

Value Maximisation, Stakeholder Theory, and the Corporate Objective Function

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Abstract

This paper examines the role of the corporate objective function in corporate productivity and efficiency, social welfare, and the accountability of managers and directors. I argue that since it is logically impossible to maximise in more than one dimension, purposeful behaviour requires a single valued objective function. Two hundred years of work in economics and finance implies that in the absence of externalities and monopoly (and when all goods are priced), social welfare is maximised when each firm in an economy maximises its total market value. Total value is not just the value of the equity but also includes the market values of all other financial claims including debt, preferred stock, and warrants.

In sharp contrast stakeholder theory, argues that managers should make decisions so as to take account of the interests of all stakeholders in a firm (including not only financial claimants, but also employees, customers, communities, governmental officials and under some interpretations the environment, terrorists and black-mailers). Because the advocates of stakeholder theory refuse to specify how to make the necessary tradeoffs among these competing interests they leave managers with a theory that makes it impossible for them to make purposeful decisions. With no way to keep score, stakeholder theory makes managers unaccountable for their actions. It seems clear that such a theory can be attractive to the self interest of managers and directors.

Creating value takes more than acceptance of value maximisation as the organisational objective. As a statement of corporate purpose or vision, value maximisation is not likely to tap into the energy and enthusiasm of employees and managers to create value. Seen in this light, change in long-term market value

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becomes the scorecard that managers, directors, and others use to assess success or failure of the organisation. The choice of value maximisation as the corporate scorecard must be complemented by a corporate vision, strategy and tactics that unite participants in the organisation in its struggle for dominance in its competitive arena.

A firm cannot maximise value if it ignores the interest of its stakeholders. I offer a proposal to clarify what I believe is the proper relation between value maximisation and stakeholder theory. I call it enlightened value maximisation, and it is identical to what I call enlightened stakeholder theory. Enlightened value maximisation utilises much of the structure of stakeholder theory but accepts maximisation of the long run value of the firm as the criterion for making the requisite tradeoffs among its stakeholders. Managers, directors, strategists, and management scientists can benefit from enlightened stakeholder theory. Enlightened stakeholder theory specifies long-term value maximisation or value seeking as the firm's objective and therefore solves the problems that arise from the multiple objectives that accompany traditional stakeholder theory.

I also discuss the Balanced Scorecard, the managerial equivalent of stakeholder theory. The same conclusions hold. Balanced Scorecard theory is flawed because it presents managers with a scorecard which gives no score—that is, no single-valued measure of how they have performed. Thus managers evaluated with such a system (which can easily have two dozen measures and provides no information on the tradeoffs between them) have no way to make principled or purposeful decisions. The solution is to define a true (single dimensional) score for measuring performance for the organisation or division (and it must be consistent with the organisation's strategy). Given this we then encourage managers to use measures of the drivers of performance to understand better how to maximise their score. And as long as their score is defined properly, (and for lower levels in the organisation it will generally not be value) this will enhance their contribution to the firm.

Keywords: *value maximisation; stakeholder theory; Balanced Scorecard; multiple objectives; social welfare; social responsibility; corporate objective function; corporate purpose; tradeoffs; corporate governance; strategy; special interest groups; social responsibility.*

Proposition: *This house believes that change efforts should be guided by the sole purpose of increasing shareholder value.*

1. Introduction

Lying behind the statement which I have been asked to address, is a complex set of controversies on which economists, management scholars, managers, policy makers, and special interest groups exhibit wide disagreement. Political, economic, social, evolutionary, and emotional forces play important roles in this disagreement as do ignorance, complexity, and conflicting self-interests. I shall discuss these below.

At the organisational level the issue is the following. Every organisation attempting to accomplish something has to ask and answer the following question: what are we trying to accomplish? Or, put even more simply: when all is said and done, how do we measure better versus worse? Even more simply, how do we keep score?

