DEVELOPMENT OF THE CONCEPT OF BONDS

Robert Wendelin, Hanken – Swedish School of Economics and Business Administration, Finland

Abstract:

The concept of bonds has developed since the concept first was used in social sciences in the 19th century. Bonds develop between companies due to mutual adjustment between the counterparts. Bonds affects the exchange processes between the companies, future adaptation processes and also costs of switching partners (Mattsson 1987). A model containing 11 bonds is the richest and most expanded view of bonds at present. It incorporates findings from sociology, industrial and services marketing and is bridging existing gaps in the industrial business relationships literature. The purpose of the paper is to explain the development of the bond concept.

Key words: Bonds, Relationship, Development, Value

Development of The Concept of Bonds

THE NATURE OF BONDS

As a result of the increased importance of cooperative industrial business relationships the bonds between the companies become more important. This is due to that bonds are building blocks of relationships that affect the stability in the cooperation between the companies. If the relationships between companies are strong then it can usually be seen as a sign that the companies will cooperate for a longer time and that may affect the companies' competitive and financial strength positively (Storbacka, Strandvik and Grönroos 1994). This is the fact since focus can be on cultivating the current relationship instead of building new relationships. Bonds of different kinds are said to develop between cooperating companies due to mutual adjustment between the counterparts. This affects the exchange processes between the companies, future adaptation processes and also the costs of switching to another supplier or buyer (Mattsson 1987). Bliemel & Eggert (1997) argue that members in a network need bonds to assure themselves among other things against opportunistic behavior. There are different kinds of bonds that bind the customer and the supplier together. Bonds can be defined as exit barriers that tie the customer to the supplier and maintain the relationship (Liljander & Strandvik 1995; Dwyer, Schurr & 0h 1987). Even unsatisfied customers may have strong relationships to suppliers due to bonds that function as exit barriers (Liljander & Strandvik 1995). But bonds also have more positive connotations that are important for the continuation of the relationship or for the strengthening of the relationship.

The relationship between suppliers and industrial customers has changed so that at present stable relationships between suppliers and customers is a prerequisite for a good business climate. Demands for lower prices and an increase in profits, shorter product cycles and global competition is some of the forces affecting suppliers and customers in the industrial market pressing them to have stronger relationships (Holmlund & Kock 1995). Companies have decreased the number of suppliers and have instead started more intense cooperation with the remaining suppliers. The strength of bonds affects the strength of the relationship. Bonds affect termination of relationships because they often prevent termination of relationships even if the partners are dissatisfied with the cooperation. That can be seen as a negative perception of bonds. On the other hand it can be said that bonds affect the continuation of the relationship and may also affect the strength of the relationship in a positive way and lead to the strengthening of the relationship, which for instance may lead to increased profitability, or a growth in the volumes delivered. (Wendelin 2004)

The background of the paper is mainly in the IMP literature e.g. Håkansson (1982), Hammarkvist, Håkansson & Mattsson (1982), Johanson & Mattsson (1987), Easton (1989), Kock (1991), Easton (1992), Holmlund & Kock (1995), Kock (1995). However,

influences from services marketing have also been used e.g. Liljander & Strandvik (1995), Storbacka, Strandvik & Grönroos (1994) since the IMP literature has certain gaps regarding bonds that are possible to bridge by incorporating theories from services marketing. In order to be able to focus on bonds as they are presented in the IMP literature, e.g. Håkansson (1982), Hammarkvist, Håkansson & Mattsson (1982) as well as in the service management approach, e.g. Liljander & Strandvik (1995) and see were they stem from, it is considered beneficial to read sociology and social psychology where the theories regarding networks and bonds are grounded. These are also referred to in the IMP literature. These are for instance Simmel (1906), Small (1915), Wirth (1938), Homans (1950), McCall (1970), Turner (1970) and Granovetter (1973). The ones most referred to in the IMP literature are McCall (1970), Turner (1970) and Granovetter (1973). All these studies, both those with an industrial marketing perspective and those with a service management perspective have mainly had some other issue as their point of focus and therefore not focused solely on bonds. The bonds that stem from sociology have on the other hand mainly focused on relationships between people and hence social bonds. There are exceptions such as the sociologists Macaulay (1963), Palmer, Friedland & Singh (1986) or Lincoln, Gerlach & Takashi (1992) who focused on bonds between companies. A more comprehensive model of bonds has been found by combining the IMP bonds with those from service marketing. The purpose of the paper is to explain the development of the bond concept based on a literature review.

