Corporate Social Responsibility: Can Markets Control?

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Abstract

Do consumers have power to impose social responsibility on corporations? The paper derives conditions for equilibria where the code of ethical conduct of firms is dominating, diverse or non-existent. Somewhat counterintuitively, ethical conduct may arise as prisoners' dilemma under Cournot output competition (though not under price competition). Disappearing transparency shakes the image of firms. The working conditions of labor need not deteriorate when consumers pay due attention to the firms' image. The question of socially optimal corporate culture is discussed and put into perspective.

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1 Introduction

Milton Friedman (1970): "There is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud".

The above widely cited argument by Milton Friedman and echoed by the recent issue of Economist (2005) apparently is based on the concern that a firm spending its money inefficiently will ultimately make a loss and is driven out of business. Our paper critically evaluates such a concern. The stated normative argument has the flavor that it is developed from the perspective of a firm which is rather autonomous and immune to social norms and people’s moral sentiments. The principle it suggests appears to be developed in the fictitious neoclassical world with perfect markets and with no links to ethical values. Instead, the current paper builds a world where consumers not only care for the products but also for how they are produced. We ask to what extent and under what conditions consumers equipped with moral preferences are able to control firms’ strategy choices, whether there are markets for morality in the sense that moral principles can be priced in markets, and whether consumers’ values can steer corporate cultures and their success.

Such issues arise particularly in a context where the products of different producers are rather homogeneous by quality and where the corporate image, i.e. the quality of the corporate culture, therefore tends to play an important role in guiding consumers’ choices. Take a few examples. Today, consumers can buy in a grocery two types of coffee, say. One type is the regular coffee. The other type, call it a fair trade coffee, is a perfect substitute but is more expensive because the firm (delivery chain) commits to a higher cost guaranteeing the original producer a fair compensation. Firms selling the fair trade coffee have a better image than the firms selling only regular coffee. Other examples include a commitment to produce agricultural products without chemical fertilizers. Or, a mother company can provide an effort to control for the employment of child labor by its foreign subsidiaries. Cases where consumers characterized by moral preferences punish firms behaving badly are numerous.

Building up a corporate culture with a code for an ethical conduct typically is costly. It represents a commitment strategy which distances from the temptation to take an advantage of some short-term profitable opportunism at the expense of some stakeholders. The idea of costly corporate culture is in line with empirical observations on how much money firms spend on their image in mass media. In their internet home pages, they advertise their charity and financing of social projects which have nothing to do with their core business areas. We consider the question whether the firms with a costly ethical conduct can survive. We also consider the case where the firm’s commitment cannot be perfectly monitored. The image building is subject to moral hazard when the investment is not fully transparent. Consumers filter market information, update their estimates of the firms’ images but they do not observe the true...
corporate culture if information is asymmetric. Window dressing causes signal jamming. For example, the Enron company was known for its strong principles. Yet, it cheated all of its stakeholders. Several other corporate scandals were revealed in the US in 2002, including Worldcom, Merck and AOL Time Warner. Also the Finnish paper producer, UPM-Kymmene was known for its high-quality principles. Its image was sound. Yet, it turned out to be a partner in a secret price cartel.

The paper takes the view that commitment to social responsibility is a costly strategy but one which strengthens social norms in the society. It operates like a positive externality. Firms’ image may also be hurt by its policy relative to its stakeholders. We raise the question whether markets provide a disciplinary mechanism for corporate strategies also in their employment policy.

It has been argued by Shleifer (2004) that erosion of corporate ethics may result from intensified competition instead of greed. It is the competition which reduces firms’ willingness to pay for ethical conduct, because competition drives down prices and entrepreneurs’ incomes. An opposite view is taken by Hörner (2002) who claims that markets’ response in terms of reputation helps to maintain corporate ethics.

Capitalism has created more wealth and prosperity than any other economic system. The degree of trust in capitalist economies is substantial, going far beyond that of, say almost any other known economic and social systems. However, some of its mechanisms and outcomes are regarded unfair in the common opinion. Capitalist economic systems indeed are characterized by different faces, like Janus, the Roman god of gates and doors, beginnings and endings, and hence represented with a double-faced head, it looks in opposite directions. On the other hand, the complexity of transactions, markets and contracts has opened a variety of new avenues to exploit the opportunities. Consequently, discussion about corporate culture and corporate social responsibility is topical. Enhanced global competition adds to its relevance. Increased information dissemination via TV and internet helps to judge economic cultures in trade but the informational barriers are never fully overcome.

As suggested by Frank (2004) there are several mechanisms whereby a firm that incurs additional costs going beyond what is required by law is nonetheless able to prosper in competition with more opportunistic rivals. The mechanisms discussed by Frank operate against exploitation of short-run benefits, facilitating longer-term repeated interactions and survival of commitment to rules. With the rise of globalization, the restructuring of corporations, labor firings, and environmental problems, Frank’s analysis provides a different answer to the challenging issue of corporate social responsibility.

It is, however, not a trivial matter to extend such an analysis to the area of appropriate incentive schemes for corporate managers. Tirole (2001) has convincingly argued that such schemes, when linked to the welfare of various stakeholders, probably would ruin the economic life of corporations. There is

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1 Nonetheless, given that ethical conduct is a normal good, it is suggested by Shleifer (2004) that competition tends to be good for ethical norms in the long run, because competition promotes income growth.
evidence for that building better relations with primary shareholders leads to improved shareholder value, while social issue participation is negatively associated with shareholder value, see Hillman and Keim (2001).

We contribute in terms of consumer power. It is increasingly recognized among economists that the homo oeconomicus cannot be a complete description of a human being. The other side of the coin is the homo moralis living in us. People take strong positions relative to fairness (Frank (2004)). Moral feelings enter their preferences (Hausman and McPehrson (1993)). Homo moralis does not only look into market prices but may be sensitive to immorality, cheating and unfair actions. One of the key aspects is that market processes do not operate through prices and quality only, but also through the beliefs on quality and corporate culture. Corporate image is an important element determining the consumer loyalty and willingness to pay (Hörner (2002)). When products are similar, the image of the producing firm tends to have a greater impact on consumers' choices. This also makes advertisement an important instrument in corporate strategy choice.

