# **ARBEITSPAPIERE**

des Instituts für Kooperationswesen an der Hochschule für Wirtschaft und Umwelt (IfK)

# IfK WORKING PAPERS

Nr. 4/2007

# Co-operative Privatisation Models in the German Housing Industry

Markus Mändle and Ina Wagner



Institut für Kooperationswesen an der Hochschule für Wirtschaft und Umwelt (IfK) Parkstr. 4, D-73312 Geislingen/Steige

www.ifk-office.de

# **CONTENTS**

AE	BSTRACT	1
1	INTRODUCTION	1
2.	THE NATURE OF CO-OPERATIVE PROPERTY	3
3.	CO-OPERATIVE PRIVATISATION MODELS	4
	3.1. The Pinneberg-Model	5
	3.2. The Flensburg-Model	7
	3.3. The Kreuzberg/Schöneberg-Model	8
	3.4. <i>The GIMA-Model</i>	0
4.	SUMMARY AND CONCLUSION	1
AC	CKNOWLEDEMENTS1	3
RE	EFERENCES1	3

# **ABOUT THIS PAPER**

This study was carried out by Dr Markus Mändle and Ina Wagner of the Institute of Co-operative Studies, Nürtingen-Geislingen University. Dr Markus Mändle is Professor of Economics and Co-operative Studies at the Department of Real Estate, Nürtingen-Geislingen University and Director of the Institute of Co-operative Studies. Ina Wagner is research associate at the institute and project manager at the KEWOG Kommunale Entwicklungs- und Wohnungsbaugesell-schaft mbH, Tirschenreuth. This paper was presented at the European Real Estate Society (ERES) Conference 2007 at Cass Business School, City of London.

# Co-operative Privatisation Models in the German Housing Industry

# Markus Mändle Ina Wagner

Institute of Co-operative Studies, Nürtingen-Geislingen University, Parkstr. 4, D-73312 Geislingen/Steige, Germany

June 2007

#### Abstract

This paper discusses the possibility whether housing co-operatives could represent an economically effective and socially acceptable alternative form of privatisation in the German housing industry. First it is shown that the allocation of property rights in a co-operative can be assumed as a form of private ownership. So as a matter of fact co-operatives can be regarded as a form of housing-privatisation. The analysis of different examples of co-operative privatisation models that are currently implemented in Germany suggests that there are some determinants for successful or unsuccessful co-operative development. The interaction of favourable factors enables co-operative privatisation models to be successful in economic terms. Primarily the significant support of the project by the municipal political administration – including commonly a noticeable public subsidy – seems to be the essential factor of success.

Key Words: housing co-operatives; housing-privatisation.

# 1. INTRODUCTION

Since 1999 up to the beginning of 2006 about 1.2 million tenements in Germany have changed hands. Additionally approximately one million transactions will be carried out until 2010. Often the local authorities are the vendors. The public interest in the processes of these considerable transactions as well as in the models they follow is extremely high at the moment as some German towns use or intend to use those transactions as an instrument for selling their assets primarily to private equity funds in order to achieve a budget consolidation.

Without doubt the local authorities in Germany lack money. Selling their housing associations to private equity funds bares the chance of a quick debt relief. In Dresden for example Fortress paid 1.7 billion € for the publicly owned Woba with about 48.000 tenements. Thereof 981 million € raise the municipal budget of Dresden – with a budget debt amounting to 741 million € Consequently this type of amortisation process becomes also attractive for other local authorities. Above all the potential buyers hold sufficient equity. Financial investors like Fortress or Cerberus are almost inundated with capital by insurances or pension funds.

But to achieve a target yield return of at least 15 % private equity funds will hardly be able invest significantly in maintenance and modernisation. So in the German public, politics and academia it is currently discussed seriously whether there could be other forms of privatisation that give financial support to the public authorities and simultaneously constitute a socially acceptable alternative.

In this context co-operative models experience a renaissance. They offer a long-term orientation and their objectives are not primarily to resell. Through their focus on sustainable rental income and dismissal protection for most occupants they also seem to represent a much more reliable partner than the "Heuschrecken" (locust).

Based on these facts this paper discusses the possibility whether housing co-operatives could represent an economically effective and socially acceptable alternative form of privatisation in the German housing industry.

