The Effectiveness of Business Codes: A Critical Examination of Existing Studies and the Development of an Integrated Research Model

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THE EFFECTIVENESS OF BUSINESS CODES:

A CRITICAL EXAMINATION OF EXISTING STUDIES AND THE DEVELOPMENT OF AN INTEGRATED RESEARCH MODEL*

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ABSTRACT

Business codes are a widely used management instrument. Research into the effectiveness of business codes has, however, produced conflicting results. The main reasons for the divergent findings are: varying definitions of key terms; deficiencies in the empirical data and methodologies used; and a lack of theory. In this paper, we propose an integrated research model and suggest directions for future research.

Business codes are a conspicuous feature of modern business organizations (Cowton and Thompson, 2000). Of the 200 largest companies in the world, 52.5 percent have a business code (Kaptein, 2004). Companies that do not have a code are increasingly prompted by their stakeholders or even forced by law to develop a code (Waddock et al., 2002). Companies that have a code have invested a substantial amount of time and money to develop and implement it (KPMG, 2006). As more and more companies develop their own code or are required to adopt a code, the more relevant it becomes to know what the effectiveness of a code is or could be.

Some scholars argue that companies should have a code for altruistic reasons, i.e. simply because it is the right thing to do (L'Etang, 1992), or because it is a way to demonstrate and manage its moral responsibility to contribute to the resolution of social problems (Logsdon and Wood, 2005). Many scholars stress the benefits of a business code for the company itself. Business codes preserve or improve the company's reputation (Bowie, 1990), decrease the amount in legal fines in case of transgressions (Pitt and Groskaufmanis, 1990), encourage the authorities to relax onerous regulations and controls (Clark, 1980), increase organizational efficiency (Mezher et al., 2002), and improve the work climate (Manley, 1991).

There are, however, also scholars who are vehemently critical of the value of business codes. Business codes undermine the responsibilities of employees and are accusatory, threatening and demeaning (Raiborn and Payne, 1990). Business codes do not influence behavior because as Ladd posits "those to whom it is addressed and who need it the most will not adhere to it anyway, and the rest of the good people in the profession will not need it because they already know what they ought to do" (1985: 11). Moreover, business codes are viewed as mere window-dressing (White and Montgomery, 1980), providing "superficial and distracting answers to the question of how to promote ethical behavior in corporate life" (Warren, 1993: 186), they make stakeholders more suspicious, cynical and distrustful (Dobel, 1993), cost more than they yield (Hess et al., 2006), and are less effective than sector codes or laws (McClintock, 1999).

The conclusions of many conceptual studies on the effectiveness of business codes thus range from largely counterproductive (Grundstein-Amado, 2001), ineffective (Ladd, 1985), often ineffective (Warren, 1993), insufficient (Kram et al., 1989), not enough (Hayman et al., 1990), not very effective (Robin et al., 1990), uncertain (Myers, 2003), doubtful (McCoy, 1985), little impact (Lere and Gaumnitz, 2003), and less effective than their proponents think (Doig and Wilson, 1998), to needed (Rezaee et al., 2001), necessary (Cooper, 1990), valuable (Wood and Rimmer, 2003), vital (Coughlan, 2005), invaluable (Sethi, 2002), effective (Clarkson and Deck, 1992), and successful (Dobson, 2005).

Because of the divergent and even conflicting conceptual views on the effectiveness of business codes, the question arises as to whether empirical studies can provide more clarity on the matter. The good news is that ample empirical studies have been conducted in this field. The bad news is that the results are also mixed. In this paper, we examine the sources of these confusing results. We will observe that these studies use a variety of definitions of key terms, methods, and samples. Based on this analysis, we present an integrated research model for assessing the effectiveness of business codes. First of all, we develop a definition of business codes.

BUSINESS CODES DEFINED

Business codes are not new. In fact, one of the fist textbooks on the topic, *Codes of Ethics*, by Edgar Heermance was published as early as 1924. However, confusion still exists on the precise nature of a business code. This confusion is, amongst other things, created by the different names that are used to refer to it, such as code of ethics (Cressey and Moore, 1983), code of conduct (White and Montgomery, 1980), business principles (Sen, 1997), corporate credo (Benson, 1989), corporate philosophy (Ledford et al, 1995), corporate ethics statement (Murphy, 1995), and code of practice (Schlegelmilch and Houston, 1989).

In this paper, we will use the concept "business code" to include all the different types of codes at the corporate level and to distinguish it from external codes as well as other internal codes. Many, if not most, studies in the field of business codes do not define their research topic (Gaumnitz and Lere, 2002). Nevertheless, there are still many definitions to choose from. To reduce the confusion, we will present a definition of business codes at the end of this section. To come to this, we will start by expounding the meaning of "code" and relate this to the concept of "business".