DEFINITIONS OF BONDS

Some authors have earlier describes bonds as follow:
"Bonds are the psychological, emotional, economic or psychical attachments in a relationship that are fostered by association and interaction and serve to bind parties together under relational exchange." (McCall 1970) McCall's (1970) definition from sociology shows that people are bonded together by psychological, emotional, economic or physical attachments in a relationship such as a marriage. This definition and view has then been incorporated into the industrial marketing approach e.g. by Wilson and Mummalaneni (1986).

"When the cost-benefit analysis yield favorable results and people move toward greater involvement with each other, certain ties or bonds develop linking them together strongly". (Wilson & Mummalaneni 1986) This focus on bonds as aspects of relationships has then been widely accepted in different management approaches. Bonds of different character have been found to exist.

Bonds develop over time

Development of bonds in that bonds start to exist and then develop and die has been discussed in some more developed definitions of bonds. "Bonds of various kinds are developed between firms. Relationships are based on these different kinds of bonds,

which develop over time and through which the actors are tied to each other" (Proenca & Castro 1998). "An important feature of the relationships that develop between the companies in a network is that they can be characterized as bonds. The bonds are of different character and have different purposes" (Hammarkvist, Håkansson, Mattson. 1982). "Central to the Network Approach as applied to industrial markets is the concept of the bond. This is the relationship formed between supplier and customer organizations. At its most fundamental a bond must exist, in however weak a form when economic exchanges take place between supplier and customer. When they cease to do so the bond may be considered severed. With infrequent purchases it may not be clear when the bond comes into existence or when it dies" (Easton & Araujo 1986).

Bonds due to Investments & Adaptations

Bonds have been found to be due to investments and adaptation in the relationship according to the following definitions. The idea with bond being barriers to exit or constraints is presented in the later of the definitions presented below. "As the relationship continues there is an ongoing process of exchanges, interactions and investments. Every relationship is unique by content, intensity, history, value and time as the actors invest in the relationship by making adaptations and spending time and effort. Consequently bonds emerge between the interacting actors in the relationship" (Holmlund & Kock 1995). "Bonds develop through investments and adaptations. The bonds make the relationship more stable and make a good base for continued cooperation. These bonds will have the character of exit barriers since the cost for building up new relationships becomes high and the investments that has been made in the relationship are lost if the relationship is terminated" (Kock 1995).

Bonds as Exit Barriers

Some authors consider bonds to be exit barriers and thus function as value reducing factors that have a negative affect on the relationship. This is due to the entrapment the counterpart that is affected by the exit barrier in the relationship feels. This coincides with the burden of relationships idea of Håkansson and Snehota (1995). And since it is a burden it is regarded as factors that reduce value. This focus on exit barriers has been used in service marketing, consumer marketing as well as in business-to-business marketing. "Exit barriers seem less common in consumer markets than in industrial and organizational markets"; bonds are considered as exit barriers (Dwyer, Schurr & 0h 1987). "A bond implies a measure of tying, albeit unspecified, between partner firms. Firms are bonded together and are not usually entirely free to dissolve those bonds at will" (Easton 1992). "Bonds are seen as switching barriers beside customer satisfaction" (Naude & Buttle 1999). "Bonds are exit barriers that tie the customer to the supplier/service provider and maintain the relationship. These are legal, economic, technological, geographical, time, knowledge, social, cultural, ideological and

psychological bonds" (Storbacka, Strandvik & Grönroos 1994; Liljander & Strandvik 1995).

Summing up the Definitions

The definitions of bonds have been summed up and analyzed and bonds are defined in the following manner based on the cumulative process: *Bonds are the concrete or abstract technical, time, knowledge, legal, economic, geographical, social, cultural, ideological, psychological and strategic value creating, neutral or value reducing factors that form the building stones of the industrial business relationship. Bonds can be mutually or one-sidedly value creating or value reducing. The sum of the total package of bonds in a relationship equals to the total value of the relationship.*

Bonds are value reducing if they are causing negative effects in the relationship functioning as exit barriers or if they are weakened and lead to negative effects weakening the relationship.