The current paper takes the view that business survival is indeed subject to Darwinist evolutionary processes which harshly punish unprofitable firms. It examines the effects of a move from less competition to more intense competition. Two firms operate in the market. At the first stage, firms choose their ethical code. At the second stage, a competitive process occurs. The paper asks whether markets can provide a disciplinary control mechanism for firms. In particular, it addresses the issue whether high-quality corporate culture can represent a competitive advantage instead of a competitive disadvantage. With homogeneous products, increased competition emphasizes the role of image building in business survival. The paper derives conditions for equilibria where the code of ethical conduct of firms is dominating, diverse or non-existent. Somewhat counterintuitively, ethical conduct may imply a prisoners' dilemma under Cournot output competition though not under price competition. Disappearing transparency shakes the image of firms but need not reduce social capital. The working conditions of labor need not deteriorate when consumers pay due attention to the firms' image. The question of socially optimal corporate culture is discussed.

The paper is structured as follows. Sections 2-4 introduce our model with consumers having heterogeneous code of ethical conduct and we discuss the potential market equilibria when firms can choose their ethical conduct. The effects of disappearing transparency are examined in Section 5. The link between worker externality and markets’ reactions is examined in Section 6 and the socially optimal corporate culture in Section 7. The final section concludes.

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2 We would like to highlight the work by John Ruskin (1819-1900), an English critic and social theorist who not only revolutionized art history but proposed a positive program for social reform. He was an early writer on the quality of labour in his *Unto This Last* (1962). He was one of the first to propose that consumers' values can have an impact on how production and the input of labor is organized. The authors are grateful to Manfred J. Holler for pointing out this historical reference.
2 Model

We consider imperfect competition in the vertical product differentiation model introduced by Mussa and Rosen (1978). The model is also related to the classic Brander and Spencer (2003) approach on R&D competition. This framework is particularly appropriate as entry is a secondary issue in the current context. There are two firms \( a \) and \( b \). They produce products which are perfect substitutes for the consumers in terms of their physical characteristics. The choice of status of a firm with a code of high ethical conduct is costly, requiring an investment \( k > 0 \). In most of what follows, the investment \( k \) is assumed to be a credible signal to the consumers of the firm's type. We motivate the cost of ethical conduct as follows. A choice by the firm of its corporate culture is viewed to represent a long-term commitment whereby the firm abstains from short-term profitable opportunism arising probabilistically and leading to access of with short-sighted gains. Thus the cost of status can be presented as \( k = \alpha s \) where \( 0 < \alpha < 1 \) is the probability of a short-term gain, \( s \).

We assume in most of what follows that the firm \( a \) is the low-cost firm while the firm \( b \) is the high-cost firm, \( k_a < k_b \). Occasionally, we assume that both face same costs, \( k_a = k_b \). Firms choose their type ex ante. They may target the image of a firm with a code of ethical conduct or, alternatively, a firm with no ethical code. We characterize the first firm as type \( H \)-firm and the second as type \( L \)-firm. As the ethical codes chosen by the firms are denoted by \( H, L \), profits are thus presented as \( \pi_a^{HL}, \pi_b^{HL} \) if firm \( a \) chooses to have the ethical code while firm \( b \) does not. The structure of market equilibrium may have both firms having the ethical conduct (\( HH \)), having one firm with it and one with no ethical conduct (\( HL \)), or having two firms with low ethical conduct (\( LL \)). The case where firms do not commit to their announced type, will be discussed later in the paper.

The mass of consumers is scaled to one. Each consumer buys at most one unit of the good. Consumers are indexed by \( x \in [0, 1] \) with respect to their basic willingness to pay in decreasing order. Consumer \( x = 0 \) is endowed with the highest willingness to pay, \( \beta_0 \); consumer \( x = 1 \) has a zero willingness to pay. The willingness to pay by the rest of consumers is uniformly distributed on \((0, \beta_0)\). Consumers also value the producers’ image. They are heterogeneous in that regard. If a firm adopts the code of ethical conduct, the consumers’ willingness to pay for its product is greater and is assumed to be uniformly distributed on \((0, \beta_1)\), \( \beta_1 > \beta_0 > 0 \). We assume that the ratio between the valuations is equal across consumers. This implies that a consumer with low basic willingness to pay for the product also values little the image of the producer. In a sense, the degree of self-respect of consumers is related to the difference \( \beta_1 - \beta_0 \). Our approach is a formalization of the sociological theory of self-esteem. Cf. Franks and Marolla (1976) who conceptualize self-esteem in terms of the individual’s self-respect.

[3] It is not the case that altruism will always represent a costly sacrifice. Frank (1987) has argued that the ability to commit to cooperation results in mutual gains.

[4] The model can be extended to the case where the consumers’ valuation is related to the investment, \( k \), undertaken by the firm.
feelings derived from his own perceptions and appraisals of significant others in the form of social approval. We notice, however, that there is nothing in the model which would guarantee that the consumers’ values were universally acceptable. We recognize that it remains an open issue whether we can trust on markets in formation of values.

In the current section, we assume that the consumers are able to identify the type of the firm. They have the power of punishing the firm having chosen no ethical conduct by committing to pay a price premium on the product of the firm with a high ethical conduct. In the spirit of Katz and Shapiro (1985) and Shy (2001, p. 20), we consider equilibria in which consumers’ expectations are fulfilled.

Using our assumptions, the consumers can be ordered along a declining linear demand curve. Denoting the net utilities (indirect utilities) from the product of the $H$–firm and of the $L$–firm, respectively, by $u^i, v^j$ for consumers $(x_i, x_j)$, we have

$$u^i = \beta_1(1 - x_i) - p_H, \quad v^j = \beta_0(1 - x_j) - p_L, \quad \beta_1 > \beta_0 > 0.$$  \hspace{1cm} (1)

where $p_H, p_L$ are the prices (yet to be determined).

In a sense, all consumers in our model ex ante prefer the ethical firm over the non-ethical one though to a varying degree. They are all entitled to a higher utility when buying at the $H$–firm. However, their actual decision is affected not only by their preferences but also by the market prices. The consumer loses the extra self-respect open to her if she buys the product of the firm with no ethical conduct.

The time line of the model is as follows. There are two stages. Before the market game opens, firms undertake in stage one, a cost-benefit analysis of their desired type. At stage two, firms compete for customers in the market place and their profits are realized.

If $k$ is the same for both firms, the market equilibrium can apparently be expected to be of two types: either both firms become an $H$–firm, or both become an $L$–firm. We, however, suggest that also a mixed equilibrium can arise. An equilibrium with both types can arise particularly if the costs of investment differ. The model is solved backwards as we look for the sub-game perfect Nash equilibrium. In this section, we consider the potential equilibria in stage two. Then we resume to the stage one to analyze whether the resulting outcome can be of the prisoners’ dilemma type.