At the economy wide or social level the issue is the following: if we could dictate the criterion or objective function to be maximised by firms (that is, the criterion by which executives choose among alternative policy options), what would it be? Or, even more simply, How do we want the firms in our economy to measure better versus worse?

In this light I prefer to restate the proposition I have been asked to address as follows:

This house believes that in implementing organisational change, managers must have a criterion for deciding what is better, and better should be measured by the increase in long-term market value of the firm.

I call this the Value Maximisation Proposition and it has its roots in 200 years of research in economics and finance. ‘Stakeholder theory’, the asserted (and currently popular)² main contender competing with value maximisation for this objective function, has its roots in sociology, organisational behaviour, the politics of special interests, and managerial self interest. I say ‘asserted’ contender because stakeholder theory is incomplete as a specification for the corporate purpose or objective function, and therefore cannot logically fulfill that role. I argue below that its incompleteness is not accidental. It serves the private interests of those who promote it, including corporate outsiders as well as many managers and directors of corporations.

Briefly put, value maximisation says that managers *should make all decisions so as to increase the total long-run market value of the firm*. Total value is the sum of the values of all financial claims on the firm—including equity, debt, preferred stock, and warrants.

Stakeholder theory, on the other hand, says that managers *should make decisions so as to take account of the interests of all the stakeholders in a firm*. And stakeholders include all individuals or groups who can substantially affect the welfare of the firm: not only the financial claimants but also employees, customers, communities, and governmental officials—and under some interpretations, the environment, terrorists, blackmailers, and thieves.³

The answers to the questions of how managers should define better vs. worse, and how managers in fact do define it, have important implications for the welfare of a society’s inhabitants. Indeed, the answers provide the business equivalent of the medical profession’s Hippocratic Oath. It is an indication of the infancy of the science of management that so many in the world’s business schools, as well as professional business organisations, understand so little of the fundamental issues in contention.

With this introduction of the issues let me now move to a detailed examination of value maximisation and stakeholder theory.

²Stakeholder theory, for example, has been endorsed by many professional organisations, special interest groups, and governmental organisations including the current British government. See, for example, *Principles of Stakeholder Management* (1999) and especially the excellent articles analysing the topic by Elaine Sternberg ((1996; 1999) and her books (Sternberg, 1994, 2000)), who surveys its acceptance by the Business Roundtable (Business Roundtable, 1990), and its recognition by law in 38 American states (Hanks, 1994) and the *Financial Times*.

³See (Freeman, 1984, p. 53). ‘The ... definition of “stakeholder” [is] any group or individual who can affect or is affected by the achievement of an organisation’s purpose ... For instance, some corporations must count “terrorist groups” as stakeholders’.

2. The logical structure of the problem

In discussing whether firms should maximise value or not, we must separate two distinct issues:

1. Should the firm have a single-valued objective? And,
2. Should that objective be value maximisation or something else (for example, maintaining employment or improving the environment)?

The debate over whether corporations should maximise value or whether they should act in the interests of their stakeholders is generally couched in terms of issue number 2, and is often falsely framed as stockholders versus stakeholders. The real conflict is actually an unjoined debate over issue number 1, whether the firm should have a single-valued objective function or scorecard. This confusion has led to widespread misunderstanding.

What is commonly known as stakeholder theory, while not totally without content, is fundamentally flawed because it violates the proposition that any organisation must have a single-valued objective as a precursor to purposeful or rational behaviour. In particular, I argue that a firm that adopts stakeholder theory will be handicapped in the competition for survival because, as a basis for action, stakeholder theory politicises the corporation, and it leaves its managers empowered to exercise their own preferences in spending the firm's resources.