DEVELOPMENT OF THE CONCEPT OF BONDS

Bonds tend to have different names depending on the author. Bonds can be named as such or as ties and links. For simultaneous use of ties and bonds for the same phenomenon see for instance Turner (1970), Wilkinson & Young (1994) or Buttle, Ahmad & Aldlaigan (2002). For links being used meaning the same as bonds see e.g. Wilson & Mummalaneni (1986) and Thorelli (1986). In most cases the difference between bonds, ties and links is unclear. The same phenomenon is described using different words. For the concept of bonds see e.g. Simmel (1906), Small (1915), Wirth (1938), McCall (1970), Wilson & Mummalaneni (1986) and Easton & Araujo (1986, 1989).

The concept of bonds has developed since the concept first was used in social sciences in the 19th century. Social bonds in a modern form are described by Small in 1915 in the American Journal of Sociology (Small 1915). Smalls (1915) paper is almost identical to McCall's (1970) and bears great similarity to Turners (1970). Most authors, such as Wilson and Mummalaneni (1986), in the business-to-business literature refer to McCall (1970) and Turner (1970) who are also sociologists. (for instance Wilson & Mummalaneni 1986 refers to a high degree to both these authors) Another author who is also referred to frequently is Granovetter (1973) with his article "The Strength of weak ties" also from the American Journal of Sociology". In fact the foundation to the interaction approach to industrial marketing was based on social exchange theory like for instance Homans (1958) (Johansson & Mattsson 1987).

There are different kinds of bonds in theory. In the first IMP (International Marketing and Purchasing Group) affiliated papers there were only two bonds present namely

technological ties and social bonds (Håkansson 1982). Later the number of bonds was raised to five, including technical, time, knowledge, social and economic/legal bonds (Hammarkvist, Håkansson, & Mattson 1982). Some years later in 1987 there were six bonds present, i.e. technical, planning, knowledge, social, economic and legal bonds (Johanson & Mattsson 1987). The IMP (Industrial Marketing and Purchasing) group has found six different kinds of bonds in the cooperation between companies. These bonds are technical, economic, time, legal, social and knowledge bonds (Johanson & Mattsson 1987; Holmlund & Kock 1995). These six bonds did however not give a picture that would cover industrial relationships completely (Wendelin 2004). Additional bonds have been recognized in the past years in service marketing, such as cultural, ideological, geographical and psychological bonds. (Liljander & Strandvik 1995; Storbacka, Strandvik & Grönroos 1994) In service marketing the number of bonds varied through the years and the model with 10 bonds stems from Liljander and Strandvik's model published in 1995. By combining the bonds that the IMP group has found with those from the service marketing perspective a more comprehensive model has been created. Geographical, cultural, ideological and psychological bonds have also been found to be important in industrial business relationships. Buttle, Ahmad & Aldlaigan (2002) have also noticed these ten bonds in industrial business relationships. Arantola (2003) found that almost all of the 10 bonds with the exception of ideological bonds existed in consumer relationships as well. One additional bond, namely strategic bonds have been found to complete the structure with 10 bonds (Wendelin 2004, 2007).

The 11 bonds are as follow. **Technical bonds** see e.g. Hammarkvist, Håkansson, Mattson (1982), Johanson & Mattsson (1987), Easton (1989), (Kock 1991) and Erbismann, Kock & Strandvik (1998). Technical bonds stem from the characteristics of the products and services that are exchanged. Companies adjust the technical products and processes according to their counterpart's specifications (Easton 1989, 1992). **Time bonds** see e.g. Johanson & Mattsson (1987) and Kock (1995). Time bonds develop when the companies in the relationship adapt their logistic functions to each other (Johanson & Mattsson 1987). **Knowledge bonds** see e.g. Kock (1991), Proenca & Castro (1997) and Nonaka (1994). Knowledge bonds develop with time as the cooperating companies learn more about each other's strengths and weaknesses, opportunities and problems. This happens when companies for instance develop products together. **Social bonds** see e.g. Simmel (1906), Small (1915), McCall (1970), Granovetter (1973), Håkansson (1982) and Wilson & Mummalaneni (1986). Social bonds develop between personnel from the companies that cooperate in the dyad and not between the companies themselves (Kock 1991; Erbismann, Kock & Strandvik 1998). For **legal bonds** see e.g. Macaulay (1963), Palmer, Friedland & Singh (1986) and Johanson & Mattsson (1987). A long-term contract is a legal bond (Palmer, Friedland & Singh 1986; Johanson & Mattsson 1987; Mattsson 1987). A contract overall or other articles of involvement or ownership can also constitute legal bonds (Halinen 1994). Quality certifications like ISO 9001, QS 9000,