2.1 Potential Equilibria

Market equilibrium with two types of producers. Suppose that we have an equilibrium with two types of firms, one of $H$–type and one of $L$–type.\(^5\) Their profits, respectively, are

$$\pi_a^{HL} = p_H x_H - k_a, \quad \pi_b^{HL} = p_L x_L,$$  \hspace{1cm} (2)

\(^5\)We notice that also the entrepreneur can have self-respect, implying that $k$ could be interpreted as the net cost of adopting the code of ethical conduct.
as the firm lacking the ethical conduct does not incur the extra cost. The outcome is asymmetric and consumers are segmented.

There are two marginal consumers. We identify by \( x_m \) the marginal consumer who is indifferent between buying the product of the \( H \)- and \( L \)-firm, and by \( x_n \) the marginal consumer who is indifferent between buying the product of the \( L \)-firm and none. We expect that in the industry equilibrium, there will be segmentation of markets, i.e. those consumers with a high marginal utility (willingness to pay) will buy from the \( H \)-firm while those with lower marginal utility buy from the \( L \)-firm. The consumers are found on the declining demand curve. Thus the marginal utility for a consumer, \( x_i \), buying from the \( H \)-firm is \( \bar{\beta}_1(1 - x_m) \) where \( 0 \leq i \leq m \). The marginal utility for consumer \( x_j \), buying from the \( L \)-firm is \( \beta_0(1 - x_j) \) where \( m \leq j \leq n \). Subtracting the prices, it holds for the marginal consumers,

\[
\beta_1(1 - x_m) - p_H = \beta_0(1 - x_m) - p_L, \quad \beta_0(1 - (x_m + x_n)) - p_L = 0.
\]

As negative prices are excluded (\( \beta \)-firms cannot make negative profits), it follows that \( 0 \leq x_m + x_n \leq 1 \), \( 0 \leq x_m \leq 1 \), \( 0 \leq x_n \leq 1 \). The market prices then satisfy

\[
p_L = \beta_0(1 - (x_m + x_n)), \quad p_H = \beta_1(1 - x_m) - \beta_0x_n.
\]

Therefore, the price of the \( H \)-firm thus exceeds the price in the \( L \)-firm, \( p_H - p_L = (\beta_1 - \beta_0)(1 - x_m) \). Note that the number of buyers from the \( H \)-firm and \( L \)-firm, respectively, are \( x_H = x_m, x_L = x_n \).

The profits are

\[
\pi^H_a = [\beta_1(1 - x_m) - \beta_0x_n]x_m - k_a; \quad \pi^H_b = \beta_0(1 - (x_m + x_n))x_n.
\]

Suppose that the participation constraints \( \pi^H_a \geq 0, \pi^H_b \geq 0 \) are satisfied requiring \( k_a \leq [\beta_1(1 - x_m) - \beta_0x_n]x_m \). Consider the Cournot-Nash equilibrium obtained from reaction functions

\[
x_m = \frac{\beta_1 - \beta_0x_n}{2\beta_1}, \quad x_n = \frac{1 - x_m}{2}.
\]

The market shares are

\[
x_m = \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} > x_n = \frac{\beta_1}{4\beta_1 - \beta_0}.
\] (3)

Prices can be solved as

\[
p_H = \frac{\beta_1(2\beta_1 - \beta_0)}{4\beta_1 - \beta_0} > p_L = \frac{\beta_1\beta_0}{4\beta_1 - \beta_0}.
\] (4)

Several results are at hand. In particular, there is a price premium on the product of the firm with a code of high ethical conduct,

\[
p_H - p_L = \frac{2\beta_1(\beta_1 - \beta_0)}{4\beta_1 - \beta_0} > 0.
\]
The firm with an ethical code is able to take an advantage of those consumers who pay attention to its image. From another angle, consumer morality is priced in the market. Moreover, the ethical firm also has a greater market share, \( x_m > x_n \). Its market share is positively related to the consumers’ ethical aspiration while the market share of its rival is affected adversely, \( \partial x_m / \partial \beta_1 > 0, \partial x_n / \partial \beta_1 < 0 \).

When both firms are in the market and we have a mixed equilibrium, the profits are

\[
\pi_a^{HL} = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - k_a, \quad \pi_b^{HL} = \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2.
\]

To constitute a market equilibrium and given the strategy of the other firm, neither firm can increase its profit by switching to the role of its rival. Those conditions will be considered below.

We notice that there is a special case where a mixed equilibrium arises even when \( k_a = k_b = k \). When \( k = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 \) we find that firms are indifferent between their roles in the market as long as they adopt different roles.

**Market equilibrium with both firms having the ethical conduct.** We next consider the case where it is sufficiently inexpensive for both firms, firm \( a \) and firm \( b \) have adopted the ethical conduct, yet \( k_a < k_b \).\(^6\) This means that firms operate as a symmetric duopoly. We consider a Cournot game.\(^7\) Consumers face two equivalent products. The marginal consumer, this time say \( x_n \), again faces a condition that his net utility is zero, as his alternative is to abstain from consumption. There can be only one market price, say \( p \), in equilibrium.

It holds for the marginal consumer

\[
\beta_1 (1 - (x_a + x_b)) - p = 0
\]

The profits are

\[
\pi_a^{HH} = [\beta_1 (1 - (x_a + x_b))] x_a - k_a; \quad \pi_b^{HH} = [\beta_1 (1 - (x_a + x_b))] x_b - k_b
\]

and the outputs can be solved as

\[
x_a = \frac{1}{3} = x_b. \quad (5)
\]

Solving for the market price

\[
p = \frac{1}{3} \beta_1, \quad (6)
\]

\(^6\)In the section below, we consider the case where both firms will have an ethical code because of prisoners’ dilemma.

\(^7\)Bertrand price competition would ruin firms profits though both firms may survive. We consider this case in the sequel.
we find an interesting outcome. When both firms have adopted the ethical code, the ethical aspiration of consumers does not have any impact on how many consumers actually buy. Consumers’ ethical preferences are fully capitalized in the market price; the firms exploit the consumers’ willingness to pay for their ethical image and the profit levels satisfy

\[ \pi_a^{HH} = \frac{1}{9} \beta_1 - k_a, \quad \pi_b^{HH} = \frac{1}{9} \beta_1 - k_b. \]

A necessary (but not sufficient) condition for the case \( HH \) to constitute a market equilibrium is that

\[ k_b \leq \frac{1}{9} \beta_1. \]

If this condition is satisfied, we can have two firms with an ethical code and still making profit. We also notice that when both firms can commit to an ethical conduct, all consumers pay a lower price than paid by the buyers of the firm with an ethical conduct in the case of mixed equilibrium since

\[ p_H = \frac{\beta_1(2\beta_1 - \beta_0)}{4\beta_1 - \beta_0} > \frac{1}{3} \beta_1 \]

for all \( \beta_1 > \beta_0 \).