The concept "code" has at least two meanings. The first refers to a system that gives meaning to a series of symbols, signs, or signals such as Morse code, the binary code, and bar codes. The second meaning of a code refers to collections of rules and regulations. A code, ranging from school dress codes to elaborate civil law codes, generally signifies a written set of behavioral prescriptions (The Encyclopaedia Britannica, 1974).

The term "code of *business*" implies that the code is developed by and for a given company. Codes *of* business, i.e. micro-codes, are one of the layers of the whole "house of codes” *for* business consisting also of meso-codes, i.e. professional, industrial and national codes, and macrocodes, i.e., codes for business that are developed by international institutions (Kaptein and Wempe, 1998). Codes of business are a device for self regulation (Schwartz, 2001).

The notion of “business” also implies that the code applies to those who represent the company. A business code, as a formulation of behavioral prescriptions for doing business (Brooks, 1989), is for all those people that make the business work and run, which includes at least the management and employees of the company. A code for only one department or one stakeholder group cannot be regarded as a business code because they only apply to a part of the business; they are respectively a departmental code (Ferrell et al., 1998a) and stakeholder code (Kolk and Tulder, 2002).

The adjective “business” also implies that a business code prescribes, in a more or less coherent way, multiple behavioral items that are relevant for the company (Gaumnitz and Lere, 2002). For example, a code for the private use of the company’s Internet facilities cannot be regarded as a business code, but as a sub-code for one issue-or what Gaumnitz and Lere (2004) call a “vertical code”-because business conduct cannot normally be limited to the use of the Internet.

The behavioral prescriptions of a business code can have different objects and levels. The object can be internal, i.e., how management and employees should treat each other and company assets, and external, i.e., how they should act towards stakeholders (Mathews, 1987) and society in general (Ferrell and Fraedrich, 1994). The level of behavioral prescriptions can range from general to specific, i.e., from a mission statement or credo (Pearce and David, 1987), beliefs (Weber, 1993), principles (Frederick, 1991), values (Claver et al., 2002), and responsibilities (Langlois and

Schlegelmilch, 1990), to guidelines (Ethics Resource Center, 1990), procedures (Sikkink, 1986), standards (Ottoson, 1988), and rules (Weller, 1988).

While a distinction can be made between explicit and implicit codes (Weaver, 1993), a business code is, first of all, a distinct and formal (Molander, 1987) document (Weller, 1988). It is formal in the sense that to apply to management and all employees, the board as the highest corporate decision making authority, should approve it. On the other hand, the informal norms, although often strongly and deeply shared by employees, cannot be labeled–at least in this paper-as a business code, as it would both broaden and dilute the concept to such an extent that it would become synonymous with the ethical culture and climate of the organization (cf., Treviño and Weaver, 2003).

Regarding business codes, many scholars use the adjective "ethics" (e.g., Somers, 2001). According to Clark and Leonard (1998), the adjective "ethics" underscores the fact that the code is not just an instrument that serves the interests of the company, but that is has–or should have–a broader normative claim. We believe-in this paper at least-that the adjective "ethics" is superfluous. We define a business code as a set of behavioral prescriptions varying from rules to the firm's mission, which address multiple issues. Whereas "ethics", according to Velasquez (2005), stresses the fundamental interests that are at stake, thereby excluding dress codes and rules of etiquette, we believe that a business code already reflects these fundamental interests. Furthermore, by not including the adjective "ethics", the impossible task is avoided of judging whether codes are deployed to serve only the firm's interests or also other, non-instrumental interests (e.g., Robin et al., 1990).

In conclusion, we come to the following definition of a business code:

> A business code is a distinct and formal document containing a set of prescriptions developed by and for a company to guide present and fu-

ture behavior on multiple issues of at least its managers and employees toward one another, the company, external stakeholders and/or society in general.

EXISTING EMPIRICAL STUDIES

According to Cowton and Thompson (2000), the amount of empirical evidence that is available on the impact of business codes is very limited. Also Somers (2001) argues that there is a paucity of empirical research into the effectiveness of business codes. However, a thorough review of existing literature reveals at least 79 empirical studies that examine the effectiveness of business codes. The results of these studies, as presented in Table 1, are clearly mixed: 35% of the studies have found that codes are effective, 16% have found that the relationship is weak, 33% have found that there is no significant relationship, and 14% have presented mixed results. Only one study has found that business codes could be counterproductive.

Insert Table 1 about here

On the surface, these results are not very helpful in assessing the value of business codes. To find out what the real message of these studies is, we have to scrutinize the nature of these studies. In this section, we will examine whether the results of empirical studies on the effectiveness of business codes can be related to the particular definition of the business code and its aims, the sample on which the empirical findings were based, and the methodology which was employed.