EMAS, and environmental certifications like ISO 14001 or even more stringent military quality certifications than QS 9000 can also be considered as legal bonds between companies (Wendelin 2004). For **economic bonds** see e.g. Johanson & Mattsson (1987) and Kock (1991). Special credit arrangements constitute economic bonds (Johanson & Mattsson 1987; Halinen 1994). Mutual investment in the business by the competing firms that is investing in each other's business also constitutes an economic bond (Proenca & Castro 1997; Proenca & Castro 1998; Proenca & Castro 2000). For **geographical bonds** see e.g. Lincoln, Gerlach & Takahashi (1992), Liljander and Strandvik (1995) and Wendelin (2004). Geographical bonds have to do with how suitably located the supplier is from the buyer's point of view. The view of how suitably located the supplier is can vary over time in the relationship depending on for instance the global strategy for the company and the lead-times. Wendelin (2004) For **cultural bonds** see e.g. Liljander & Strandvik (1995), (Roslin & Melewar 2000) and Wendelin (2004) Cultural bonds develop between suppliers and buyers with a similar cultural background (Liljander & Strandvik 1995). **Ideological** bonds are such bonds that make a buyer choose suppliers that for instance manufacture green products, or domestically manufactured products (Liljander & Strandvik 1995). **Psychological bonds** develop when for instance the buyer is convinced that the products manufactured by the supplier or a service are of superior quality (Liljander & Strandvik 1995). **Strategic bonds** are bonds that emerge when the companies have it in their strategy and make a strategic decision to cooperate (Wendelin 2004, 2007). A strategic bond is generally affected by strategic decisions regarding cooperation, the strategic importance of the buyer or the supplier from for instance a economic, technical, geographical, or psychological view, it can also be connected to the strategic importance of the product and development activities. Strategic bonds are on a different level than the other bonds mentioned and can contain all the other types of bonds (Wendelin 2004, 2007).

CONLUSION

The development leading to the increase of bond studies in management literature is that some sociologists, for instance Macaluay (1963), Palmer, Friedland & Singh (1986) or Lincoln, Gerlach & Takashi (1992) focused on bonds between companies. Then management researchers like Håkansson (1982) and Wilson and Mummalaneni (1986) started writing about bonds referring to sociologists like McCall (1970), Turner (1970) and Granovetter (1973). These sociologists mainly focused on bonds between persons and families. These management researchers paved the way for other management researchers to write about bonds. Management researchers as Håkansson (1982) made it "socially" acceptable to apply a sociologic approach to management.

Bonds do affect the total value of business relationships. Bonds may have been seen as something positive and later on their character may change to something being perceived as negative, they become an exit barrier. Bonds may change character in different

situations and what has been seen as positive is later being seen as negative. The nature of the character of bonds is that bonds may be viewed or perceived differently over time. Bonds are dynamic and change over time. Dynamics refer to the change of bond strength and thus also affect relationship strength since bond strength affect relationship strength. Bonds do not have to remain at status quo but may change in strength so that for instance strong bonds become weak and weak bonds change into strong. As an example can be mentioned the fact that social relationships, technical relationships or economic relationships may change over time from being seen as positive or neutral to negative and vice versa.

The model structure containing 11 bonds is the richest and most expanded view on bonds at present. It incorporates findings from sociology, industrial and services marketing and it is bridging gaps that have existed in the industrial business relationships literature. Gaps regarding for instance cultural, ideological and psychological bonds. It is also a manageable structure that is easy to use and utilize for analyzing empirical material and in consulting even if the structure is rich.

