INTRODUCTION

How do institutionalized norms influence the spread of new ideas among organizations?
A central proposition in neo-institutional theory is that the institutionalization of norms within an organizational field facilitates mimesis among firms (DiMaggio & Powell, 1983; Scott, 1995). Several studies provide empirical support for the importance of mimetic pressures on the likelihood of the adoption of a new idea (Burns & Wholey, 1993; Haveman, 1993; Tolbert & Zucker, 1983; Westphal, Gulati & Shortell, 1997). A less researched corollary to this proposition is that institutionalized norms also limit the types of actions that are likely to spread (Leblebici, Salancik, Copay & King, 1991; Strang & Meyer, 1994). Not only has this corollary received scant empirical attention, but earlier studies relating the legitimacy of a new idea to its spread have also been limited in two important ways. Firstly, these studies have commonly investigated the spread of a single new idea or practice through a community, rendering it problematic to distinguish firm-specific and innovation-specific influences on the spread of an idea (Strang & Soule, 1998). Secondly, even the few studies that have investigated the spread of multiple innovations (e.g. Davis & Greve, 1997) have focussed on the spread of administrative practices, leading to problems in distinguishing the effects of differences in institutional legitimacy from differences in efficiency across innovations (c.f. Kraatz & Zajac, 1996).

Addressing these earlier shortcomings, this paper elaborates the proposition that institutionalized norms may facilitate as well as restrict the spread of new ideas by specifying explicit simultaneous firm-level hypotheses of both effects, and by investigating these through a multiple-innovation study. Studying the spread of ‘illegitimate’ as well as ‘legitimate’ new ideas provides insights into the question of firm-level agency contra field-level pressures (Friedland & Alford, 1991; Haveman & Rao, 1997; Lounsbury, 2001). Furthermore it also sheds light on role of efficiency and appropriateness when firms adopt new ideas (D’Aunno, Succi & Alexander, 2000; Greenwood & Hinings, 1996; Lounsbury, Hirsch & Klinkerman, 1998; Oliver, 1991; Ruef & Scott, 1998).

The empirical focus of this paper is the spread of two differently efficient as well as differently legitimate mutual fund product categories over the period 1989-2000. The relative efficiency of adopting a product category relates to how well it sells in relation to other product categories. A product category adoption may also represent a symbolic positioning of the firm within the financial community, where security analysts are important ‘referees’ of product controversiality with respect to professional norms (Lounsbury, 2002; Zuckerman, 1999).
paper investigates how a set of two particularly controversial product categories – the Index and the Socially Responsible Investment (SRI) mutual funds – spread alongside a legitimate product category - the Mixed asset fund.

**INSTITUTIONALIZED NORMS AND THE SPREAD OF NEW IDEAS**

The legitimacy of an innovation may influence its diffusion in several ways. Ideas that ‘resonate’ with extant norms are likely to spread more widely and faster than ideas that deviate from current norms (Strang & Meyer, 1994). While most firms follow norms, individual firms may however break with norms and adopt new ideas that are widely perceived as illegitimate (D’Aunno, Sutton & Price, 1991; Leblebici, Salancik, Copay & King, 1991). Likely candidates for breaking norms are institutionally less embedded firms as well as those that have an internal political climate conducive to the new idea (Greenwood & Hinings, 1996; Kraatz & Zajac, 1996; Leblebici, Salancik, Copay & King, 1991). Institutional embeddedness may thus serve as a diffusion channel distinct from structural diffusion channels (i.e. networks and status structures) distinguishing early from late adopters when innovations differ in legitimacy (Chaves, 1996; Soule & Zylan, 1997; Strang & Meyer, 1994). There is thus:

**Hypothesis 1a.** Institutionally embedded firms are relatively slower adopters of illegitimate innovations

and conversely,

**Hypothesis 1b.** Less institutionally embedded firms are relatively faster adopters of controversial innovations.

Diffusion patterns of differently legitimate innovations may also differ with respect to their respective contagion mechanisms (Burt, 1982; Davis & Greve, 1997). Legitimate ideas, once introduced into an adoption community, are likely to spread fast as merely observing a socially comparable firm adopt may provide enough inducement for adoption (Abrahamson & Fombrun, 1994; Greve, 1998). Hence:

**Hypothesis 2a.** Contagion effects for legitimate innovations are triggered through the adoption by proximate firms

With respect to the adoption of an illegitimate innovation, on the other hand, managers may need to seek confirmation or moral support before adoption (Elsbach & Sutton, 1992; Suchman, 1995). Seeing just any other firm in the market adopt the illegitimate practice may therefore not suffice to trigger adoption. However, if a highly regarded actor adopts the innovation, or if the adoption is supported by a strong external source of legitimacy, for example the media, it may be sufficient to drive a contagion effect (Davis & Greve, 1997; Greenwood, Suddaby & Hinings, 2002; Hirsch, 1986). Hence:

**Hypothesis 2b.** Contagion effects of illegitimate innovations are triggered by a close relationship between the focal firm and earlier adopters
Hypothesis 2c. Media attention is more important to the contagion effect of an illegitimate innovation than a legitimate innovation.

To ground the concepts of ‘legitimate’ and ‘illegitimate’ mutual fund products the next section, based on extensive interviews, provides a brief historical description of how a particular form of competition became taken for granted in the Swedish mutual fund industry.

NORMS OF COMPETITION AND PRODUCT INTRODUCTIONS

As competition in the industry grew more intense during the late 1980’s competition shifted from one based on providing a ‘commodity product’ through an extensive sales network to direct product competition firms in industry increasingly differentiated their product portfolios. To avoid price competition a ‘logic of competition’ developed (Fligstein, 1996; Thornton & Ocasio, 1999) centered on historical product performance of mutual funds where firms signal competence and adherence to this competitive logic through their ‘security analyst prowess’. A central assumption in this logic is that good historical performance is the result of the professional knowledge of security analysts and fund managers.

Competing on the ‘quality of asset management’ had consequences for how new product categories were received. A Mixed asset fund is an actively managed fund that invests a certain percentage in equity and the rest in bonds and it was perceived as being in line with extant norms of ‘active asset management’ – which was part of the competitive logic’. The introduction of the Index or SRI funds, on the other hand, was controversial with many CEOs and fund managers. The construction of an Index fund does away with the need of active asset management and thereby the role of security analysts and Index funds are therefore often seen as a challenge to the very notion of active asset management (c.f. Gruber, 1996). Another fund category that lacks in professional legitimacy is the Socially Responsible Investment (SRI) fund. A SRI fund invests only in assets that conform to a set of ethical or environmental investment rules set up for the particular fund. Although an actively managed fund, SRI investment in general is often considered with professional skepticism for the belief that environmental soundness is a systematically positive sectoral factor. To most fund managers it was thus less controversial introducing a Mixed asset fund than an Index or SRI fund. These professional sentiments translated into systematic differences in firm-level competitive imitation behavior, as will be seen in the analysis.

METHOD, MODEL AND DATA

A critical issue in this research is to operationalize the degree of ‘institutional embeddedness’ of a mutual fund firm. Swedish mutual fund firms compete on the basis of ‘quality of asset management’, which is closely related to the perceived importance of security analysts and fund managers. To identify firms that are more likely to adhere to the competitive logic of ‘active asset management’ the number of security analysts employed by the mutual fund firm was chosen as the marker variable. Employment data was coded from the annual membership rosters of the Swedish Financial Analyst association and from annual reports. It is a
robust measure across organizations and over time and by controlling separately for firm size and age in the analysis, the main potential confounding factors are dealt with. Other data in the analysis was collected from the Swedish Financial Supervisory Authority, annual reports and an industry newsletter (all data are updated yearly).