**Market equilibrium when neither firm has ethical conduct.** When consumers pay no premium on the ethical code, the price is determined from

\[ \beta_0(1 - (x_a + x_b)) - p = 0. \]

This time profits are \( \pi_a^{LL} = [\beta_0(1 - (x_a + x_b))]x_a; \pi_b^{LL} = [\beta_0(1 - (x_a + x_b))]x_b. \)

Again outputs and the market price are \( x_a = \frac{1}{4} x_a, p = \frac{1}{4} \beta_0. \) Thus, profits \( \pi_a^{LL} = \pi_b^{LL} = \frac{1}{4} \beta_0 \) are lower than in the previous case.

## 3 To Be or Not to Be?

So far, the industrial structure was taken as given. In the initial stage, firms rationally anticipate the market outcome and make the choice of their ethical conduct. A priori, it is possible that no firm wants to have an ethical conduct, one firm wants while the other does not, or both want. The outcome depends on the firm-specific cost of adopting such a code and the consumers’ aspirations. We ask whether competition for customers can imply a prisoners’ dilemma: if one adopts the code, it is better for the other one to follow, even if both end up having a lower profit?

We first summarize the above findings on profits under different industrial structures:

\[ HH : \quad \pi_a^{HH} = \frac{1}{9} \beta_1 - k_a, \quad \pi_b^{HH} = \frac{1}{9} \beta_1 - k_b \]

\[ HL : \pi_a^{HL} = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - k_a, \quad \pi_b^{HL} = \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 \]

(7)
Our task is to find out the conditions as to what strategy combination can possibly represent an equilibrium. Mixed strategies are excluded as the $k$-investment is assumed to be observable. The a priori intuition is that $HH$ can arise if $k_a, k_b$ are small while $LL$ is expected to arise if $k_a, k_b$ are large. However, one has to be careful with intuition as firms’ production choices determine their profitability and thereby interact with their ethical code. Our approach is to start with the $LL$—case and ask whether it is profitable to switch from $LL$ to $HH$ or $HL$.

In $LL$, profits are $\pi_a^{LL} = \pi_b^{LL} = \frac{1}{9}\beta_0$. Suppose that one of the firms is a candidate to be of $H$—type. It has an incentive to switch its type while the other firm stays as a firm of $L$—type if the following two conditions are met

\[ \pi_a^{HL} = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - k_a > \frac{1}{9}\beta_0 \Rightarrow k_a < \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - \frac{1}{9}\beta_0, \]

\[ \pi_b^{HL} = \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 > \frac{1}{9}\beta_1 - k_b \Rightarrow k_b > \frac{1}{9}\beta_1 - \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2. \]

The additional requirement is that $k_a < k_b$. These are the necessary and sufficient conditions for a mixed $(H, L)$—equilibrium. To establish that a mixed equilibrium is possible, it is sufficient to produce just one example. Take $\beta_0 = 1, \beta_1 = 2$. Having $k_a < \frac{113}{441}$ and $k_b > \frac{113}{441}$ satisfy all three stated conditions.

Consider next the conditions for the case where both firms have an incentive to switch to an $H$—type. These conditions are

\[ \pi_a^{HH} = \frac{1}{9}\beta_1 - k_a > \frac{1}{9}\beta_0 \Rightarrow k_a < \frac{\beta_1 - \beta_0}{9}, \]

\[ \pi_b^{HH} = \frac{1}{9}\beta_1 - k_b \geq \frac{1}{9}\beta_0 \Rightarrow k_b < \frac{\beta_1 - \beta_0}{9}. \]

When these conditions are satisfied, we have an equilibrium with two firms with an ethical code.

To summarize, firms’ choice of their code of ethical conduct depends both on the cost of the code and on consumers’ valuation. In particular, conditions were expressed as to when a mixed equilibrium exists and when the case with both firms having ethical conduct will arise.\(^8\)

\(^8\)The idea of firms having different ethical codes comes close to the issue of quality. From the literature on the quality choice, see Shaked and Sutton (1982) and Motta (1993), it is known that firms tend to differentiate their products (even when costs of quality are zero). This incentive arises because product differentiation allows firms to relax price competition on the market. Viewed our model from that angle, a mixed equilibrium with output competition appears to represent a relevant candidate for a description of industries where consumers are strictly heterogenous with respect to their ethical aspirations.
3.1 Multiple Equilibria: Ethical Code and Prisoners’ Dilemma

We now see that the game of ethics can have multiple equilibria. Suppose that the costs of investment $k_a, k_b$ are high enough that both firms make a larger profit if they abstain from making the investment. Suppose, however, that when firm $b$ adopts the no-investment strategy, firm $a$ can increase its profits by investing and the firm $b$ makes a loss. Firm $b$ rationally anticipating such an incentive of the $a$–firm may therefore not commit to the no-investment strategy; both end up thus choosing the ethical code. If it results in a lower level of profits for both firms, we have prisoners’ dilemma. However, both firms understand that the $L$–strategy gives to both of them a greater profit than the $H$–strategy when adopted jointly. If both have a strong reason to believe that neither will play the $H$–strategy, the equilibrium outcome is $LL$. However, if the expectations are such that nothing prevents a firm from leapfrogging the rival, we must have $HH$ as an equilibrium. Expectations on whether the competitor can commit are thus critical.

Prisoners’ dilemma thus arises (i) if a switch of one firm induces also the second firm to switch conditional on that both firms are better off if they co-ordinate their choices and neither switches (ii) both firms have an incentive to switch provided that the other one does not. Then the switch is the dominating strategy.