The paper consists basically of two parts. The first part in Section 2 deals with the following question: Can a co-operative be truly regarded as a form of housing-privatisation? That is the sine qua non to consider this form of organisation as an alternative for housing-privatisation. The second part of the paper in Section 3 examines different examples of housing co-operative models that are currently implemented in Germany in order to execute different forms of privatisation. The models are structured and factors are analysed individually in order to determine successful or unsuccessful co-operative privatisations. Concluding remarks are finally presented in Section 4. Here a contribution to the highly sensitive current public topic – housing policy in Germany is made.

# 2. THE NATURE OF CO-OPERATIVE PROPERTY

A co-operative can only be regarded as a form of housing-privatisation when its allocation of property rights can be assumed as a form of private ownership. Property rights are "socially recognized rights of action" (Alchian and Demsetz 1973, p. 17). They include different forms of legal options. They can be differentiated according to the type of property right - the right to use a good (ius usus), the right to appropriate returns (ius usus fructus), the right to convert the form and structure of a good (ius abusus) and the right to transfer one or even all of these property rights to other persons (ius abutendi) (see Furubotn and Pejovich 1972, p. 1140).

A person owning all of these four property rights related is entitled to the most comprehensive rights to use. He has the right to use the good exclusively i.e. the person is able to exclude others from using the resource. This corresponds widely to the character of private property in German civil law (§ 903 BGB). However, the existence of private property does not comprise the allocation of all property rights to one single person. If someone, for example, purchases a freehold apartment some rights to use the good are ruled commonly by the owner's association. The property rights with e.g. concerning staircases, cellars, attics and gardens are quasi socialised within the group of owners. Legally this division is expressed in Germany through different terms and definitions like "Sondereigentum" or "Gemeinschaftseigentum". The property rights related to the Gemeinschaftseigentum (e.g. land, facilities and equipment) are ruled commonly by the owner's association. Nevertheless the allocation of property rights in the case of a freehold apartment is naturally considered as a form of private property.

A similar case is given with respect to co-operative property. Regarding the traditional business of housing co-operatives – the letting of a tenement to its members – the co-operative can be seen as a hybrid form of organisation between market and hierarchy (see Williamson 1975; Bonus 1986, pp. 332). In this hybrid form of organisation the members of the co-operative remain basically autonomous concerning their fundamental economic and legal affairs. Only with respect to the supply of housing space a dependency is created. The members integrate this transaction within the hierarchy of their control. The market control between the occupant and the landlord is replaced by a more hierarchic form of organisation that, in terms of Williamson, could most likely be described as "relational contracting" (Williamson 1985).

The co-operative governance structure therefore is an institutional arrangement that consists of different rules with regard to the German

co-operative law (GenG), the co-operative principles (e.g. one-man-one-vote), the organs of the co-operative (like the annual general meeting, the managing board and the supervisory board), the autonomously rendered articles of the co-operative and the regulations of co-operative lease agreements offering each member the right of a permanent use of its tenement (Dauernutzungsvertrag).

In case of a housing co-operative the member – like an occupant – has the right to use the apartment instantaneously (ius usus). But there is an important discrepancy to a regular tenancy: Unlike the occupant, a member of a co-operative can regulate the other property rights indirectly. In the business these property rights are administrated by a democratically elected managing board in the sense of an "agency relationship" (Pratt and Zeckhauser 1985, p. 2).

The managing board as an agent is controlled and guided strategically by the members (principals) with the help of the annual general meeting and the supervisory board. Of course this agency relationship doesn't work without bonding or agency costs but generally a member of a co-operative is able to regulate the property rights beyond its ius usus indirectly with the help of the co-operative governance structure. For example in the annual general meeting a co-operative member is able to participate in the decision-making process concerning a structural alteration of its tenement (ius abusus). The right to appropriate returns (ius usus fructus) and the right to transfer co-operative assets cannot be claimed individually but the member is able to regulate these property rights indirectly via the co-operative governance structure.

As a result of the instantaneous right of a co-operative member to use its tenement exclusively and the possibility to influence the property rights related to housing space indirectly, a co-operative governance structure can also be recognised as a form of private property. Therefore co-operatives generally constitute a form of housing-privatisation.

