, all measures planned in the Netherlands, are likely to stimulate such entrepreneurship among lawyers. Research of Steven Vogel (1996) into deregulation and privatization of the British telecom and financial sectors has at least for Britain indicated a relation between deregulation and a more adversarial policy style of regulatory agencies and to increasing litigation.

How to evaluate such a trend? There are no doubt positive aspects to the fact that people have easier access to their rights in court. It fits also well with the individualization trend in society. For business it however means more uncertainty and higher transaction costs. Because litigation and case law tends to be less effective and efficient in reducing risk and uncertainty, as can be learned from the American example.

How *effective* are both systems in the reduction of uncertainty? It should be noted at the outset that neither legislation nor litigation can provide for

complete stability and predictability. Ideally — that is, in the interest of stability — statute law would have to be highly detailed, specifying all the possible future states. But that is of course not possible. Lawyers, the legal designers, have a bounded rationality and imperfect foresight. Therefore, such rules need later interpretation by the courts, through litigation. That is not only necessary but also desirable, to keep legislation flexible and capable of adjusting to changing circumstances and changes in the sense of justice of society. Regulatory systems have to strike a balance between predictability at the cost of rigidity on the one hand, and flexibility at the cost of uncertainty and arbitrariness on the other hand.

- However, in the US the emphasis is a bit much on the side of flexibility and unpredictability. In the literature and the media there are many complaints about the unpredictability of judicial decisions. Medical malpractice is a case in point. Law looks often like a lottery. In a review of cases against anesthesiologists, in 46 pct. of the cases the claimant had received appropriate care, according to an expert panel. Nevertheless, 42 pct. of these 46 nevertheless also received compensation.

“At the same time, many of these malpractice studies show, many malpractice victims, and some legal claimants, who did receive inadequate care, according to expert review panels, received no or relatively little compensation.” (Kagan 1996, note 88).

Such unpredictability creates uncertainty. Huber (1989) compared verdicts by juries in cases of allegedly dangerous products. “Most juries, in accordance with the evidence, found the product not responsible for the plaintiff’s injuries. However, in each sequence of trials concerning a particular product, one or two juries, hearing the same evidence as those which found no liability, decided otherwise and awarded the plaintiff massive compensatory and punitive damages. The modal jury award was \$0, but the “average” was in the millions of dollars. For the manufacturer in question, the result was inescapable legal uncertainty, which has a large impact on settlement strategy.” Even when a defendant may be in its rights, according to all legal advice, there is still an inclination to invest in out of court settlements. Kagan (1996: note 82): “The notable point is that defendant firms are uncertain whether theirs will be in the minority of cases in which firms are hit with enormous judgements. To foreclose this risk of catastrophic loss, they are likely to settle out more often than they would if there were less uncertainty regarding that catastrophic loss being avoidable.”

Even lots of expensive legal advice does not safeguard a company. A veritable legion of well-paid and experienced attorneys and investment advisors was not able to prevent Texaco from being fined 8.5 billion dollars in actual and punitive damages in the infamous Pennzoil -Texaco dispute over Getty Oil, one of the most expensive liability cases ever.

In reaction firms are going to avoid risky transactions and risky customers. Doctors refuse to do certain operations, and accounting firms refuse to audit risky clients. (Berton and Lublin 1992, Berton 1995). And firms may become more careful with innovation, as I have argued elsewhere (Van Waarden, in press). When specific transactions are avoided, markets may shrink.

More litigation and more activist lawyers may be a good thing for their individual customers; it remains to be seen whether that will also be the case for society at large. It can lead to greater fluctuations in case law and make court decisions less consistent and predictable. That means, case law is less effective as a collective good that reduces uncertainty. Law becomes then merely a private good, good for the individual client.

Activist litigation is not only rather ineffective in reducing uncertainty in economic transactions; it is neither very *efficient*. The costs of legal advice and litigation can get very high with ongoing juridification of society and economy. Contract regulations and case law are by their nature less general, less abstract and more specific to certain transactions. They emanate from a variety of actors: transaction partners, regulatory agencies, courts. There are more of them, and they are more complex. The rules that are produced are less transparent and predictable, as said.

In the face of such uncertainty, business needs batteries of lawyers, that assist it in drawing up contracts. “American business executives engaged in negotiating sales franchises, seeking approval for real estate projects, acquiring other companies, issuing stock, and launching new products are surrounded by larger phalanxes of expensive attorneys than their counterparts in, for example, Europe or Japan — where the legal risks corporations face are less problematic.” (Kagan 1996: 12)

Given the adversarial nature of legal proceedings, lawyers provide work for each other. The defendant does not have a voluntary need for advice, but is forced by the plaintiff to get it. Thus the system can acquire a self-propelled momentum of ever more juridification, adversarial legalism, lawyers and lawyer fees. Once this trend has been set in motion, it is difficult to stop. It is like an arms race. Whereby the parties in the race, the attorneys on both sides, have an incentive in escalating the adversarial relations, to lengthen cases, to device new

rules and exceptions to the rules that can in turn be challenged again. It is not only a self-reproducing system, but an endogenous growth system.