Conditions for prisoners’ dilemma to arise are

$$\pi_{HH}^a = \frac{1}{9} \beta_1 - k_a < \frac{1}{9} \beta_0 = \pi_{LL}^a$$

$$\pi_{HH}^b = \frac{1}{9} \beta_1 - k_b < \frac{1}{9} \beta_0 = \pi_{LL}^b$$

$$\pi_{HL}^a = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - k_a > \frac{1}{9} \beta_0 = \pi_{LL}^a$$

$$\pi_{HL}^b = \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 < \frac{1}{9} \beta_0 = \pi_{LL}^b$$

These conditions are reduced to

$$\frac{\beta_1 - \beta_0}{9} < k_a < \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - \beta_0$$

$$\frac{\beta_1 - \beta_0}{9} < k_b$$

$$\beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 < \frac{\beta_0}{9}.$$

To study the conditions for a prisoners’ dilemma, it is sufficient to consider, for example, the case $k_a = k_b = k$. Without loss of generality examine the case $\beta_0 = 1, \beta_1 = 2$. Working out the above conditions, one obtains the condition for
Intuitively, the $\beta_1$-parameter ought to be sufficiently greater than $\beta_0$, to create an incentive to deviate while the cost of investment, $k$, ought to be great enough for a reduction of profits if both firms adopt the ethical code. We finally notice that under Cournot competition, the condition $k_a = k_b = k$ is not necessary for the prisoners’ dilemma to arise.

Thus,

**Proposition 1** Joint adoption of the code for ethical conduct can imply a prisoners’ dilemma in duopoly if firms are profit maximizing quantity competitors.

We notice that the prisoners’ dilemma arises in the current context in a somewhat striking manner. Neither firm would individualistically prefer to support the adoption of the ethical code. However, the fear that the rival becomes the market leader with the help of its outstanding image, creates the firm an incentive to adopt the ethical code if only to prevent the destruction of profits.

This result sends a strong message for those arguing that competition *per se* automatically leads to deterioration of the corporate ethics. A joint code for ethical conduct, reducing both firms’ profits may arise from quantity competition. It remains to be seen whether the result survives when competition becomes even more intense.

4 **Intensified Competition: from Cournot to Bertrand**

It was asked by Shleifer whether competition is detrimental to corporate social responsibility. Shleifer suggested that the observed corporate behavior may be explained by intensified competition rather than by greed. To explore, suppose that competition between firms becomes more intense. We model this change by a switch from Cournot quantity competition to Bertrand price competition. Does price competition induce firms to maximize their profits with no reference to an ethical conduct?\(^9\)

When consumers have no ethical aspirations - and this is an empirical question whether they have or have not - both firms can capture the whole market by undercutting the price of the rival firm. It is a strong background assumption in Bertrand price competition theory that a firm has the ability to serve the full market as this calls for a fairly large capacity. Suppose, however, that this is the case. Then, with undifferentiated products, the only equilibrium available is the one where the price is zero. Once consumers value corporate ethics, the game is different. If a firm can adopt an ethical code at zero cost, the ethical code spreads like an aggressive meme.\(^{10}\) What may prevent the appraisal of an ethical code as a meme is an opportunity cost, $k > 0$. The firm with an

---

\(^9\)There are related questions which we will not address in this paper. Does price competition destroy the credibility of the announced investment $k$ as a signal of the firm’s type? Does price competition substantiate the moral hazard incentive for a firm to deviate from its created image?\(^{10}\)The idea of a social gene, "meme" in contrast to the biological gene, was introduced by Dawkins (1976).
ethical code must be able to charge a positive price to cover the cost while the firm with no ethical code tries to undercut that price. Now, consumers’ moral aspirations can make them pay attention to differences in the firms’ images. A mixed equilibrium is possible. To solve, the indifference condition for the marginal consumer, $x_m$, requires that

$$p_H - p_L = (\beta_1 - \beta_0)(1 - x_m).$$

The last consumer, $x_n$, buys at the price

$$p_L = \beta_0(1 - (x_m + x_n)).$$

Thus, the demand functions are

$$x_m = 1 - \frac{p_H - p_L}{\beta_1 - \beta_0}, \quad x_n = \frac{p_H - p_L}{\beta_1 - \beta_0} - \frac{p_L}{\beta_0}$$

and the profits are

$$\pi^H_a = p_H \left(1 - \frac{p_H - p_L}{\beta_1 - \beta_0}\right) - k_a; \quad \pi^H_b = p_L \left(\frac{p_H - p_L}{\beta_1 - \beta_0} - \frac{p_L}{\beta_0}\right).$$

The Bertrand reaction functions are

$$\left(1 - \frac{p_H - p_L}{\beta_1 - \beta_0}\right) - p_H \frac{1}{\beta_1 - \beta_0} = 0; \quad \left(\frac{p_H - p_L}{\beta_1 - \beta_0} - \frac{p_L}{\beta_0}\right) - p_L \left(\frac{1}{\beta_1 - \beta_0} + \frac{1}{\beta_0}\right) = 0.$$

We can solve for prices

$$p_H = \frac{2\beta_1 (\beta_1 - \beta_0)}{4\beta_1 - \beta_0}, \quad p_L = \frac{\beta_0 (\beta_1 - \beta_0)}{4\beta_1 - \beta_0}$$

and for the market shares,

$$x_m = \frac{2\beta_1}{4\beta_1 - \beta_0}, \quad x_n = \frac{\beta_1}{4\beta_1 - \beta_0}$$

We obtain

**Lemma 2** Under price competition, the firm with an ethical code will have a greater market share than the firm with no ethical code.

Profits satisfy

$$\pi^H_a = \frac{4\beta_1^2 (\beta_1 - \beta_0)}{(4\beta_1 - \beta_0)^2} - k_a$$

$$\pi^H_b = \frac{\beta_0 \beta_1 (\beta_1 - \beta_0)}{(4\beta_1 - \beta_0)^2}.$$
To constitute an equilibrium, firms shall not make losses and they have to be satisfied with their chosen ethical codes. The $H-$firm has no reason to regret its type if

$$k_a < \frac{\beta_1 (\beta_1 - \beta_0)}{4\beta_1 - \beta_0}.$$  

For the $b-$firm to abstain from mimicking the $a-$firm, two conditions have to be met depending on the strategy of the $a-$type. Suppose that it chooses to be the $L-$type. Then the $b-$firm will not want to be of the $H-$type, either because $k_b > k_a$. Suppose, on the other hand, that both firms ex ante choose the $H-$type. This means that they commit to costs $k_a, k_b$ but operate under similar corporate cultures. As the $a-$firm is more efficient, it can undercut the price of the rival and ultimately make it leave the market. Firm $b$, on the other hand, anticipates such an outcome and abstains from adopting the ethical code in the first place. Thus,

**Lemma 3** Under cost differences, the market structure where both firms have adopted an ethical code is not an equilibrium.