# 3. CO-OPERATIVE PRIVATISATION MODELS

In the recent past different kinds of co-operative privatisation models could be noticed in the German housing industry. Well-known examples are the Pinneberg-Model, the Flensburg-Model, the Kreuzberg/Schöneberg-Model and the GIMA-Model. In the following different examples of housing co-operative privatisation models are illus-

trated briefly in order to identify factors that determine successful or unsuccessful co-operative privatisations.<sup>1</sup>

# 3.1. The Pinneberg-Model

Being highly indebted and therefore in need of balancing its budget, in early 2004 the Kreis Pinneberg decided to sell its 81,49 %- share of the municipal housing company GeWoGe (Gemeinnützige Wohnungsbaugesellschaft mbH für den Kreis Pinneberg). This company, founded in 1948, has about 2.200 tenements and is a major housing association in the rural district of Pinneberg. Its function is primarily social housing.

Shortly after the intention to sell became public the tenants protested spontaneously and founded an interest group which in order to promote their concerns ("Interessengemeinschaft Sozialer Wohnungsbau"). Their main concern was that being sold to a private equity fund could mean a significant increase in rent. As a matter of fact journalists reporting on this topic stirred an enormous public interest so the sale soon became a political issue. The Interessengemeinschaft initiated a petition for a referendum which eventually blocked the transaction plans for an indefinite time.

Meanwhile talks between the management of the GeWoGe and a representative of the Investitionsbank Schleswig-Holstein<sup>2</sup> developed the idea to found a new housing co-operative only for the purpose of acquiring the municipal housing company share. Each party affected – including the Interessengemeinschaft – agreed on examining this possibility. During the examination process two experts were consulted in order to determine the market value of the GeWoGe and to examine whether a conversion of the company into a co-operative was possible.

After having obtained the expert opinion it was decided to conduct negotiations with the newly founded housing co-operative "Die 'Neue' GeWoGe eG" with the purpose to take over the old GeWoGe by purchasing the company's share. Members of the new co-operative were the speaker of the Interessengemeinschaft as well as the managers of the old GeWoGe – today these managers also constitute the co-operative managing board. On the part of the co-operative the negotia-

<sup>&</sup>lt;sup>1</sup>The Pinneberg-Model, the Kreuzberg/Schöneberg-Model and the GIMA-Model were part of the ExWoSt-Reseach-Programme of the Bundsamt für Bauwesen und Raumordnung (BBR). A detailed report of theses models can be found at Bundesamt für Bauwesen und Raumordnung (ed.) 2006. Further information on the GIMA-Model is given by Wagner 2006.

<sup>&</sup>lt;sup>2</sup>The Investitionsbank Schleswig-Holstein is an institute for business develoment belonging to of the federal state of Schleswig-Holstein. It supports the federal government in the conversion of their housing policy objectives.

tions were led by the members of the supervisory board (which partly had a banking origin). The Kreis Pinneberg as vendor was supported by external legal and property consultants. The Investitionsbank Schleswig Holstein played an important role in the negotiations, not only as financing institution, but also as a mediator. In these negotiations not only the purchasing price was of importance, but also social aspects, preserving cheap housing or necessary refurbishments and modernisations played a role. Eventually politicians set a minimum purchasing price of 47 million € for their municipal housing company share.

At the end of a long negotiation process in February 2006 the Kreistag of Pinneberg confirmed the sales of the company share and the contract of assignment between the associates of the old GeWoGe GmbH and the "Neue" GeWoGe eG. The purchase price was 47 million € The subsidy of the Land Schleswig-Holstein – represented by the Investitionsbank – was 9 million € which means about 20 % of the purchase price. Within the next years modernisation will require further investments of 50 million € for which a loan commitment by the banks was given.

In the case of the Pinneberg-Model following factors determining a successful co-operative privatisation model can be identified:

- Strong resistance of the tenants concerned against a market sale but a clear support of the co-operative privatisation idea.
- Continuity concerning the management of the old and the new firm.
- Funding granted by the state of Schleswig-Holstein was an essential prerequisite for the success of this model.
- An effective co-operation based on trust between the banks involved. In addition, in this case there was a strong commitment of local banks.
- The Investitionsbank and also the federation of housing cooperatives – played an important role in the process as a monitoring and consultant institution.

Factors determining an unsuccessful co-operative development can be recognised as well:

- Public budget consolidation requires a maximum purchasing price for the share. Therefore finding an acceptable purchasing price often seems to be difficult.
- There were obvious difficulties in setting the hypothecary value and the capitalised value of the share (problems of valuation).