Definitions of a business code. The way business codes are defined could influence empirical findings on their effectiveness. When codes are defined as descriptions of values and beliefs, researchers tend to look for other results than when a code is defined as a set of specific rules and standards. For example, Treviño et al. (1999) found that codes have little meaning. However, they referred to codes as codes of conduct, and based on that definition found that codes have little meaning unless organizations first clearly articulate their unique set of values. But other studies consider values as part of a business code (e.g., Kohut and Corriher, 1994) or even limit business codes to descriptions of values and principles (e.g., Valentine and Fleischman, 2002). Based on this latter view, some studies conclude that business codes are ineffective because of their vagueness (e.g., Finegan and Theriault, 1997), which is very plausible given that values are by definition vague. We, therefore, come to the following proposition.

> *Proposition 1:* The less clearly a "business code" is defined, the greater the fluctuation in empirical results of its effectiveness.

Definitions of the effectiveness of business codes. In even a greater number of studies than those where a definition of a code is lacking, a clear definition of the objectives of business codes is absent (Nakano, 1999). There is, for example, a huge difference whether in determining the effectiveness of business codes the code is supposed to reduce fraud (Rich et al., 1990) and child labor (Sajhau, 1998), or to improve corporate reputation (Ryan, 1994) and social diversity (Valentine and Fleischman, 2002). These objectives differ regarding their complexity and possibility of being influenced.

The more difficult it is to realize the objectives of a code, the greater the chance that it will be ineffective. For example, according to Stevens (1999), codes are successful when employees intuitively know what to do and act accordingly. If codes are considered successful only when these criteria are met, there is a lower likelihood that this will take place. Many scholars suggest after all that organizations can steer the conduct of employees to only a limited degree due to the many organizational stimuli that influence the conduct of employees (e.g., Treviño and Weaver, 2003). Therefore, we develop the following proposition.

> *Proposition 2:* The more ambitious the objectives of business codes, the less likely business codes will be considered to be effective.

Empirical basis. The empirical basis of existing studies which examine the effectiveness of business codes differs widely and so is the level of sophistication in the application of the methodology. In some studies the scope is limited to one organization. For example, Finegan and Theriault (1997) studied the impact of a code within one petrochemical company. Sims and Brinkmann (2003) examined Enron as a case to conclude that culture matters more than codes. Schwartz (2001) did research into four organizations and Treviño et al. (1999) into six organizations. Whereas Treviño et al. choose their organizations from different sectors, Murphy et al. (1992) limited themselves to the service industry. Almost all studies were conducted in one country, of which 83 percent of the studies were within the U.S. Only three studies took their sample from more than one continent (i.e., Diller, 1999; Rodríguez-Garavito, 2005; Sajhau, 1998).

Regarding the response group, many studies have been conducted among business students during their classes (e.g., Hegarty and Sims, 1979; Lazniak and Inderrieden, 1987; Weaver, 1995). Other studies used managers (e.g., Weaver and Ferrell, 1977), employees (e.g., Finegan and Theriault, 1997), professionals (e.g., Ferrell et al., 1998b), and stakeholders (e.g., Ryan, 1994). The sample size ranged from one company to 650 companies (Bowman, 1981), 17 questionnaires (Kitson, 1996) to 10,000 questionnaires

(Treviño et al., 1999), and the response rate from 9.5 percent (Valentine and Fleischmann, 2002) to 48 percent (Stevens, 1999). Valentine and Fleischman (2002) did not interpret their low response rate as a severe limit because they only found significant differences between early and late respondents for age and occupational experience, indicating that non-response bias was not a issue. However, a low response rate increases the chance for bias arising from non-response error (Harmon et al., 1994). To conclude, our third proposition reads as follows:

> *Proposition 3*: The smaller and less diversified the empirical basis for determining the effectiveness of business codes, the greater the findings will fluctuate.

Research methods. Much of the variance in the findings of empirical studies regarding the effectiveness of business codes could be explained by the use of different research methods.

Desk research. There are some studies which evaluate the effectiveness of business codes based on their content. For example Kolk et al. (1999) analyzed business codes on the level of detail and number of sanction mechanisms. Based on these two factors, they arranged companies according to their expected effectiveness, i.e. likelihood of compliance. Some studies assessed the extent to which business codes have adopted or absorbed existing rules and standards of meso- and macrocodes, such as Diller (1999) regarding labor laws and Kolk and Tulder (2002) regarding the UN declaration on human rights.

Laboratory experiments. Laboratory experiments are used in five studies. Hegarty and Sims (1979) wanted to evaluate unethical decision making behavior under different policy and environmental situations. They carried out an experiment in which 165 business students made a series of decisions related to paying a kickback or not in a simulated marketing decision task scenario. In the first group, the subjects were given a letter from the company president supporting ethical behavior. The second group also received a letter from the president, but it did not mention ethical behavior whatsoever. Ethical behavior was more prevalent among the participants in the first group than in the second group. Thus, the study concluded that organizational ethics policies significantly reduce unethical decision making behavior. Other experiments have been done by Clark and Leonard (1998), Laczniak and Inderrieden (1987), Weaver (1995), and Sanderson and Varner (1984).