The analysis uses the heterogeneous diffusion model, proposed by Strang & Tuma (1993). The heterogeneous diffusion model allows for identifying each variable as affecting firm-level propensity to adopt, the susceptibility to earlier adopters and the social proximity of a focal firm to earlier adopters (Greve, 1995; Strang & Tuma, 1993). To test hypotheses 1a and 1b, the institutional embeddedness, proxied by the number of analysts, is introduced in the propensity vector of the model – relating the number of analysts to the likelihood of introducing an illegitimate product. A number of control variables are also included in the propensity vector. Average fund size is entered to control for differences in the relative efficiency of the product categories. Average fund size, measured previous year per fund category, proxies the relative profitability of the different fund categories. Firm age and firm size are entered to control for inertia (Gresov, Haveman & Olivia, 1993; Hannan & Freeman, 1984) as well as for the effect of an increased resource base of larger and older firms (Barnett, 1997; Damanpour, 1991). To control for the effect of the market environment on the general likelihood of firms introducing new products (Greve, 1996), a measure of resource availability is also introduced.

Several variables may influence the contagion effect. Economic theory suggests the importance of relative efficiency of earlier adopted products, here operationalized as the average fund size in a product category. The number of analysts is also included in the susceptibility vector to capture differences in the importance of personal networks in how legitimate and illegitimate product categories spread (Davis & Greve, 1997; Kraatz, 1998). An intuitive understanding of the argument is that if a firm has professional contacts with an earlier adopter of an illegitimate product category, such an adoption is more likely to influence the decision of the focal firm to adopt than the adoption by a firm without such professional network ties. Media attention – an annual count of articles per fund category in the Swedish press - is hypothesized to influence the adoption decision of the focal firm differently depending on the legitimacy of the innovation. To control for the effects of performance on the likelihood of a firm taking action (Miller & Chen, 1994), firm performance is included as a control variable in the susceptibility vector. To investigate the effects of social proximity of earlier adopters the model includes a social proximity index (Greve 1995; Strang & Tuma, 1993), separating the contagion influence of proximate and non-proximate earlier adopters. This index is constructed based on the corporate parenthood of the firms, which interviews indicated as a relevant strategic grouping variable. The sample of potential adopters in the analysis included all Swedish mutual fund firms from 1989-01-01 to 2000-12-31.

ANALYSIS AND RESULTS

The model was estimated using a version of RATE 3.0 (Tuma, 1993). Model -fit (against a model with no covariates) indicates a significant improvement by including the covariates ($\chi^2 = 694.52$ with 28 d.f.). Hypotheses 1a and 1b, relating institutional embeddedness to the likelihood of introducing illegitimate products, are supported. The coefficient for number of analysts is negative and significant for the introduction of controversial (Index/SRI) products
and positive and significant for the introduction of the legitimate (Mixed asset) product. Firms employing relatively more security analysts (i.e. thought to be eager to come across as legitimate) are less interested in introducing products that lack legitimacy. Firms employing few security analysts, on the other hand, showing less concerns for institutional norms are also less concerned with breaking with norms regarding product legitimacy (c.f. Leblebici, Salancik, Copay & King, 1991).

Hypotheses 2a-c, predicting different contagion mechanisms for Index/SRI and Mixed asset funds, are also supported. For the legitimate (Mixed asset) fund introductions the social proximity and the average fund size coefficients are both positive and significant. When the product introduced is considered legitimate, firms are more influenced by earlier successful product introductions by firms in their reference group than by adoptions by other firms. The media attention variable however lacks significant impact on the contagion effect for legitimate products. For illegitimate product adoptions (Index/SRI funds) the coefficient for the number of analysts variable is positive and significant, while the coefficients for the average fund size and the social proximity variables are non-significant. The media attention variable is positive and significant. Firms that adopted illegitimate products were not influenced more by earlier adoptions by firms in their reference group than by the adoption by other firms. On the other hand they were more susceptible to earlier adoptions of illegitimate products when they employed more analysts. This can be interpreted as if close personal networks (of security analysts) are involved in the diffusion of illegitimate products (c.f. Kraatz, 1998). The level of external support (media attention) also significantly influences the contagion mechanism of an illegitimate product category, in line with the findings of Hirsch (1986). The main economic control variable (average fund size) is positive and significant for both product categories in the propensity vector indicating that firms were more keen to introduce products that had sold well, all other variables constant. Thus the adoption of illegitimate products is influenced by profitability concerns, but it is also mediated through concerns of legitimacy.