To summarize,

**Proposition 4** Under Bertrand competition, we can have a mixed equilibrium where one firm adopts the ethical code while the other one does not or, alternatively, there is a symmetric equilibrium where neither firm adopts the ethical code.

What about prisoners’ dilemma? When neither firm adopts the ethical code, their profits must be zero in equilibrium. Thus, price competition cannot lead to a prisoners’ dilemma as a joint ex ante switch cannot reduce the profits. Instead, it might increase them.

We have thus demonstrated that against the intuition of Shleifer (2004), competition *per se* need not be detrimental to the adoption of an ethical code. It is the nature of competition which is decisive. When firms’ capacity cannot be built sufficiently large to cover the whole market and/or competition is of the Cournot-type, an equilibrium with one or two firms adopting the ethical code is possible. It can be of a prisoners’ dilemma type. With price competition, the outcome is more unsettled. Under cost differences, the market structure where both firms have adopted an ethical code is unstable. Moreover, the equilibrium cannot be of a prisoners’ dilemma type. However, a mixed equilibrium is still possible. Again thus, competition is not necessarily detrimental to corporate culture. A strong image among consumers may serve as a competitive advantage rather than disadvantage. Yet, in spite of the optimal choice of corporate culture of the $H-$type firm, its market share may well fall short of that of its rival.
5 Firm Opportunism: moral hazard

5.1 Non-contractable quality

Opportunistic behavior and the moral hazard incentive arises in the context where a firm having built a reputation, an image of its ability to operate in a certain way, finds it in its interest to deviate. This may be a matter of, say, product quality, personnel policy or loan default. Frank (2000) has, however, suggested several mechanisms which may facilitate the commitment. In this section, we discuss the incentives of a firm to deviate. The inability of a firm to commit to a norm is, of course, anticipated by its customers who will ex ante adjust their judgement about the firm accordingly. The problem may arise because one cannot contract on quality ex ante. Quality is verifiable only ex post. Having the contract, a firm can reoptimize its quality particularly if contracts are incomplete. A time-inconsistency problem may arise.11 Given that firms may have different costs of providing high-quality, high-cost firms tend to produce low quality ex post.

In a repeated interaction, the problem is less severe. Suppose for a moment that the market game is repeated. The firm a has made its investment \( k \) in the reputation and there is a separating equilibrium in the first period with two types of firms. With repeated consumer/firm interaction, it could be profitable to invest \( k \) though this might be a waste from the short-run perspective. An option to deviate in the second period might make this investment, however, worthwhile, provided that the consumers do not anticipate it. Yet, once the firm is caught, consumers update their view of the firm’s type and the firm is classified as \( L \) for the rest of its life-cycle.

5.2 Firm Image under Disappearing Transparency

To analyze the deviation of a firm’s image from the true corporate culture, we introduce two modifications of the basic model. First, we assume that the cost of investment \( k \) is a matter of choice for the firm but unobservable. Second, we assume that consumer’s valuation of the corporate image is proportional to their image.

Assume thus that consumers are able to identify the firm’s type only imperfectly. The firm claims to have invested \( k \) but due to the imperfect credibility of its signal, the consumer downgrades the firm’s image as

\[
k^* = ak + (1 - \alpha)\varepsilon,
\]

where \( 0 \leq \alpha < 1 \) and \( \varepsilon \) is a random variable with probability distribution function \( F : \mathbb{R} \rightarrow [0, 1] \) with mean \( \mu \). Parameter \( \alpha \) is a measure of consumer confidence in firm’s information, the accuracy of the signal. Our model in the previous sections is a special case with \( \alpha = 1 \). Now, \( \overline{k} = E[k^*] = \alpha < 1 \).

11 Especially in non-repeated contracts like renovation projects and other services, the quality cannot be contracted on, but can only be observed ex post.
With consumers’ uncertainty of the true ethical stance of the firm, the image is downgraded and the net utility of consumers buying at the \( a \)-firm and, alternatively, at the \( b \)-firm is

\[
    u^i = \beta_1 \bar{K}(1-x) - p_H, \quad u^j = \beta_0(1-x) - p_L, \quad \beta_1 > \beta_0 > 0.
\]

The market prices thus satisfy

\[
    p_L = \beta_0(1 - (x_m + x_n)) \quad \text{and} \quad p_H = \beta_1 \bar{K}(1 - x_m) - \beta_0 x_n.
\]

The profits are

\[
    \pi^H_a = [\beta_1 \bar{K}(1-x_m) - \beta_0 x_n]x_m - k_a; \quad \pi^H_b = \beta_0(1 - (x_m + x_n))x_n.
\]

The Cournot Nash-equilibrium is restated as

\[
    x_m = \frac{2\beta_1 \bar{K} - \beta_0}{4\beta_1 \bar{K} - \beta_0} > x_n = \frac{\beta_1 \bar{K}}{4\beta_1 \bar{K} - \beta_0}. \quad (11)
\]

Prices can be solved as

\[
    p_H = \frac{\beta_1 \bar{K}(2\beta_1 \bar{K} - \beta_0)}{4\beta_1 \bar{K} - \beta_0} > p_L = \frac{\beta_1 \bar{K}\beta_0}{4\beta_1 \bar{K} - \beta_0}. \quad (12)
\]

Evaluate

\[
    \frac{\partial x_m}{\partial \bar{K}} = \frac{2\beta_1 \beta_0}{(4\beta_1 \bar{K} - \beta_0)^2} > 0.
\]

Also \( \frac{\partial p_H}{\partial \bar{K}} > 0 \). Unsurprisingly, we find that increased consumer confidence in the firms’ ethical conduct results in increased market share of an \( H \)-firm despite that the firm asks for a higher price.\(^{12}\)

6 Corporate Culture, Labor externality, and Globalization

Happiness studies (Layard (2005)) suggest that being fired or even a threat of an increase in unemployment in the economy are the major causes of increased stress and reduced happiness. Status quo is considered as safe. When a firm reduces its labor, it faces the problem of damaged public image.