Vignettes. Vignettes have been used in some studies into the effectiveness of business codes. The respondents were usually requested to select their preferred response to a set of hypothetical ethical dilemmas. For example, Marnburg (2000) tested differences in attitudes of employees in two groups of companies in Norway: those with and those without codes. He concluded that the empirical findings suggest that the existence of business codes did not have any attitudinal effects because the two groups did not respond differently to the presented dilemmas.

Perceptions about practice. Another frequently used method is to ask respondents about their perceptions of practice: 61% of the studies used this method. For example, Stevens (1999) asked 101 employees of two hotels regarding their learning about ethics from different sources and found that codes have no value if they are not supported by other measures. Singh (2006) asked 490 Canadian corporations whether the code of their company affected the bottom-line: 68 of the 100 respondents viewed the code as having a positive effect on profit. Adams et al. did some more sophisticated research. Their study included 766 members of the U.S. working population; 465 were working in a company with a code and 301 without a code. They asked their respondents for their perception of ethical behavior in their work environment and compared the two groups with each other. They concluded that “the existence of a corporate code of ethics affected both employee ethical behavior and perceptions of ethics in several ways” (2001: 207). Questionnaires are used in 84% of the studies on perceptions about practice, whereas 22% of the studies used interviews.

Objective data on practice. Four studies used more or less objective data on practice, such as the scale of misconduct, the frequency of civil actions, and the price of shares. One of the most elaborate studies was conducted by Mathews (1987). She analyzed 485 U.S. manufacturing companies in an attempt to find a possible relationship between codes and civil actions taken against these companies by four federal U.S. regulatory agencies between 1973 and 1980. Mathews found a slight but not significant impact of codes on illegal behavior.

Multiple methods. Empirical studies into the effectiveness of business codes usually only used one method. Four studies used multiple methods and sources. Snell and Herndon (2000) used interviews, document reviews and questionnaires. Ferrell and Skinner used questionnaires, interviews and panel sessions among 1,500 marketing researchers. Rodríguez-Garavito (2005) conducted a multi-sited ethnographical study with interviews with employees and external stakeholders and participant observation to examine the compliance with labor rights in anti-sweatshops. And Kaptein and Wempe (1998) used a questionnaire to measure the impact of the new code of the Dutch Schiphol Airport on the ethical work culture as well as an internal registration system on the scale of damage to corporate means. Six months after the introduction of the code, damage to corporate vehicles fell by 25% and the culture improved by 17% for uniformity, 19% for clarity and 21% for openness. Besides that of Murphy (2005) and Snell and

Herndon (2000), the research of Kaptein and Wempe is to date the only longitudinal study into the effectiveness of business codes. To conclude, we suggest the following proposition:

> *Proposition 5*: The greater the variety of research methods for determining the effectiveness of business codes, the more the findings will fluctuate.

To understand the mixed findings of studies into the effectiveness of business codes implies knowing how the code itself is defined, how its effectiveness is defined, and what the empirical basis and methodology consist of. We will give three examples of how this knowledge may improve our understanding.

First, studies among students appear to be more negative in their findings than studies among managers and employees. This may be explained by the fact that many studies using students focus on the extent to which respondents make ethical decisions immediately after reading a code, which is a rather simplistic approach to the way codes influence attitudes.

Secondly, questionnaires generally yield more positive results than other types of research. The results are especially positive when respondents are asked to give an indication of the effectiveness of codes in their organization or for business in general. For example, when the Ethics Resource Center (1980) asked managers about the extent to which they were satisfied about the code in their own company, 91% indicated they were satisfied. Brenner and Molander (1977) found in their survey of corporate executives that 41% of respondents believed that a business code leads to less unethical conduct. Bowman (1981) asked one respondent for each of the 650 companies he approached to indicate whether their own business code helps to ensure sound business conduct: the results were positive. The only exception is the study of Rich et al. (1990), in which corporate controllers and managerial accountants responded that they perceived no positive behavioral changes attributable to the adoption of a business code. These types of self-reported effectiveness surveys have a certain value but do not provide an adequate scientific basis for determining the effectiveness of business codes. Instead, they only really assess individual evaluations, an approach which lends itself to bias.

Thirdly, the theoretical frameworks scholars rely upon to study the effectiveness of codes may influence the way research is conducted. For example, the effectiveness of business codes has been studied from different theoretical perspectives, such as institutional theory (Weaver, 1995), contextual behavior perspective (Somers, 2001), organizational climate (Peterson, 2002), psychology (Finegan and Theriault, 1997), and information economics (Lere and Gaumnitz, 2003). Each of these frameworks may generate different definitions of business codes as well as what constitutes code effectiveness.