3. Issue 1: Purposeful behaviour requires the existence of a single-valued objective function

3.1. A simple example

Consider a firm that wishes to increase current-year profits, p , as well as market share m . Assume, as in Figure 1, that over some range of values of m , profits increase. But at some point increases in market share come only at reduced current-year profits—say because increased expenditures on R&D and advertising, or price reductions to

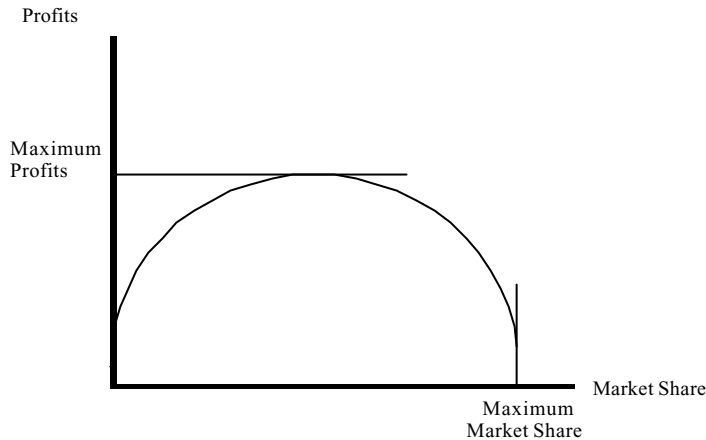


Fig. 1 Tradeoff between profits and market share. A manager directed to maximise both profit and market share has no way to decide where to be in the range between maximum profits and maximum market share.

increase market share reduce this year's profit. Therefore, it is not logically possible to speak of maximising both market share and profits. In this situation it is impossible for a manager to decide on the level of R&D, advertising, or price reductions, because he or she is faced with the necessity to make tradeoffs between the two 'goods' p and m with no way to do so. While the manager knows that the firm should be at least at the point of maximum profits or maximum market share, there is no purposeful way to decide where to be in the area where the firm can obtain more of one only by giving up some of the other.

3.2. Multiple objectives is no objective

It is logically impossible to maximise in more than one dimension at the same time unless the dimensions are monotone transformations of one another. Thus, telling a manager to maximise current profits, market share, future growth in profits, and anything else one pleases will leave that manager with no way to make a reasoned decision. In effect, it leaves the manager with no objective. The result will be confusion and lack of purpose that will fundamentally handicap the firm in its competition for survival.⁴ A firm can resolve this ambiguity by specifying the tradeoffs among the various dimensions, and doing so amounts to specifying an overall objective function such as $V=f(x, y, \dots)$ that explicitly incorporates the effects of decisions on all the goods or bads (denoted by (x, y, \dots)) affecting the firm (such as cash flow, risk and so on). At this point the logic above does not specify what V is. It could be anything the board of directors chooses, such as employment, sales, or growth in output. But, I argue below that social welfare and survival will severely constrain the boards choices.

Nothing in the analysis so far has said that the function f must be well-behaved and easy to maximise. If the function f is non-monotone, or even chaotic, it makes it more difficult for managers to find the overall maximum. But even in these situations the meaning of 'better' or 'worse' is defined, and managers and their monitors have a principled basis for choosing and auditing decisions.

Without a definition of the meaning of better there is no principled foundation for choice. In this light it is perhaps better to call this objective function 'value seeking' rather than value maximisation to avoid the confusion that arises when some argue that maximising is difficult or impossible if the world is structured in sufficiently complicated ways.⁵

4. Issue 2: Total firm value maximisation makes society better off

Given that a firm must have a single objective that tells us what is better and what is worse, we then must face the issue of what that definition of better is. (As I pointed

⁴ See (Jensen *et al.*, 1991; Wruck *et al.*, 1991) for an example of a small non-profit firm that almost destroyed itself while trying to maximise over a dozen dimensions at the same time. Cools and van Praag (2000) in an interesting empirical paper are the first to formally test the proposition that multiple objectives handicap firms. In a test using 80 Dutch firms in the 1993–97 period the authors conclude: 'Our findings show the importance of setting *one* single target for value creation' (emphasis in original).