REFERENCES

Arantola, H. (2003): *Relationship Drivers in Provider – Consumer Relationships Empirical Studies of Customer Loyalty*, Doctoral dissertation No. 111, Helsinki, Swedish School of Economics and Business Administration

Bliemel, F., Eggert, A. (1997): Structural Bonding In Customer-Supplier Relattionship: - The Case of Prosumer Versus Consumer, In Mazet, F., Salle, R., Valla, J-P. (eds.*) Interaction, relationships and networks. Conference proceedings from the 13th IMP Annual Conference, Lyon, September 1997*. 49-68

Buttle, F.A., Ahmad, R., Aldlaigan, A.H. (2002): The Theory and Practice of Customer Bonding, *Journal of Business-to-Business Marketing*, Vol. 9(2), 3-27

Dwyer, R.F., Schurr, P.H., Oh, S. (1987): Developing Buyer-Seller Relationships, *Journal of Marketing*, Vol. 51, April, 11-27

Easton, G. (1989): *Industrial Networks - A Review* 5th IMP Seminar, Penn State, Pennsylvania, 161-182

Easton, G. (1992): *Industrial Networks: A Review* in Axelsson, B., and Easton, G. (eds.), Industrial Networks A New View of Reality, London and New York, Routledge, pp. 3-27

Easton, G., Araujo, L. (1986): Networks, Bonding and Relationships in Industrial Markets, *Industrial Marketing and Purchasing*, No 1, 8-25

Easton, G., Araujo, L. (1989): The Network Approach: An Articulation, *Advances in International Marketing*, JAI Press Inc., Volume 3, pp. 97-119

Erbismann, K., Kock, S., Strandvik, T. (1998): Cooperation and Adaptations in a Supply Chain – The Suppliers' View, *Paper presented at the !4th IMP Conference*, Turku, 3-5th of September

Granovetter, M. S. (1973): The Strength of Weak Ties, *American Journal of Sociology* Volume 78. No. 6, May, 1360-1380

Halinen, A. (1994): *Exchange Relationships in Professional Services- A study of Relationship Development in the Advertising Sector*, Publications of the Turku School of Economics and Business Administration, Åbo Akademis Tryckeri, Turku 1994

Hammarkvist, K-O., Håkansson, H., Mattsson, L-G. (1982): *Marknadsföring för konkurrenskraft*, Malmö, Liber Förlag

Holmlund, M., Kock, S. (1995): Buyer Perceived Service Quality in Industrial Networks, *Industrial Marketing Management*, March, Volume 24, no. 2, 109-121

Homans, G. (1950): *The Human Group*, New York, Harcourt, Brace & World

Håkansson, H. (1982): *An Interaction Approach* in Håkansson, H. (ed.) International Marketing and Purchasing of Industrial Goods: An Interaction Approach, Chichester, UK, John Wiley & Sons, pp. 10-27

Håkansson, H., Snehota, I. (1995b): The Burden of Relationships or Who's Next. In Turnbull, P., Yorke, D., Nande, P. (eds.) *Proceedings of the IMP Group 11th International Conference, Manchester, U.K., September 1995*, Vol.1., 522-536.

Johanson, J., Mattsson, L-G. (1987): Interorganizational Relationships in Industrial Systems – A Network Approach Compared with the Transaction Cost Approach, *International Journal of Management Orientation*, 17, 1, 34-48

Kock, S. (1991): *A Strategic Process for Gaining External Resources Through Long-Lasting Relationships-Examples from two Finnish and two Swedish Industrial Firms*, Helsingfors: Doctoral Dissertation no. 47, Publications of the Swedish School of Economics and Business Administration, Helsinki

Kock, S. (1995): *Kontextens betydelse vid utformningen av strategier i industriella nätverk*, in: Vest, T. (ed): Studia Economica. Swedish School of Economics and Business Administration

Liljander, V., Strandvik, T. (1995): The Nature of Customer Relationships in Services, *Advances in Service Marketing and Management*, Volume 4, 141-167

Lincoln, J. R., Gerlach, M. L., Takashi, P. (1992): Keiretsu Networks in the Japanese Economy: A Dyad Analysis of Intercorporate Ties, *American Sociological Review*, Volume 57, Issue 5, October, pp. 561-585