# 3.2. The Flensburg-Model

The Wohnungsbaugesellschaft Flensburg GmbH (WoBau) was founded in 1925. With about 4.850 tenements the WoBau was the major housing association in the city of Flensburg. Due to an average rent of 4.21 €m² the function of this municipal housing company was to offer good but cheap housing. Shareholders of the company were the city of Flensburg (90 %) and the Sparkasse Flensburg, a local bank (10 %). In 2003 the supervisory board set the target to achieve an adequate return. In addition the social character was to be preserved as a major objective of the WoBau. Even though the business situation was quite successful the budget problems of the city led to the decision to sell the WoBau-shares in order to achieve a budget consolidation.

Therefore the supervisory board examined the following possible alternatives: (1) Keep on doing business as usual, (2) Founding a new housing co-operative in order to take over the company's shares (3) Selling the municipal housing company shares to an already existing local housing co-operative. The city of Flensburg decided in favour of a co-operative privatisation model because this form of privatisation would offer long term advantages such as helping tenants to become home owners, securing reasonably priced housing, pursuing a long-term portfolio strategy and in addition achieving a budget consolidation. Moreover, in contrast to selling tenements to a private equity fund, a co-operative privatisation model would promise public acceptance.

Main decision criterions for the public authorities were the possibility to pursue local housing policy objectives as well as the interests of the company's employees. Luckily a housing co-operative in Flensburg with about 2.350 tenements already existed, even though much smaller in scale – the SBV Selbsthilfe-Bauverein eG Flensburg – which was immediately interested in this project. In agreement with the objectives of the co-operative which were fixed in their articles<sup>3</sup> the co-operative management initiated an expensive strategy. Nevertheless, the management maintains a price limit on the purchase. That restriction was necessary to finance the full purchasing price from the asset's cash flow in order to minimise financial risks and to commit the banks. The estimation of the cash flow needed turned out to be a critical issue. Nonetheless, the SBV was a long term-orientated reliable actor in the local housing market with similar strategic objectives than the WoBau which guaranteed sustainability.

7

<sup>&</sup>lt;sup>3</sup>See § 2 (1) of the SBV articles: "Zweck der Genossenschaft ist die Förderung ihrer Mitglieder durch eine gute, sichere und sozial verantwortbare Wohnungsversorgung." This is quite similar to the goals of a municipal housing company.

In July 2006 the city of Flensburg decided in favour of selling the 'giant' to the 'dwarf'. The purchase price of the WoBau was about 115 Mio. €in total. For the city of Flensburg this meant a budget relief of ca. 40 Mio. €and a sustainable interest relief of about 1.5 Mio. € p.a. The reasons for choosing this alternative were the reliability concerning public housing policy objectives and the safeguarding of the interests of the employees concerned. Also here continuity in the management of the WoBau and the SBV could be achieved. Compared to the foundation of a new co-operative the economies of scale resulting of the merger offered an estimated 5 % reduction of the purchase price.

In the Flensburg-Model following factors determining a successful co-operative privatisation model can be identified:

- Significant support of the project by the city of Flensburg.
- Continuity concerning the management of the old and the new firm.
- The existence of a committed local housing co-operative.
- Complete transparency and a generally positive image of the project from the beginning including the tenants and the public.
- A positive team work of the members of the WoBau supervisory board involving the representatives of the tenants and the employee's representation.
- The possibility of realising merger-caused economies of scale.
- Support of the project by the housing co-operative association vnw Verband norddeutscher Wohnungsunternehmen as a consultant and mediator.

There were not many factors determining an unsuccessful cooperative privatisation in this case - with one exception:

• The estimation of the cash flow required in order to guarantee stable financing turned out to be a critical factor in this model.

# 3.3. The Kreuzberg/Schöneberg-Model

In 2004 the Berlin Senate asked the Wohnungsbaugesellschaft Mitte to re-privatise 17 properties in the quarters Berlin Kreuzberg and Berlin Schöneberg, formerly restoration areas. Within in the recent years a series of privatisation acts in the Berlin housing policy followed this action in the course of which more than 100.000 tenements were sold to private investors in order to achieve budget consolidation. These transactions always represented political issues in the German capital.

Therefore the Berlin Senate actively supports privatisation strategies which are considered to correspond with the interests of the tenants.