The high costs of lawyering can be read from the earlier presented comparative data on lawyer density. The costs of legal services by the 780.000 lawyers that existed around 1990 in the US have been estimated at 100 billion dollars a year, or 2.4 percent of the American GDP. With that, the US legal industry was, measured in terms of value added, larger than the US steel industry, or the domestic automobile industry (Sander 1992). In the larger West European nations, lawyering costs amounted to 0.5 to 0.6 percent of GDP. In the Netherlands it was negligible (Lipset 1996).

Kagan (1996: 10) presents still other evidence that “American litigation, with its wasteful, lawyer-dominated pretrial discovery and its cumbersome jury trials, is far less efficient than Continental European or British methods.” In Motor vehicle accident lawsuits in the US, payments to lawyers account for more than 40 percent of total liability insurance pay-outs. In Japan and the Netherlands, a variety of alternative dispute resolution and legal mechanisms produce compensation for motor vehicle accident victims at dramatically lower transaction costs. “Claims agents who deal with cargo damage disputes arising from trans-Atlantic shipments say that lawyers’ bills are far higher if a legal dispute is processed in New York rather than in Rotterdam, even though the relevant substantive law in the two countries is essentially identical.”

The uncertainties of legal action produce also indirect costs, such as those or more paperwork, red tape, and bureaucracy, in firms, but also in state organizations. Kagan (1996, note 97) quotes William Barker who advises “in-house counsel” of firms: “Barker suggests that firms with no current litigation under way take the following steps to prepare for discovery requests that may arise in conceivable future litigation: 1) Systematically and consistently retain documents reaching back as long as any pertinent statutes of limitation (15 years or longer in some cases); 2) “instill a bias towards documentation” among company employees. Litigation against insurance companies often involves discovery inquiries into documents and routine firm practices dating back many years, and in many instances no longer in use. This is a burdensome inquiry for defendants, and “one likely to justify significant prophylactic actions to minimize both defense costs and liability”.

Finally, there are the costs of enormous compensations awarded and of their consequences. Texaco went bankrupt on the Getty Oil case and thousands of workers lost their jobs. Other costs are those of risk-avoidance behavior, such as pretrial settlements even in pertinently unjust cases, “defensive medicine” (unnecessary tests in order to prevent that a patient is sent home and something

would be overlooked), and the high premiums of liability insurance. Some risks can already not be insured any more. And in as far as insurance companies did insure such risks in the past, it threatens to be their downfall. Even that symbol of solidity in insurance, Lloyd's of London, runs the real danger of going bankrupt on asbestos claims (McClintick 1999, coverstory in Time Magazine).

Proponents of a regulatory system based on tort law often argue that the threat of high liability claims provides an economic incentive to business to refrain from harming transaction partners and thus increasing trust in economic transactions. This would be much more effective than “command and control” regulation. American scholars are not so convinced. Kagan and Axelrad (1996: 17) summarize the evidence: “Many thoughtful scholars have come to the conclusion that the vaunted deterrent effect of the uniquely fierce American tort law regime is in fact minimally or only erratically effective. Steven Sugarman points out that the liability system’s deterrent threat is severely muted by: (1) liability insurance, which means that tortfeasors do not bear the full cost of the harms they do; (2) the uncertainty and delayed effects of tort liability, which cause potential tortfeasors to discount the threat, regarding tort suits more like random lightning bolts than a source of systematic guidance about what precautions to take; and (3) the all-but-inevitable persistence of human incompetence, inattentiveness, and calculated corner-cutting that lead truck drivers, emergency-room doctors, and the crew of the Exxon Valdez to make mistakes, no matter how large the potential liability. ... Case studies of the motor vehicle and small aircraft manufacturing industries, in a book edited by Peter Huber and Robert Litan, did not support the presumed safety-enhancing effect of American product liability litigation.”

Summarizing: the American may pay less taxes for a bureaucracy that sets and enforces codified and statute law; however, he pays at least as much on costs of lawyers and liability insurance. Is the average European transaction partner confronted with a “bureaucracy”, the American has to do with a “lawyerocracy”. Both are functional alternatives for each other. But a comparison shows that a lawyerocracy is less effective and efficient in reducing risk and uncertainty.

4.5. Less Rules, Less Community and Trust?

In stead of less rules leading to more community and trust (see above), the reverse may be more likely. Liberalization of markets tend to undercut trust and informal cooperation.