TOWARD AN INTEGRATED MODEL

There is a difference between examining whether business codes *are* effective or *could be* effective. This distinction runs throughout most empirical studies. Relating the question of the potential effectiveness, one example where a code is indisputable effective will help demonstrate this proposition. Whether codes are effective in practice is a much more complicated question because it needs to be proven every time for the population that is the object of research. However, in both cases, there needs to be an overall research model for measuring the effectiveness of business codes because there are many explaining, moderating, and mediating factors involved. In this section we develop such a model. Figure 1 presents the main factors.

Insert Figure 1 about here

As one layer of the house of codes for business, a business code has to be viewed in relation to possible external codes and internal sub-codes. Business codes are instruments to steer the conduct of management and employees and by doing so to have favorable consequences for the company, its stakeholders, and society in general. The extent to which a business code steers or potentially steers the conduct of management and employees depends on the process of developing the code, the content of the code itself, and the implementation of the code. The implementation of the code has to affect the individual characteristics of management and employees and/or the internal organizational context before it can affect their conduct. Environmental and corporate characteristics may influence the relationships and the results.

Expectations of stakeholders and meso- and macrocodes. The effectiveness of a business code has to be measured against the expectations of stakeholders and possible external codes for business. These expectations may guide behavior and determine what "effectiveness" means. Kolk et al. (1999) compared codes of firms with codes of social interest groups, business support groups, and international institutions. They suggest that effective business codes should be linked to other external codes. Stevens et al. (2005) found that financial executives are more likely to integrate their company's business code into their strategic decision making processes if they are under pressure from market stakeholders to do so.

Environmental and organizational characteristics. In order to properly study the effectiveness of business codes, external environmental factors such as industry, economic conditions and competition (Stead et al., 1990), should be taken into account as these factors may vary per company and subsequently may impact the effectiveness of business codes differently. According to Rezaee et al. (2001), societal ethical dilemmas will also have an impact on the effectiveness of any business code. Corporate characteristics may also influence the effectiveness of business codes (Weller, 1988). For example, Murphy et al. (1992) found that firm size was a moderately strong predictor of ethical behavior.

Objectives of the organization. The effectiveness of business codes needs to be measured against the objectives the companies have in mind with a code, because that may influence the way the code is formulated and implemented and to what extent the company itself regards the code as effective. For example, companies who would like to use a code to communicate existing rules have a different objective than companies who use their code to communicate their core values (Paine, 1994). Kaptein and Wempe (1998) compared the objectives of the company with the extent to which these objectives were realized, while Treviño et al. (1999) found that a key factor in the success or failure of an ethics program-including a business code-is employees' perceptions of management's objectives for the establishment of the program. In most cases, however, researchers made assumptions about the objectives of a code without involving its authors or decision-makers.

Development process. The approach followed in the development of a code can have an impact on its effectiveness. As a result, the effectiveness of a code can diverge even if two companies have an identical code that has been implemented in an identical way. The process of creating a code is potentially important for creating support for the code, in improving awareness, and stimulating a sense of ownership (Ethics Resource Center, 1990). For this reason, Kaptein and Wempe remark: “A code is nothing, coding is everything” (1998: 853). Murphy (1988) suggests that codes should also be revised periodically. Weller (1988) even considers a relationship between the frequency of revisions and the effectiveness of codes. To date, there is no empirical study which relates the impact of the code to the process in which the code has been developed and/or updated.

Content. Most studies simply focus on whether or not a company has a code, without taking the content of the code into consideration. For example, Valentine and Fleischman (2002) conducted a study into the impact of business codes on social diversity. But they did not examine whether the codes addressed the issue of social diversity and, if so, how it was addressed. The content of the code determines, however, its effectiveness (Weaver, 1995). To put it in extreme terms, a blank code will be devoid of any message. Also, a code which requires employees to engage in fraud and lie to stakeholders should be evaluated according indicators other than the mere existence of a code. Clark and Leonard (1998) found that variations in code design have some–although not statistically significant–impact on effectiveness. Based on that, they conclude that wording and content is perhaps not as important as the way in which the code is communicated. Adams et al. have a more extreme view in this regard: “…the mere presence of a code is more important than the content of the code per se” (2001: 208). However, that there are other important factors to be taken into account does not mean that content is not important.

Sub-codes. In addition to or even instead of a business code, behavioral prescriptions can be laid down in sub-codes. These sub-codes may influence the effectiveness of business codes as they extend the organizational expectations of the behavior of management and employees. Issues may also be addressed in sub-codes and not in the business code. These sub-codes may also have an impact on their own when for these sub-codes different implementation programs are in place. Furthermore, sub-codes can be perceived as underscoring the business code-i.e., the sub-codes give the business code "flesh on its bones"-or as undermining it-e.g., when the sub-codes contradict the business code. Therefore, to determine the effectiveness of a business code, the extent to which the code is elaborated on in sub-codes should be taken into account.