In this section, we integrate productive inputs into the model. We define the production cost as

\[
    c(w, e), \quad (13)
\]

\(^{12}\)We work out explicitly only the second stage. We notice that the analysis of the firms’ game on how much to invest at stage one can be carried out by introducing a variable cost of investment.
where $w =$ the wage cost and $e =$ labor effort, satisfying $c_1 > 0, c_2 < 0$. Consider the case where the required labor effort $e$ is chosen by the firm. A worker’s utility is

$$U = w - e.$$

To keep the workers on the same welfare level, increased work requirement, $e$, ought to be compensated in the wage rate, $dU = dw - de = 0$. Consider this as a status quo and call this a fairness equilibrium. In such an equilibrium, it would be costly to deviate in terms of corporate image. Moreover, if the cost of production is linearly homogeneous in $(w, e)$, a firm would not gain a cost advantage by deviating if the increased work effort is compensated in the wage level satisfying $dU = dw - de = 0$.

The essence of the globalization process is that it creates an option for a firm to reduce its production cost (instead of going bankrupt). The opportunity cost of employing in a given high-cost unit is increased as switching production to a low-cost unit has not only become possible but abstaining from it represents a competitive disadvantage. If accomplished, such a switch represents a transfer of income from the high-cost country to the workers of the low-cost country. If not accomplished, the firm has two possibilities. It can impose a cost reduction in its current unit. If not feasible, it can demand a greater effort (productivity) from its labor. This tends to create more pressure on the employees. The requirements may include extended working time, more work load, the increased risk of firing, reduced firm-financed recreation opportunities, etc. Such effects function like an externality on firms’ personnel and loss of status quo.

The increased effort requirement on labor is viewed as negative externality by the general public and it tends to hurt the corporate image. The firm therefore faces the choice of (a) maintaining the status quo and gaining in terms of image or of (b) demanding a greater working effort with a loss of an image among consumers. To analyze the market equilibrium, take the wage rate $w$ as predetermined and consider the case where the firm, having previously a policy $e_L$, now has an option to choose between $(e_L, e_H), e_L < e_H$.

Firms’ profit function then is

$$\pi = px - c(w, e).$$

Consider a local market with two firms. Consider the case where one firm becomes an $H$–firm targeting a high image while the other one becomes an

---

13 This cost is like a fixed cost arising from operating the firm with a fixed labor input.

14 The domestic public largely opposes such a change even if it results in an increase in the earnings of the working labor in the developing countries.

15 An alternative though a less realistic way to introduce the external effect would be to make the wage level fully flexible.

16 As a historical anecdote, we notice that the "closed-economy" period before the current wave of globalization has been called an era of "lazy capital". With increased globalization, firms face a more intense competition pressure in the open market, and have been trimmed to the stage of "efficient capital", with a more intensive use of their labor input.

17 Even when firms are operating in a globalized world, they can have pricing power arising from a product brand or from location. In our model, corporate culture is a brand.
The $L$-firm paying no attention to its image. The $H$-firm does not increase worker stress and is compensated by the consumers with an ethical code. Given the consumers’ preferences above,

$$u^i = \beta_1(1 - x_i) - p_H, \quad u^j = \beta_0(1 - x_j) - p_L, \quad \beta_1 > \beta_0 > 0,$$

the profits are

$$\pi_a^{HL} = [\beta_1(1-x_m) - \beta_0 x_n] x_m - c(w, e_L); \quad \pi_b^{HL} = \beta_0(1-(x_m + x_n)) x_n - c(w, e_H).$$

This model can be analyzed within the framework developed in the earlier part of the paper. The $L$-firm will acquire a competitive advantage as its cost is lower. However, the $H$-firm may be able to keep its market share depending on the consumers’ ability to commit to appreciate the $H$-firm’s corporate culture.

With Cournot competition, profits can be calculated as above:

$$\pi_a^{HL} = \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 - c(w, e_L), \quad \pi_b^{HL} = \beta_0 \left( \frac{\beta_1}{4\beta_1 - \beta_0} \right)^2 - c(w, e_H).$$

If also the $a$-firm abstains from targeting a superior image, profits are

$$\pi_a^{LL} = \pi_b^{LL} = \frac{1}{9} \beta_0 - c(w, e_H).$$

Does the consumers’ valuation of corporate image help to sustain an equilibrium where one firm abstains from increased working effort? The necessary condition for $\pi_a^{HL} > \pi_a^{LL}$ is

$$\beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 > c(w, e_L) - c(w, e_H).$$

This amounts to stating that the corporate revenue has to exceed the foregone cost saving. Now, because

$$\frac{\partial}{\partial \beta_1} \left[ \beta_1 \left( \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0} \right)^2 \right] > 0,$$

increased consumer confidence on the firm’s image helps to maintain a corporate culture where the firm avoids an employment policy which causes negative externality on its labor force. Markets can provide the control. The $a$-firm can gain by building an image of a firm with an ethical code. This conclusion is conditional on that the $b$-firm does not challenge the image of the $a$-firm with the same strategy of image building. Indeed, it might.

Thus, consider the case where both firms maintain their inherited effort requirement $e_L$ with profits

$$\pi_a^{HH} = [\beta_1(1 - (x_a + x_b)) - p] x_a - c(w, e_L)$$

$$\pi_b^{HH} = [\beta_1(1 - (x_a + x_b)) - p] x_b - c(w, e_L).$$
The reaction functions are those derived in section 2.1.2 and the outputs can be solved as

\[ x_a = \frac{1}{3} = x_b. \]

Solve for the market price,

\[ p = \frac{1}{3} \beta_1, \]

When both firms have adopted the ethical code, the ethical aspiration of consumers again does not have any impact on how many consumers actually buy. From another angle, the firms can exploit the consumers’ willingness to pay for their ethical image with the profit levels

\[ \pi_a^{HH} = \frac{1}{9} \beta_1 - c(w, e_L), \quad \pi_b^{HH} = \frac{1}{9} \beta_1 - c(w, e_L). \]

A necessary (but not sufficient) condition for the case HH to constitute a market equilibrium is that

\[ c(w, e_L) \leq \frac{1}{9} \beta_1 \]

which does not depend on the basic willingness to pay \( \beta_0 \). When this condition is satisfied, we can have two firms with a code of an ethical conduct, which leave unexploited the option to demand more pressure from their workers and yet making a positive profit. When both firms can commit to an ethical conduct, consumers pay a lower price than the price paid by the buyers of the firm with an ethical conduct in the mixed equilibrium. We, however, expect a mixed equilibrium to arise if one of the firms is superior in managing production costs without a labor externality.

What is the economics behind these outcomes? The idea that firms may abstain from exploiting their workers even when the cost is high relative to workers’ productivity necessitates a particular social awareness among the members of the society. In a sense, the argument necessitates that there is a social trade-off between the conscience of consumers and the externality on workers. No more, no less, a corporate culture can operate as a middleman for the emergence of such altruism. Ultimately, it is an empirical question to what extent such interpersonal transfers exist in a particular economy.