⁵ I would like to thank David Rose for suggesting this simple and more descriptive term for value maximising. See his paper (Rose, 1999).

out above, having a single objective does not mean that individuals or firms care only about one thing. This single objective will always be a complicated function of many different goods or bads.)

The short answer to the question of the definition of better is that 200 year's worth of work in economics and finance indicate that social welfare is maximised when all firms in an economy maximise total firm value. The intuition behind this criterion is simply that (social) value is created when a firm produces an output or set of outputs that are valued by its customers at more than the value of the inputs it consumes (as valued by their suppliers) in such production. Firm value is simply the long-term market value of this stream of benefits.

When monopolies or externalities exist the value-maximising criterion does not maximise social welfare. By externalities we mean situations in which the decision-maker does not bear the full cost or benefit consequences of his or her choices, water and air pollution are classic examples. But the solution to these problems lies not in telling firms to maximise something else, but in defining and assigning the alienable decision rights necessary to eliminate the externalities. (Under the Coase Theorem we know externalities can exist only if some alienable decision rights are not defined or assigned to someone in the private economy, (see Coase 1960; Jensen and Meckling 1992)).⁶

Maximising the total market value of the firm—that is the sum of the market values of the equity, debt and any other contingent claims outstanding on the firm—is one objective function that will resolve the tradeoff problem among multiple constituencies. It tells the firm to spend an additional dollar of resources to satisfy the desires of each constituency as long as that constituency values the result at more than a dollar. Although there are many single-valued objective functions that could guide a firm's managers in their decisions, value maximisation is an important one because it leads under some reasonable conditions to the maximisation of social welfare. Let's look more closely at this.

5. Value maximising and social welfare

5.1. Profit maximisation

Much of the discussion in policy circles over the proper corporate objective casts the issue in terms of the conflict among various constituencies or 'stakeholders' in the corporation. The question then becomes whether shareholders should be held in higher regard than other constituencies, such as employees, customers, creditors, and so on. It is both unproductive and incorrect to frame the issue in this manner. The real issue to be considered here is what firm behaviour will result in the least social waste—or equivalently, what behaviour will get the most out of society's limited resources—not whether one group is or should be more privileged than another.

To see how value maximisation leads to a socially efficient solution, let's first consider a simpler objective function; profit maximisation in a world in which all

⁶In addition, we should recognise that when a complete set of claims for all goods for each possible time and state of the world do not exist, the social maximum will be constrained; but this is just another recognition of the fact that we must take into account the costs of creating additional claims and markets on time/state delineated claims. (See Arrow, 1964; Debreu, 1959).

production runs are infinite and cash flow streams are level and perpetual. This scenario allows us to ignore the complexity introduced by the tradeoffs between current and future-year profits (more accurately, cash flows). Consider now the social welfare effects of a firm's decision to take resources out of the economy in the form of labour hours, capital, or materials purchased voluntarily from their owners in single-price markets. The firm uses these inputs to produce outputs of goods or services that are then sold to consumers through voluntary transactions in single-price markets.

In this simple situation a firm taking inputs out of the economy and putting its output of goods and services back into the economy increases aggregate welfare if the prices at which it sells the goods more than cover the costs it incurs in purchasing the inputs. Clearly the firm should expand its output as long as an additional dollar of resources taken out of the economy is valued by the consumers of the incremental product at more than a dollar. Note that the difference between these revenues and costs is profits. This is the reason (under the assumption there are no externalities or monopolies)⁷ that profit maximisation leads to an efficient social outcome.⁸

Because the transactions are voluntary, we know that the owners of inputs value them at a level less than or equal to the price the firm pays or they wouldn't sell them. Therefore, as long as there are no negative externalities in the input factor markets, the opportunity cost to society of those inputs is no higher than the total cost to the firm of acquiring them. I say 'no higher' because some suppliers of inputs to the firm are able to earn 'rents' by obtaining prices higher than the value of the goods to them. But such rents do not represent social costs. Likewise, as long as there are no externalities in the output markets, the value to society of the goods and services produced by the firm is at least as great as the price the firm receives for the sale of those goods and services. If this were not true, the individuals purchasing them would not do so. Again, as with producer surplus on inputs, the benefit to society is higher to the extent that consumer surplus exists (that is, to the extent that some consumers are able to purchase the output at prices lower than the value to them).