In order to inform the tenants concerned and to discuss possible alternative forms of privatisation with them the UTB – an external consulting company – was hired. The UTB developed a financing plan for the privatisation of all 17 properties concerned which tried to combine the financial and the social interests of the city as well as those of the tenants which commonly had a migrational background. First of all the start-up of a Turkish-German housing co-operative was favoured but the realisation of this project had to be abandoned soon because no financial subsidy (e.g. from the Investitionsbank Berlin or the KfW-Förderbank) could be gained due to the lack of an adequate equity base. In addition the required real estate know-how could not be confirmed. Finally the cooperation with an existing housing co-operative seemed to be the most realistic way of privatisation.

Initially the housing co-operative associations could not find a suitable local co-operative interested in extending its stocks in such a way. So the UTB contacted the managing board of the ownershiporientated housing co-operative Am Ostseeplatz eG newly founded in 2000. The management of this co-operative was interested in the project because at its annual general meeting the decision to expand its assets had already been made. A UTB feasibility study came to the result that a successful implementation of this co-operative model was possible. So by the end of 2005 the Berlin Senate and UTB fixed the following key conditions for a co-operative package purchase: (1) The housing co-operative buys a package of 13 of the total 17 properties on sale; (2) The housing co-operative receives a financial subsidy for necessary refurbishment and modernisation; (3) As an equity substitute the state of Berlin grants a loan to the housing co-operative of 20 % of the purchasing price. The loan must to be repaid within 15 years. In 2006 further negotiations were conducted between the purchasing housing co-operative, UTB and the financing bank.

In the Berlin model following factors determining a successful cooperative privatisation model can be identified:

- Significant support of the project by the Berlin Senate including an intensive public subsidy.
- Hiring an independent consulting company to monitor the process and to give professional advice.

Factors determining an unsuccessful co-operative privatisation are:

Necessity of a massive public subsidy.

- The lack of private equity and of profound knowledge in real estate proved to be an almost insurmountable obstacle in founding a new housing co-operative.
- Here also the migrational background of most of the tenants represented a challenge in trying to establish a German co-operative model.
- To get in touch with long-established local housing co-operatives in this certain case was not successful.
- Hiring an external consulting company creates strategic and financial dependencies.

#### 3.4. The GIMA-Model

Due to the strong demand for residential properties in the city of Munich prices for real estate as well as rents are on an extremely high level in this area. Selling tenements on this strained market to a private investor often resulted in transforming these tenements into free-hold flats. Consequently this process causes original occupants to move out of their homes and lastly destroys long-grown neighbourhoods.

In 2005 the Munich housing co-operative WOGENO München eG founded the co-operative real estate agency GIMA (Genossenschaftliche Immobilien-Agentur). The GIMA approached the challenging task to mediate between owners who are willing to sell their tenements, the tenants concerned and housing co-operatives interested in expanding their housing assets. It is the objective of the GIMA to preserve long-grown neighbourhood structures. At the time of the ExWoSt-research programme the GIMA model was simply a project without a legal form. Today the GIMA operates as a co-operative in the legal form of an eG with about 12 housing associations – mostly co-operatives – as members. Since the GIMA took up business about 20 house owners showed interest in the co-operative privatisation model. Meanwhile considerable success in mediating between owners, housing co-operatives and tenants has been achieved. The mediation required for providing advice and organisation was very time consuming and prevented a rapid implementation.

Regarding the GIMA model the factors determining a successful privatisation are:

• Prohibitive high transaction costs in the process of privatisation. With respect to transaction cost theory (Williamson 1975; Williamson 1985) the existence of the GIMA can be explained by its

function to reduce the transaction costs of the privatisation process.

 Significant support of the project by the municipal administration of Munich and connections to political stakeholders and the public.

Factors determining an unsuccessful co-operative privatisation in the GIMA case are:

- Restrictions set by the owner respectively the vendor (e.g. price, time).
- A sufficient period of time is needed in order to implement a cooperative privatisation process as numerous actors and a complex mediation and negotiation process is required. Moreover the tenants concerned need to change roles from tenant to co-operative house owner. Therefore they also have to raise a certain amount of private equity.
- Also in this case it was initially rather difficult to get in touch with established local housing co-operatives. The residential properties on sale are often not perfectly in the line with the portfolio strategy of an existing housing co-operative. This usually requires to found new housing co-operatives. Some of the assets on sale are too large in scale for one housing co-operative to purchase. In this case there is a need for a co-operation between the different housing co-operatives which intent a purchase.
- Financing a privatisation project is commonly quite difficult. Funds are usually required to fill the gap between private equity and the debt capital available. Many times the purchasing price consists of 25 % private equity, 60 % loan and the gap of about 15 % is covered by a local government's subsidy.

