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# Use of coordination spheres in food economics

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**Abstract:** The coordination plays central role in the economics. The conventional economic theory looks at the market and enterprise (or hierarchy) as two different, separated manner of coordination of economic goods and services. However the modern organization theory, price theory and institutional economics show that different types (not only market and enterprise, but also several types of hybrid forms) of coordination (or governance structure) necessarily live together in the current economic system.

Based on my previous research on the field of regional clusters in the food industry I came to the conclusion that the cluster is one of the spheres where economic coordination can occur. At the same time I pointed out that the ways of coordination can be ordered on an ordinary scale according to its normative or positive nature.

I've also found that the choice between the coordination spheres (market, enterprise or cluster) is not arbitrary, but instead depends on the interest's dimension which is represented by the exchange of goods and services in question.

**Key words:** exchange, coordination, institutions, governance structure

## Introduction

The question of economic coordination became widely debated issue among economic theorists (Kornai, 1983, Williamson, 2002). These approaches “are all alike in their acceptance of organizations as entities to be analyzed in order to understand the allocation, coordination, and creation of resources” (Ménard, 1996).

The analysis of food industry's clusters in Hungary has guided me to recognition that in these clusters the most important object of economic exchange is the information among cluster members. If the information is matter of supply and demand, what factors and in which way of mechanism determine the equilibrium on that specific market? – it was the question, I tried to clarify in this paper.

## 1. Regional clusters and coordination

It is an important fact of cluster analysis that geographical concentration advantages in a given area cannot, or can only rarely be, identified entirely. A cluster cannot therefore be broken down into enterprises, as in a wider sense all of them share in the given advantages as part of the cluster. It follows that the expression ‘regional cluster’ is an abstraction, as definite geographical borders of the cluster may not be known. However, in order to deal more deeply with this issue we need a notion of a cluster as a form

of cooperation which solely incorporates just those obviously sharing some geographical advantage.

There exists no definable common activity among enterprises working in the same agglomeration area in the absence of special relationships. Those identifiable external effects and interactions belong to the definition of clusters:

- A locally qualified workforce available
- A concentrated presence of suppliers
- Vertical relationships among members of a cluster
- Intensive information exchange between enterprises and institutions
- Diversified institutions and infrastructure endorsing specialized activities of a cluster
- Trust and common sense of socio-cultural identity among members based on the same values.

In a cluster, among the complex set of interactions, emphasis is rather based on ‘soft’, non-measurable factors like trust, creative ability and knowledge ‘overflow’. Therefore a precise cluster definition based on which sharp line of demarcation could be drawn between pure agglomerations and complex clusters is not possible. Commonalities of different cluster-aspects, nevertheless, may be given:

- Some permanent cooperation is observable between enterprises
- Enterprises share their resources with each other
- Enterprises create intensive relationships with local institutions

- Cooperating enterprises and institutions are concentrated geographically

Nonetheless, clusters also can be interpreted from the enterprise theory point of view, by which we get closer to an exploration of factors for economic success and competitiveness and thereby to a demonstration of the development possibilities for competitiveness positions based on management of clusters. The market, the enterprise, and in addition, the cluster, is a scene of change. In order to use change to explain the market, the enterprise and the cluster in the same way, the definition should be general enough. Accordingly, “change is a transaction between actors, in which one party allocates some good, information or knowledge to the other party, which the other party has not had before, and by which this latter can obtain advantages” (Kapás, 2002).

In a cluster, the object of change is typically information or (special) knowledge. Information and knowledge change has the extraordinary specialty – due to frequency of changes in relationships – of being mostly random, but the intensity of the relationship guarantees its materialization.

A cluster then – similarly to a market or an enterprise – is a coordination field of change (mainly of information and knowledge) and is not a coordination mechanism of its own but rather the place of its materialization. Therefore, systematization of the mechanisms coordinating change (even in the field of clusters) is needed.

2. Economic coordination in different fields

Coordination is the central problem of economics. Traditional economic thought treats market and enterprise as two discrete, insular mechanisms. In the last decade, observance of a spread of diverse hybrid forms – like clusters – has raised the question whether coordination mechanisms really exist in such a discrete, insular form (Coase, 1937/2004, Ménard, 1996). Market – as an enterprise – cannot be treated as a coordination mechanism, but rather a result or field of their operation. The diverse existence of hybrid forms – like clusters – certifies that the existence of coordination mechanisms in different proportions finally determines the concrete field in which coordination takes place.


Economic coordination mechanisms can be set on an ordinal scale, in which ‘positive’ coordination is meant (through a competitive price system) to create market equilibrium. Market competition, based on supply-demand circumstances, decides whether economic decisions of market actors are adequate. The realized price cannot be judged and does not contain any values. The price mechanism of a market thereby **positively defines the equilibrium price without any reference to pre-defined values**, so this coordination rightfully composes the starting point of an ordinal scale.

The situation is totally different in the case of ethically-incurred types of economic coordination (e.g. corporate social responsibility, inheritance, bestowal, etc.). Here there

naturally exists **an a priori value-order or normative** aspect, based on which the decision comes into existence. Such transactions are regulated by totally different mechanisms to those belonging to the field of positive coordination. Ethical coordination is thereby rightfully treated as one located near the normative end point of a sequence scale of economic coordination mechanisms.

It is evident that various stages exist between the two points which incorporate some characteristics of coordination found in both positions. It is also natural that there are no unequivocal demarcation terminologies; furthermore, a difference can not be interpreted between various modes concerning ‘positivity’, or ‘normativity’. Table 1 summarizes that which is mentioned above.