Therefore, when the firm acquires an additional unit of any input (or inputs) to produce an additional unit of any output, it increases social welfare at least by the amount of its profit—the difference between the value of the output and the cost of the input(s) required in producing it.⁹ The signals to the firm are clear: continue to

⁷By externalities I mean situations in which the full social cost of an action is not borne by the firm or individual that takes the action. Examples are cases of air or water pollution in which a firm adds pollution to the environment without having to purchase the right to do so from the parties giving up the clean air or water. There can be no externalities as long as alienable property rights in all physical assets are defined and assigned to some private individual or firm. See (Jensen and Meckling, 1992)

In the case of a monopoly, profit maximisation leads to a loss of social product because the firm expands production only to the point where an additional dollar's worth of inputs generates incremental revenues equal to a dollar, not where consumers value the incremental product at a dollar. In this case the firm produces less of a commodity than that which would result in maximum social welfare.

⁸I am indebted to my colleague George Baker for this simple way of expressing the social optimality of profit maximisation.

⁹Equality holds only in the special case where consumer and producer surpluses are zero, and there are no externalities or monopoly.

expand purchases of inputs and sell the resulting outputs as long as an additional dollar of inputs generates sales of at least a dollar.

5.2. Value and tradeoffs through time

In a world in which cash flow, profit, and cost flows are not uniform over time, we must deal with the tradeoffs of these items through time: for example, when capital investment comes in lumps that have to be funded up front, while production occurs in the future. Knowing whether society will be benefited or harmed requires knowing whether the future output will be valuable enough to offset the cost of having people give up their labour, capital, and material inputs in the present. Interest rates give us the answer to this. Interest rates tell us the cost of giving up a unit of a good today for receipt at some time in the future. So long as people take advantage of the opportunity to borrow or lend at a given interest rate, that rate determines the value of moving a marginal dollar of resources (inputs or consumption goods) forward or backward in time.

The value one year from now of a dollar today saved for use one year from now is thus $\$1 \times (1 + r)$, where r is the interest rate. Alternatively, the value today of a dollar of resources to be received one year from now is its present value of $\$1/(1 + r)$. In this world an individual is as well off as possible if his or her wealth, measured by the discounted present value of all future claims, is maximised.

When we add uncertainty nothing of major importance is changed in this proposition as long as there are capital markets in which the individual can buy and sell risk at a given price. In this case it is the risk-adjusted interest rate that is used in calculating the market value of risky claims. The corporate objective function that maximises social welfare thus becomes 'maximise total firm market value'. It tells firms to expand output and investment to the point where the market value of the firm is at a maximum.¹⁰

6. Stakeholder theory

To the extent that stakeholder theory argues that firms should pay attention to all their constituencies, the theory is unassailable. Taken this far stakeholder theory is completely consistent with value maximisation which implies that managers must pay attention to all constituencies that can affect the firm.

But, there is more to the stakeholder story than this. Any theory of action must tell the actors, in this case managers and boards of directors, how to choose among multiple competing and inconsistent constituent interests. Customers want low prices, high quality, expensive service, etc. Employees want high wages, high quality working conditions, and fringe benefits including vacations, medical benefits, pensions, and the rest. Suppliers of capital want low risk and high returns. Communities want high charitable contributions, social expenditures by firms to

¹⁰ I shall not go into the details here, the same criterion applies to all organisations whether they are public corporations or not. Obviously, even if the financial claims are not explicitly valued by the market, social welfare will be increased as long as managers of partnerships or non-profits increase output so long as the imputed market value of claims on the firm continue to increase.

benefit the community at large, stable employment, increased investment, and so on. And so it goes with every conceivable constituency. Obviously any decision criterion—and the objective function is at the core of any decision criterion—must specify how to make the tradeoffs between these often conflicting and inconsistent demands.