# 4. SUMMARY AND CONCLUSION

This paper discusses the possibility whether housing co-operatives can constitute an economically effective and socially acceptable alternative form of housing privatisation in the German housing industry.

In Section 2 it is shown that - as a result of the instantaneous right of a co-operative member to use its tenement exclusively and the possibility of indirect perception regarding the other property rights related to housing space - a co-operative governance structure can be recognised as a form of private property. Therefore co-operatives can generally constitute a form of housing privatisation.

Regarding Section 3, different examples of housing co-operatives models were analysed that are currently implemented in the German housing industry. Obviously the models considered in this paper vary a significantly. Therefore each co-operative privatisation model must be seen as a special case concerning its individual local structure. However some overall valid factors determining successful or unsuccessful co-operative privatisations can be identified.

Factors generally determining successful co-operative privatisations are:

- Significant support of the privatisation project by the municipal and local political administration.
- A noticeable public subsidy usually represents a prerequisite to realise the co-operative privatisation model.
- Institutions serving as mediators or consultants to reduce the prohibitive transaction costs of the process (e.g. GIMA, Investitionsbank, housing co-operative association, consulting company).
- Continuity of the management concerned (this is important to reduce resistance against change).
- An overall positive image of the project and teamwork including all actors as well as the public in terms of a concerted action ("konzertierte Aktion").
- An effective co-operation based on trust between the financing banks mostly with local ties (Genossenschaftsbank, Sparkasse).
- The possibility of realising merger-caused economies of scale.

The factors generally determining unsuccessful co-operative privatisations are:

- Lack of private equity and profound knowledge of real estate management on the buyers' side.
- Exorbitant price expectations by the public vendors due to the necessity of a budget consolidation.
- Difficulties to get in touch with long-established local housing cooperatives due to the fact that they frequently see no benefit in a co-operation.
- Necessity of a rapid sale. Co-operative privatisation models need a sufficient period of time to be implemented.
- Valuation problems of the assets and cash flows concerned.

Obviously there are different ways to organise a housing cooperative privatisation successfully. An interaction of the favourable factors enables a co-operative privatisation model to be successfully in economic terms. Regarding all the factors primarily, the significant support of the project by the municipal political administration – including commonly a noticeable public subsidy – seems to be the essential factor of success.

#### ACKNOWLEDGEMENTS

We like to thank Iris Beuerle, Herbert Klingohr and Gisela Francis Vogt for their constructive comments and suggestions.

# REFERENCES

- Alchian, A.A. and H. Demsetz (1973), "The Property Rights Paradigm", *The Journal of Economic History* 33, 16–27.
- Bonus, H. (1986), "The Cooperative Association as a Business Enterprise", *Journal of Institutional and Theoretical Economics* 142, 310 339.
- Bundesamt für Bauwesen und Raumordnung (ed.) (2006), "Genossenschaftliche Lösungen beim Verkauf von Wohnungsbeständen", *Ex-WoSt-Informationen* 28/3.
- Furubotn, E.G. and S. Pejovich (1972), "Property Rights and Economic Theory: A Survey of Recent Literature, *Journal of Economic Literature* 10, pp. 1137–1162.
- Pratt, J.W. and R.J. Zeckhauser (1985), "Principals and Agents, An Overview", Pratt, J.W. and R.J. Zeckhauser (ed.), *Principals and Agents, The Structure of Business*, Boston, 1–35.
- Wagner, I. (2006), Aktivierung genossenschaftlicher Potenziale in der Stadt- und Quartiersentwicklung dargestellt am Beispiel der GI-MA München, Nürtingen-Geislingen.
- Werth, H.-J. (2007), "Die Ausverkaufs-Alternative", *Immobilienwirtschaft* 04, 14–15.
- Williamson, O.E. (1975), Markets and Hierarchies, Analysis and Antitrust Implications, New York, London.
- Williamson, O.E. (1985), The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting, New York.