7 On Socially Optimal Corporate Culture

The society shares the interest on firms for two reasons. The first reason is that the society expects a return on its investment in public goods. Firms cannot make profits to their owners unless the society provides the required public goods in terms of institutions, infrastructure, and contract enforcement principles.\textsuperscript{18} The society is implicitly subsidizing production by creating these institutions.

\textsuperscript{18}We can contrast an organized society with a jungle economy, described by Golding (1954).
Such public goods need resources to be financed. Firms are expected to return money to the society in the spirit of reciprocity and benefit taxation. In what follows, we abstract from taxes and focus on the second reason.

The second platform where the interests of corporations and the society meet is in the creation and maintenance of social norms. In an individualistic society, it is appropriate to define the intangible social capital in terms of prevailing consumer preferences for ethical code. Consumers value the ethical code in the same way, as they value an organized society with social norms supporting trust and facilitating cooperation. In our model, the reservation price of consumer $x_i$ is given by $\beta_0(1-x_i)$, measuring how much the consumer values the product. The valuation of the corporate culture that firms have adopted is valued by him as $(1-\beta_0)(1-x_i)$. Therefore, we can interpret the increased consumer surplus, the valuation exceeding $\beta_0$ as social capital, say $K$.

We have three solutions for the social capital, say $K_0, K_1, K_2$ depending on how many of the firms make the investment, $k$. We notice that the solution for the social capital differs in the case where markets are organized in terms of Bertrand competition instead of Cournot-competition. We focus here on the Cournot case. Let $x$ denote the total number of buyers from the firm(s) which have adopted the code of ethical conduct. The increase in consumer satisfaction in terms of greater consumer surplus created by such corporate culture can be evaluated as

$$K(x) = (1 - \beta_0) \left( \frac{1}{2} x^2 + (1 - x) x \right).$$

In the $LL-$equilibrium, $x = 0$, hence $K(0) = 0$. In the $HL-$equilibrium,

$$x = x_m = \frac{2\beta_1 - \beta_0}{4\beta_1 - \beta_0},$$

while in the $HH-$equilibrium, $x = \frac{2}{3}$. Consider an example. Take $\beta_0 = 1, \beta_1 = 2$. Then in the $HL-$equilibrium, the price is $p_H = 0.85$ while in the $HH-$equilibrium it is $p_H = 0.66$. We can then verify that the increase in the consumer surplus is greater in the latter case. Indeed, $K(1) = 0.34, K(2) = 0.44$.

Social capital is but one dimension of social gain from the ethical code. The other one is represented by the beneficiaries’ utility. Consider the model of the previous section. Firms can contribute to the creation of social capital by introducing corporate culture which matches consumers’ intrinsic moral valuations. Social capital is an intangible capital which in the model of section 6 thus arises from firms’ labor policy. Abstaining from harsh labor measures, the firm loses the available cost efficiency but the society gains by the augmented wellbeing of labor. When one firm changes the employment policy, social welfare declines by $\Delta U = -(e_H - e_L)$.

If a utilitarian planner could choose the ethical code of firms, what would he choose, given that the social cost of having an ethical code is positive? In an individualistic society where individual preferences are the starting point for social valuation, we obtain welfare measures $W_0, W_1, W_2$ in terms of the amount of firms with an ethical conduct $(0, 1, 2)$,
\[ W_0 = 2[c(w, e_H) - c(w, e_L)] - 2(e_H - e_L) \]
\[ W_1 = K_1 + c(w, e_H) - c(w, e_L) - (e_H - e_L) \]
\[ W_2 = K_2. \]  
(15)

Optimality of two ethical firms instead of just one requires thus that
\[ K_2 - K_1 > c(w, e_H) - c(w, e_L) - (e_H - e_L), \]
while one ethical firm instead of none requires
\[ K_1 > c(w, e_H) - c(w, e_L) - (e_H - e_L). \]

We hence have well-defined conditions on the desired structure of the ethical market. Ask next: do market forces create sufficiently social capital? For the purposes of the current paper, it is sufficient to put this issue in a perspective. In terms of our modelling framework, we can identify two potential sources of market failures. First, there is moral hazard if the corporate image and the true corporate culture can differ. Informational asymmetry, as to whether the firm has committed to its announced values by its investment, is a potential reason for a market failure. Second, changes in environment can create losses which can be regarded as externalities. In terms of our model above, workers tend to suffer from intensified competition. We think that it is useful just to state these issues without aiming at any policy proposals in the current paper.

8 Final Remarks

Should firms focus on profit maximization or should they pay attention to stakeholders’ interests, too? Our paper points to the view that the question appears misstated. Assuming throughout the paper that firms are profit maximizers, we have shown that markets yet can make firms both to adopt the ethical code and to pay attention to the well-being of their stakeholders. The paper has not challenged Friedman’s answer to the normative question of what firms should be doing. It has, however, addressed the issue of whether the moral values of consumers can shape the strategies of the firms. We have examined industry equilibria where some or all firms adopt the code of ethical conduct, despite the fact that they are maximizing their profit. This suggests that having an ethical conduct can be a comparative advantage in market competition.

We have demonstrated that, contrary to the intuition of Shleifer (2004), competition per se need not be detrimental to the adoption of an ethical code. It is the nature of competition which is decisive. When firms’ capacity cannot be built sufficiently large to cover the whole market and competition is of the Cournot-type, an equilibrium with one or two firms adopting the ethical code is possible. It can even be of a prisoners’ dilemma type. With price competition, the outcome is more unsettled. Then under cost differences, the market structure where both firms have adopted an ethical code is not an equilibrium.
Moreover, a prisoners' dilemma type of outcome cannot arise. However, a mixed equilibrium is still possible. Again, competition is thus not necessarily detrimental to corporate culture. A strong image among consumers may serve as a competitive advantage rather than disadvantage. Disappearing transparency is, however, a serious threat in the absence of a credible commitment. The issue of globalization with international redistribution of production and income and is a more complex one than typically suggested. Again, consumers could have a role which has not been previously identified. Finally, we hint that the socially optimal corporate culture probably cannot be produced by the market forces alone. Yet, it does not remain fully open what is needed for greater social responsibility by firms: improved communication world-wide and increased social awareness by consumers. It is not un-plausible that the development takes this route.

References