Implementation. Codes are presumably ineffective unless distributed to employees (Weaver et al., 1999). But even distributing a code is not sufficient because it does not guarantee that anyone reads it. Sims (1991) argues that employees must be familiar with the content of the code before the code can impact their behavior. For example, the Ethics Resource Center (1994) found that when the implementation of a code is not supported by other instruments, it had a negative effect on employee perceptions of ethical behavior in the workplace. The study found that when a code was supported by ethics training and an ethics office, it had a positive effect on employee perceptions. In sum, the manner in which a business code is implemented should be taken into account in determining the effectiveness of a code.

Personal characteristics. Personal characteristics of employees are also an important factor in examining the effectiveness of business codes. For example, as Treviño suggests "…individuals are less likely to follow the code when its expressed values conflict with their own" (1986: 722). Numerous studies have found differences in ethical decision making ability based on personal characteristics of employees, such as gender, age, nationality, educational level and religious background (O'Fallon and Butterfield, 2005).

Internal context. While Hegarty and Sims (1979) concluded that clear policies discourage unethical behavior, they noticed that a number of other elements of the internal organizational context also played a role, such as the presence of enforcement mechanisms. The importance of enforcement mechanisms is supported by the findings of a study by Laczniak and Inderrieden (1987) involving students in an in-basket exercise, which suggested that codes have an impact only if sanctions are attached. Falkenberg and Herremans (1995) also found that pressures in the informal system were dominant in influencing ethical decision making. A code could even have a reverse effect when employees perceive no support of management for the code. Employees may then see a code as a motion of non-confidence, window-dressing, or even as a back door for management in case of legal transgressions (Wood and Rimmer, 2003). Therefore, to measure the effectiveness of business codes, the existing internal organizational context, such as the corporate structure and culture, needs to be taken into account as an important factor.

Conduct and consequences. Given the purpose of a code, it should have an impact on at least the conduct of management and employees. This conduct can mainly have three types of effects, which lead also to three levels of effectiveness of business codes. Micro-effectiveness refers to the degree of convergence between the objectives the company has with its code and the consequences for the company. Meso-effectiveness refers to the degree of convergence between what stakeholders expect and the extent to which their expectations are realized. And macro-effectiveness refers to the degree of convergence between meso- and macrocodes and the social effects. When determining the effectiveness of a business code, these different levels should be taken into account.

IMPLICATIONS

To date no empirical study has been conducted that takes into account all the factors as presented in Figure 1, neither has one study been conducted that acknowledges this as a possible shortcoming. Some of the most self-reported shortcomings include: limited scope (Cowton and Thompson, 2000), an unrepresentative sample (Adam and Rachman-Moore, 2004), the use of just one measure (Sims and Keon, 1999), multiple interpretations possible (Sims and Keon, 1999), biased information (Stevens, 1999), lack of cross-sectional data (Weaver et al., 999), a unrealistic research setting (Weaver, 1995), and subjective reactions of respondents (Clark and Leonard, 1998). In this section, we will highlight five essential ingredients for doing promising research into the effectiveness of business codes.

Valid methodology. As the study of the effectiveness of business codes is very complex, researchers should be reluctant to draw hasty conclusions. In many studies of the effectiveness of business codes, it is a question whether what is really being measured and what should be measured. For example, as discussed in this paper, some studies measure the opinions of respondents on dilemmas. However, Finegan and Theriault (1997) note that two individuals faced with the same dilemma might perceive this situation differently and consequently make different judgments about the applicability of business codes. Based on the different interpretations of the situation, different interpretations may take place of the different results. Therefore, researchers should in this type of research also ask their respondents–which has not been done so far-about how they perceive the situation and what weight they give to the different presented arguments and options.

Sufficient control variables. It is important that researchers who study the effectiveness of business codes are aware of what they are studying and what they are *not* studying regarding the factors as depicted in Figure 1. The message of this paper is that including too few factors in the research scheme will leave too much room for intervening factors, which will affect the validity of the findings. The study of Farrell et al. (2002) is one of the most promising research designs. Eight companies participated in their study. In total 25 managers and 545 employees returned a questionnaire which generated about 40 behavioral patterns. One person per company also filled in a questionnaire about the existence of a code, its distribution and sanctions applied. The empirical findings showed that there was no discernable association between the consistency of the observed behavioral patterns among employees and the presence of a business code. They concluded that not less than 60% of the variance in ethical behavior came from an external, shared environment. However, the result that 60% of the variance could not be linked to the existence of a code, its distribution and the sanctions applied is not to say that it is related to a common external factor. A variety of other internal factors could explain the results. By not including sufficient control variables, the results of the studies become problematic.