Macaulay, S. (1963): Non-Contractual Relationships in Business: A Preliminary Study, *American Sociological Review*, Volume 28, Issue 1, February, 55-67

Mattsson, L. G. (1987): *Management of Strategic Change in a "Markets-as-Networks" Perspective*, Chapter 7 in The Management of Strategic Change, A Pettigrew Blackwell, 234-256

McCall, G. J. (1970): *The Social Organization of Relationships*, in McCall, G.J., McCall, M. M., Denzin, N. K., Suttles, G. D., Kurth, S. B. (Eds.), Social Relationships, Aldline Publishing Company, Chicago, 3-34

Naude, P., Buttle, F. (1999): *Assessing Relationship Quality* in Mcloughlin, D., and Horan, C. (eds.), Proceedings of The 15th Annual IMP Conference, University College, Dublin, CD-ROM

Nonaka, I. (1994): A Dynamic Theory of Organizational Knowledge Creation, *Organizational Science*, Vol. 5, No. 1, February, 14-37

Palmer, D., Friedland, R., Singh, J. V. (1986): The Ties that Bind: Organizational and Class Bases of Stability in a Corporate Interlock Network, *American Sociological Review*, Volume 51, Issue 6, December, pp. 781-796

Proenca, J., Castro, L. M. (1997): The Complexity of Business Relationships in Banking and Financial Services – A Case Study, In Mazet, F., Salle, R., Valla, J-P. (eds.) *Interaction, relationships and networks. Conference proceedings from the 13th IMP Annual Conference, Lyon, September 1997*. 315-341

Proenca, J., Castro, L. M. (1998): *Relationships in Banking*, in Naude, P. and Turnbull, P.W. (Eds.) Network Dynamics in International Marketing, Elsevier Science, UK

Proenca, J., Castro, L. M. (2000): *The Substance of Business Banking Relationships* in Pete Naudé & Sheena Leek (eds.), Proceedings of The 16th Annual IMP Conference, School of Management University of Bath & Birmingham Business School University of Birmingham, Bath, CD-ROM

Roslin, R, M., Melewar, T. C. (2000): Discovering Relationshipal Bonds in Channel Relationships: A Case Study of Malasia, *Journal of Global Marketing*, Vol. 14(3), 49-76

Simmel, G. (1906): The Sociology of Secrecy and of Secret Societies, *American Journal of Sociology*, Volume 4, Issue 4, January, pp. 441-498

Small, A.W. (1915): The Bonds of Nationality, *American Journal of Sociology*, Volume 20, Issue 5, March, 629-683

Storbacka, K., Strandvik, T., Grönroos, C. (1994): Managing Customer Relationships for Profit-The Dynamics of Relationship Quality, *International Journal of Service Industry Management*, Special Issue on Relationship Marketing

Thorelli, H.B. (1986): Networks: Between Markets and Hierarchies, *Strategic Management Journal*, Volume 7, 443-457

Turner, R. H. (1970): *Family Interaction*, U. S. A.: John Wiley and Sons Inc.

Wendelin, R. (2007): *A Framework for Understanding the Nature and Change of Bonds in Business Relationships – Cases from The Truck Producing* Industry in Andrea L. Dixon & Karen A. Machleit (eds.), Proceedings of the AMA (American Marketing Association) Winter Educators' Conference - Marketing Theory and Applications Volume 18, CD-ROM, ISBN 0-87757-324-7

Wendelin, R. (2004): *The Nature and Change of Bonds in Industrial Business Relationships*, Doctoral dissertation No. 134, Helsinki, Swedish School of Economics and Business Administration

Wilkinson, I. F., Young, L. C. (1994): Business Dancing – The Nature and Role of Interfirm Relationships in Business Strategy, *Asia-Australia Marketing Journal*, 2 (1), 67-79

Wilson, D. T., Mummalaneni, V. (1986): Bonding and Commitment in Buyer-Seller Relationships: a Preliminary Conceptualisation, *Industrial Marketing and Purchasing*, No 3, 44-59

Wirth, L. (1938): Urbanism as a Way of Life, *American Journal of Sociology*, Volume 44, Issue 1, July, pp.1-24