As already mentioned, scandals have often been the direct occasion for state regulation of markets and products. Dutch history of social and economic

regulation has been one of scandals. In the 1910s dairy scandals led to statutory standards for agricultural products; in the 1920s bankrupting insurance companies led to a call for stiff regulation of the insurance business; in 1963 the Thalodamide scandal led in many countries to state regulation of the admission of drugs to the market; in the 1970s food regulation was further tightened after 12 elderly citizens died from eating unhygienic shrimps; and recently the country has had scandals over insider trading on the stock market, explosions of fireworks factories, the BSE scandal, and poor services by the partly privatized railroads.

Liberalization of markets leads sooner or later to such scandals and suddenly and drastically reduces trust of consumers. Free markets do not produce that trust themselves. On the contrary. Markets and competition invite self servingness, opportunism, and fraud. And the freer the market, the fiercer the competition, the greater such pressures and temptations. A pig farmer smuggles still quickly a load of pigs away from his contaminated farm, the butcher processes less fresh meat in the strongly seasoned sausage, and the stock trader abuses insider knowledge. It happens wherever consumers, clients or competitors are for lack of knowledge unable to control economic power. Fighting fraud is hence not so much necessary for moral, as well as for functional reasons. It has to repair trust and promote transactions.

4.6. Less Rules (Freer Markets), eventually More Rules?

Finally: deregulation may in the short run lead to freer markets; in the long term it often leads again to a stiffening of standards.

“Freer markets, more rules”, thus Steven Vogel in the book under this title (1996). He compares the deregulation of the telecom and financial services sectors in Britain and Japan. As these sectors pre-eminently experience the consequences of technological change and globalization, it is here where deregulation should be most effective. Still, that was not the case. Vogel speaks of a “deregulation revolution that wasn’t. Deregulation and privatization first led to freer markets. But soon regulation on these markets increases again. parties conclude contracts, which become more and more detailed; these give occasion to court cases, and to very detailed case law. Liberalized sectors get their own sector regulator. That happens either already as part of the deregulation measures, because the state realizes that it has to compensate its loss of influence with the privatization of former state monopolies; or it happens somewhat later, as the conflicts between competitors and customer/suppliers increase and a need for a regulator that sets rules of the game emerges. That regulator may tender concessions out, and conclude very detailed contracts with those that won the public tender. The contracts in Britain between the railroad

regulator and the railroad companies are thousands of pages thick. The more detailed the contracts, the greater the chances for conflict, and for development of case law. Thus deregulation leads eventually to more conflict and reregulation of the sector.

5. Conclusion

Economics is a science of “trade offs”. It investigates how economic actors make reasoned and balanced (“rational”) choices from among a number of alternatives. The science tries to increase the rationality of such decisions by studying costs and benefits of the various options. In many cases the choice is one between “two evils”, whereby a bit more of the one (less inflation) goes at the cost of another (less growth). Policymakers too have to make such choices. Their policies will be more rational, the more alternatives are considered, and the more possible unforeseen consequences of such alternatives are thought through.

This essay has had the goal to think through some possible consequences of deregulation and privatization policies. It has argued that such policies may have unintended and unforeseen consequences: not “more market”, as intended, but more and more detailed contracts, more social and legal conflict and litigation, more case law, more and larger firm hierarchies, more self regulation by associations. When risk and uncertainty are reduced less by statutory regulation, transaction partners will turn to alternative institutions that may do so for them. In that sense, the various risk and uncertainty reducing institutions are functional alternatives, even communicating vessels. The paper has also argued that it remains to be seen whether such alternatives are to be preferred over statutory regulation. They may turn out to be less effective, involve higher transaction costs, or create more uncontrolled concentrations of economic power. For these very reasons such institutions have in the past been replaced by state regulation.

That does not mean of course that whatever institution has proven to be superior at one particular point in time and in one particular country will be so for all times and places. Institutions have a tendency to persist and can become sclerotic and bureaucratic, contradicting their ideal goal through their real functioning. Some “cleaning of the institutional stable” may be appropriate at regular times.

Furthermore, as conditions change, so does the appropriateness of specific market ordering institutions. New markets, new products, and new generations may require new solutions to the problems of risk and uncertainty. The internationalization of markets can make solutions by national states less

effective. Standardization and certification have to become international, and in the absence of a supra-national state with enough authority, “associations” such as the WTO or international courts can be a second best option. In addition, changes can take place in the trust of transaction partners in the state or in associations, and with that in the legitimacy and effectiveness of such institutions to regulate transactions.

Finally, it is likely that the need for risk and uncertainty reduction, i.e. the willingness of people to engage in risky activities, differs between cultures and countries, and as cultures develop, so over time as well. This would be a topic of a separate paper. I’ll have to restrict myself to pointing out this possibility here. Thus there are many indicators that Americans are less risk averse than Dutchmen. Consequently, the Dutch have created many more institutions to reduce risk and uncertainty — varying from dykes to welfare state programs to stiff food quality regulations — and have given associations and the state a larger role in these. This already in itself can be seen as reflecting a greater priority given in society and politics to risk and uncertainty reduction.

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