Different impacts. It is also important to pay attention to the different sort of impact different organizational factors can have on the behavior of employees. That some factors may have a greater impact than others, does not mean that the factors that do not have the highest impact are not relevant. This assumption appears to exist in certain studies. For example, in the study of Ford et al. (1982), respondents were divided into two groups. Both groups were presented with a scenario where their immediate boss made a major calculation error in a report that had already been signed by his superior. The difference between the two figures was that the real figures showed that the project would only break even and not make a substantial profit; whereas the boss' figure showed a major profit for the project. Nevertheless, the boss asked that the respondent sign his version of the report and destroy the real figures. The first group was told that the business code had no specific provision for a situation like this. The second group was told that the code provided for such a situation, granting amnesty for the employee who told the boss' superior the truth. The study found that there was only a 3% difference between the decisions of the two groups. On the basis of this, Ford et al. concluded that codes are not really effective. But in this case, they only demonstrated that the influence of the manager is greater.

Proving causality. Although Mathews (1987) tried to take into account several confounding factors in her study-like the percentage of 64 possible issues addressed in the sample codes as well as retarding time effects–the question remains as to whether this study can produce a valid answer to the effectiveness of business codes. The assumption that companies with codes will less frequently violate laws is not valid. Companies will have additional reasons for developing a business code when they face the threat of legal action. On the other hand, companies with a business code might be an easier target for regulatory agencies. So what is the cause and what is the effect?

Rayan (1994) conducted a somewhat similar study in England. He examined the extent to which reputable companies possessed a code. He found that there was no relationship between company reputation and having a code. But the question is whether a code did actually help these companies to improve their reputations or decrease the number of legal violations. So in order to find out whether codes are effective, it is usually better to do a longitudinal study instead of comparing some indicators of companies with and without a code.

A substantial time frame. Implementing and embedding a business code is a long term process (Treviño et al., 1999). To measure the effectiveness of a business code, the results should be expected in the longer term, meaning real effectiveness can only be determined after a longer period. On the other hand, Webley has observed: "Many companies have found that after the first enthusiasm has diminished, it is hard to sustain the code as an important part of the company's culture" (1988: 15). So, measuring the effectiveness of business codes shortly after the introduction could also give a too rosy picture. Therefore, on the level of individual companies, a substantial time frame with multiple moments of measurement is essential to assess the effectiveness of business codes accurately.

And now?

For future research into the effectiveness of business codes, we propose that the factors depicted in Figure 1 are included as dependent, independent or control variables. We also propose to draw a distinction between measuring the actual and potential effectiveness of business codes. Despite our criticism on existing studies we do not deny the complexity of assessing the effectiveness of business codes. We also do not deny the great efforts of researchers to examine the effectiveness of business codes. We do however believe that, given the number of studies already conducted, the time has come to improve the quality of empirical studies into the effectiveness of business codes.

Although this is a difficult task, it is not impossible. The best way to proceed would be to use multiple companies in which the factors of Figure 1 are longitudinally measured before and after the introduction of the business code. If a company has already implemented its business code, the effectiveness could be measured by filling in the factors of Figure 1 for each department and trying to explain the different results. Multiple methods and sources of data should be used in order to circumvent the pitfalls that are discussed in this paper.

Implications for Practice

For companies that have a business code, it is relevant to know whether these codes are effective. These companies are also increasingly required–for example in the Sarbanes-Oxley Act–to monitor and report on the effectiveness of their business code. For boards and management, this paper has the following six-fold message. First, business codes, as one layer of the house of codes for business, should be regarded as a part of a broader program for managing conduct and stakeholder relationships. A code is not an instrument that stands in isolation of others and it could even be said that in and of itself it is meaningless: the process of developing and implementing is pivotal. Second, the effectiveness of business codes will depend on many mediating and moderating factors that may vary even within one organization; effectively developing and implementing a business code requires taking these factors into account in each individual division. Third, a distinction should be drawn between the quality of a business code-the judgment about its content-and the effectiveness of a code-the judgment about the impact of its content. Fourth, the content of a business code is the basis for determining the indicators for measuring its effectiveness: the behavior that is addressed in the code is that behavior that is expected. Fifth, in order to measure the effectiveness of a business code, management should take into account the factors that are presented in this paper. Finally, measuring the effectiveness of a business code requires multiple methods and sources of data.