Table 1: Coordination Mechanisms

Type of economic coordination mechanism	Typical field of coordination	Nature of coordination
Competition/price system	Market	POSITIVE 
Contract	Market/Enterprise	
Order/planning	Enterprise	
Cooperation	Enterprise/Enterprise network/Cluster	
Business ethics, trust	Enterprise network/Cluster	NORMATIVE

Source: Authors’ own composition

It is also evident that, in different coordination fields, coordination modes are presented simultaneously but there always exists one which clearly typifies the given field and gives it its main character. This thought is presented in Figure 1.

In Figure 1, there is no distinct hierarchy between fields of coordination. Meanwhile, it is important to see that various coordination problems can be managed in different fields by economic actors. From this point of view, regional clusters are primarily appropriate for managing such economic problems where the main characteristic of the core coordination problem can not be typified by only (material) dimension. There exists some common value-order, some normative in a given region, orientation to which seems evident to market actors. This value-order is not ethical in its nature by all means but represents such an economic value

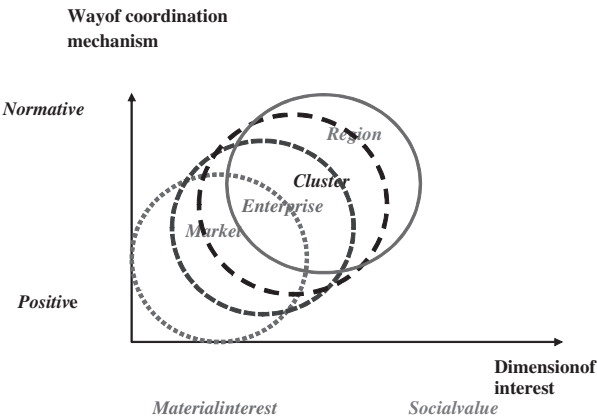
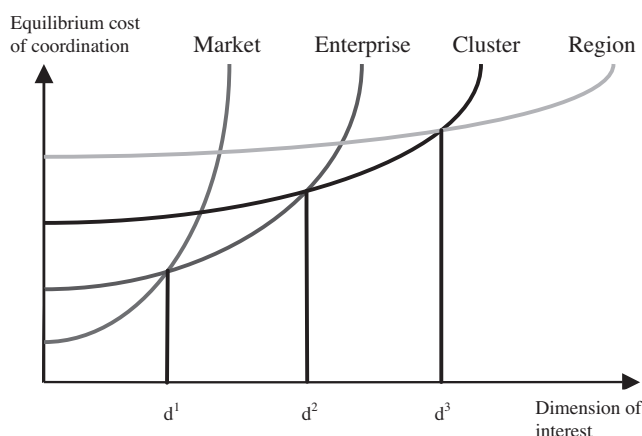


Figure 1: Linkage of economic coordination fields  
Source: Authors’ own composition

like the excellence of a wine-regions' wine. This value becomes a common organizing force for grape producers and wine processors. We state that from the aspect of success or commitment in competition, whether someone reckons this common value as one's own and takes it into consideration during one's economic decisions is of prominent importance.

### 3. Choice of the coordination field

Now, we are able to give a general rule for making choice between different fields of coordination. During my research in the past ten years I came to the conclusion that the market, the enterprise and the cluster have got the same substance: all of them serve the same economic function, namely they are the fields, where economic transactions take place. Regarding that serve for the same function, they can be analyzed with the same methods and tools. At the same time they are separated from each other with respect to the creation and maintenance cost of equilibrium in the different fields as well as the dimension of interest which is represented by the object of transaction. Following this rule we can make optimal choice between the different fields of coordination. This rule is presented in *Figure 2*.



**Figure 2:** Choice between coordination fields

Source: Based on *Williamson* (1991) and *Ménard* (1996), the authors' own composition

### Conclusion

According the general rule the market as coordination field has got economic advantages compared to the enterprise till the dimension of interest exceeds  $d^1$ . After this point the enterprise supplies more economic benefits in terms of less costly solutions. When the object of the transaction represents highly compound interest, the cluster, then the region or even the whole society seems to be the most appropriate field of economic coordination.

Non the market players, nor the decision makers are probably not conscient rule followers in this respect. Although the parallel presence of all these coordination fields in the economy reflects the fact that the actors would like to spare with coordination cost, so the general rule has got influence on their decisions.

### References:

- Kornai, J. (1983):** Bürokratikus és piaci koordináció, *Közgazdasági Szemle*, 30(9), Szeptember, 1025–1038. o.
- Ménard, C. (1996):** WHY ORGANIZATIONS MATTER: A JOURNEY AWAY FROM THE FAIRY TALE *Atlantic Economic Journal*, Volume 24, Number 4 / December, pp. 281–300
- Kapás, J. (2002):** Piacszerű vállalat és vállaltszerű piac. *Közgazdasági Szemle*, XLIX. évf., Április 320–333. o.
- Coase, R.H. (1937/2004):** The Nature of the Firm, *Economica* 4, 386–405.
- Williamson, O. E. (2002):** The Theory of the Firm as Governance Structure: From Choice to Contract, *The Journal of Economic Perspectives*, Vol. 16, No. 3. (Summer, 2002), pp. 171–195.
- Maskell, P., Lorenzen, M. (2003):** The Cluster as Market Organization, *DRUID Working Paper No 03–14*
- Williamson, O. E. (1991):** Comparative Economic Organization: The analysis of Discrete Structural Alternatives, *Administrative Science Quarterly*, 36 (2), 1991, pp. 269–296.