**DISCUSSION AND CONCLUSIONS**

Legitimacy matters to the spread of ideas among organizations in primarily two ways. First, ideas that are considered illegitimate to adopt are more likely to be adopted by less institutionally embedded firms, other variables held constant. Secondly, ideas seen as illegitimate to adopt spread through different contagion mechanisms than legitimate ideas. The spread of illegitimate ideas is more dependent on close contact with earlier adopters and on external legitimization than is the spread of legitimate ideas. Thus while institutionalized norms facilitate the spread of new ideas that are in line with the dominant institutional logic they also systematically channel the spread of illegitimate innovations through those firms that are less institutionally embedded. While these insights are not new in theory (c.f. DiMaggio & Powell, 1983; Greenwood & Hinings, 1996; Strang & Meyer, 1994), this paper represents a first large-scale empirical test of the enabling and the restricting role of institutionalized norms on the spread of new ideas. In particular the simultaneous investigation of the spread of a legitimate and an illegitimate product category provides a better test of these hypotheses than most of the earlier studies. Furthermore it is one of the first empirical investigations of the effects of the legitimacy of an innovation that actually controls for the relative efficiency of the innovation (c.f. Kraatz & Zajac, 1996; Palmer, Jennings & Zhou, 1993).
At the empirical level this study contributes additional, out of sample (a European setting), empirical support for the neo-institutional proposition that wider societal developments and norms influence individual firm behavior (Haveman & Rao, 1997; Lounsbury, 2001; Thornton & Ocasio, 1999). By studying the spread of innovations with observable differences in ‘efficiency’ (proxied by actual sales), the study also provides empirical support to the idea of institutional effects even in competitive settings (Baum & Oliver, 1996; D’Aunno, Succi & Alexander, 2000). Another important feature is the multi-innovation design, enabling the investigation of the different contagion mechanisms of legitimate and illegitimate innovations. Earlier institutional diffusion studies, for example the influential study of Tolbert & Zucker (1983), modeled a single contagion mechanism (proxied by the number of earlier adopters) for all adoptions as the indicator of institutionalized pressure to adopt. This study shows that while the contagion effect clearly is significant, it seems to work differently for legitimate and illegitimate products. With respect to the wider appreciation of how new ideas spread among organizations, the findings also provide empirical support for the arguments of Rumelt (1995) and Oliver (1997) for moderating the view of firms as keen imitators of everything possibly profitable. When observing competitive innovations in its environment, the ‘fit’ of the action with the prevailing institutional logic, as well as the degree to which the focal firm is institutionally embedded, will influence the propensity of the focal firm to imitate. This finding also has clear implications for the discussion on competitive ‘inertia’ of firms. While Miller & Chen (1994) investigated what made firms more or less competitively ‘inert’ in responding to competitors’ innovations, they did not consider the possibility that a firm could be differently ‘inert’ depending on how legitimate adoption of the particular action was in the context of the firm. In the present study, firms that were ‘inert’ in responding to the introduction of the Index/SRI funds were on the other hand likely to be very active in introducing the Mixed asset fund. In fact, some of the smaller firms in the industry claimed to use the ‘illegitimacy inertia’ of larger firms in imitating Index and SRI funds to gain a foothold in the market. Such behavior has been theorized earlier in strategic management research (Oliver, 1997; Rumelt, 1995) but empirical support has been scant (MacMillan, Mccaffery & Van Wijk, 1985). This study shows that institutional ‘markers’ can predict the competitive inertia of specific firms with reference to a specific competitive action, lending some credence to these theories.

The findings also, in part, support the findings of D’Aunno et al (2000) on the role of economic and institutional influences in the adoption of controversial organizational innovations. The present study, however, differs by studying the adoption of both legitimate and illegitimate innovations, enabling the investigation of the dynamics of competing innovations of differing economic relevance and institutional legitimacy. The ‘institutional effect’ on adoption behavior was observable only when investigating the spread of the illegitimate innovation. When investigating the spread of legitimate innovations, the standard economic diffusion model, based on relative efficiency, provided a good estimation. The current study also provides support for Davis & Greve (1997) who suggested that legitimate and illegitimate innovations spread through different contagion mechanisms, extending this their finding to innovations of which firms can judge the relative efficiency of earlier adoptions by competitors.

(References available from the author)