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BIO

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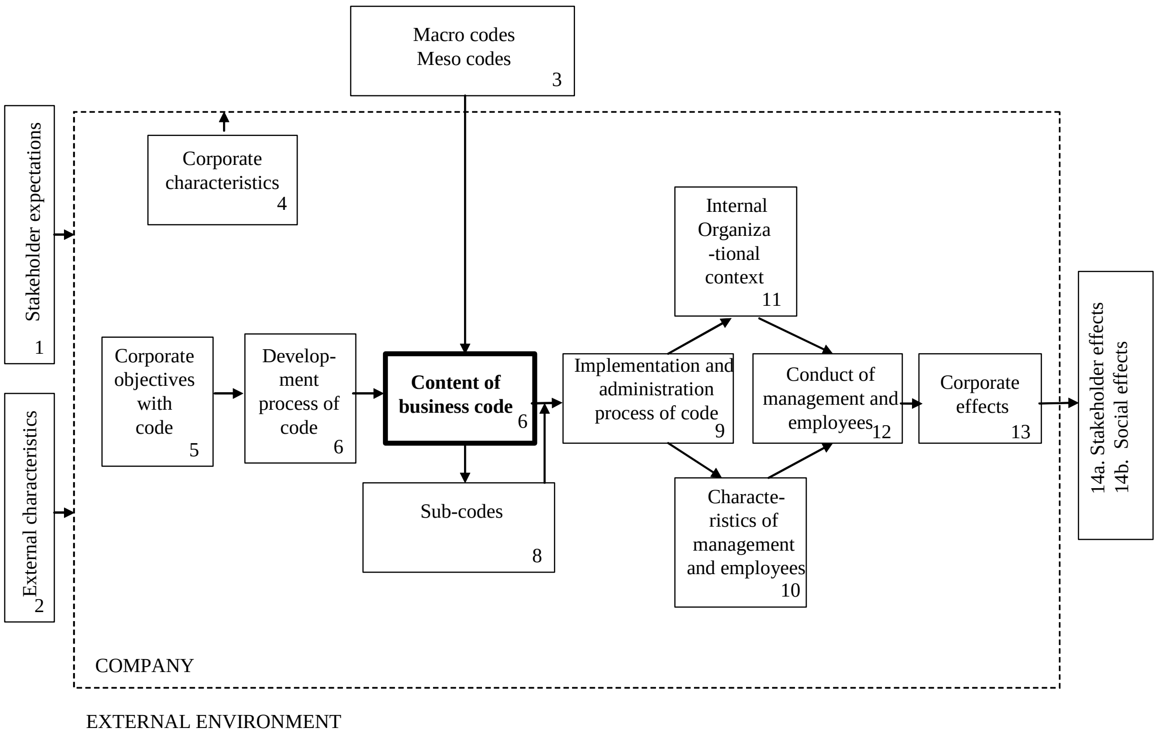
Table 1. Findings of existing empirical studies into the effectiveness of business codes

Type of relationship	Empirical Study
Significant positive relationship	Adams et al., 2001; Barnet et al., 1993; Beneish and Chatov, 1993; Bowman, 1981; Cassell, Johnson, and Smith, 1997; Chonko, Wotruba, and Loe, 2003; Embse et al., 2004; Ferrell and Skinner, 1988; Finegan and Theriault, 1997; Hegarty and Sims, 1979; Kaptein and Wempe, 1998; McCabe et al., 1996; Nakano, 1997; Nakano, 1999; Peterson, 2002; Pierce & Henry, 1996; Pierce and Henry, 2000; Rich et al., 1990; Sajhau, 1998; Sims and Keon, 1999; Singhapakdi and Vitell, 1990; Stevens, 1999; Touche Ross, 1988; Treviño et al., 1998; Valentine and Barnett, 2004; Valentine and Fleischman, 2002; Weaver and Ferrell, 1977; Weaver et al., 1999a.
Weak positive relationship	Badaracco and Webb, 1995; Beets and Killough, 1990; Bruce, 1994; Dubinksy et al., 1992; Mathews, 1987; Murphy et al., 1992; Peppas, 2003; Schwartz, 2002; Stevens et al., 2005; Stohs and Brannick, 1999; Valentine and Barnett, 2002; Weaver, 1995; Weeks and Nantel, 1992.
No significant relationship	Akaah and Riordan, 1989; Allen and Davis, 1993; Ashkanasy et al., 2000; Brief et al.,1996; Cabral-Cardoso, 2004; Callan, 1992; Chonko and Hunt, 1985; Cleek and Leonard, 1998; Cowton and Thompson, 2000; Diller, 1999; Farrell et al., 2002; Ford, Gray, and Landrum, 1982; Harker and Harker, 2000; Healy and Iles, 2002; Hume et al., 1999; Hunt et al., 1984; Kohut and Corriher, 1994; Marnburg, 2000; Mathews, 1987; McKendall et al., 2002; Montoya and Richard, 1994; Rodríguez-Garavito, 2005; Ryan, 1994; Sims and Brinkmann, 2003; Snell and Herndon, 2000; Stevens, 2004; Treviño et al., 1999.
Mixed results	Adam and Rachman-Moore, 2004; Brenner and Molander, 1977; Higgs-Kleyn and Kapelianis, 1999; Kitson, 1996; Laczniak and Inderrieden, 1987; Mathews, 1987; Mitchell et al., 1996; Peppas, 2003; Rodríguez-Garavito, 2005; Singh, 2006; Somers, 2001; Schwartz, 2004.
Negative relationship	Ethics Resource Center (1994)

Figure 1. An integrated research model for the effectiveness of business codes



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