6.1. The specification of tradeoffs and the incompleteness of stakeholder theory

As I've said before, value maximisation (or value seeking) provides the following answer to the tradeoff question: spend an additional dollar on any constituency to the extent that the long-term value added to the firm from such expenditure is a dollar or more.

Stakeholder theory as stated by Freeman (1984), Clarkson (Principles of Stakeholder Management, 1999) and others contains no conceptual specification of how to make the tradeoffs among stakeholders that must be made. This makes the theory damaging to firms and to social welfare, and it also reveals a reason for its popularity.

6.2. Implications for managers and directors

Because stakeholder theory provides no criteria for what is better or what is worse, it leaves boards of directors and executives in firms with no principled criterion for problem solving. Firms that try to follow the dictates of stakeholder theory will eventually fail if they are competing with firms that are behaving so as to maximise value. If this is true, why do so many managers and directors of corporations embrace stakeholder theory?

One answer lies in their own personal short run interests. Because stakeholder theory provides no definition of better, it leaves managers and directors unaccountable for their stewardship of the firm's resources. With no criteria for performance, managers cannot be evaluated in any principled way. Therefore, stakeholder theory plays into the hands of self-interested managers allowing them to pursue their own interests at the expense of society and the firm's financial claimants. It allows managers and directors to invest in their favourite projects that destroy firm-value whatever they are (the environment, art, cities, medical research) without having to justify the value destruction. And this can be true even though managers may not recognise consciously that adopting stakeholder theory leaves them unaccountable. By expanding the power of managers in this unproductive way, stakeholder theory therefore increases agency costs in the economic system. Viewed in this way it is not surprising that many managers like it.

By gutting the foundations on which the firm's internal control systems could constrain managerial behaviour, stakeholder theory gives unfettered power to managers to do almost whatever they want, subject only to constraints by the financial markets, the market for control, and the product markets. Thus, it is not surprising that we find stakeholder theory used to argue for governmental restrictions on financial markets and the market for corporate control. These markets are driven by value maximisation and will limit the damage that can be done by managers who adopt stakeholder theory. Current pressures for restrictions on global trade as well as environmental campaigns illustrate use of the stakeholder argument to restrict product-market competition as well.

6.3. *Implications for the power of special interests*

In addition, stakeholder theory plays into the hands of special interests who wish to use the resources of firms for their own ends. With the widespread failure of centrally planned socialist and communist economies, those who wish to use non-market forces to reallocate wealth find great solace in the playing field that stakeholder theory opens to them. Stakeholder theory gives them the appearance of legitimate political access to the sources of decision making power in organisations, and it deprives those organisations of a principled basis for rejecting those claims. The result is to undermine the foundations that have enabled markets and capitalism to generate wealth and high standards of living worldwide.

If widely adopted, stakeholder theory will reduce social welfare even as its advocates claim to increase it—just as in the failed communist and socialist experiments of the last century. And, as I pointed out earlier, stakeholder theorists will often have the active support of managers who wish to throw off the constraints on their power provided by the value-seeking criterion and its enforcement by capital markets, the market for corporate control, and product markets.¹¹ Indeed we have seen and will continue to see more political action limiting the power of these markets to constrain managers. And such actors will continue using the arguments of stakeholder theory to legitimise their positions. Exposing the logical fallacy of these arguments will reduce their effectiveness. But there is something deeper in the evolution of the human psyche that drives the attraction to stakeholder theory.

7. **Conflicts between family and markets and their role in stakeholder theory**

Stakeholder theory taps into the deep emotional commitment of most individuals to the family and tribe. For tens of thousands of years those of our ancestors who had little respect for or loyalty to the family, band, or tribe probably did not survive. In the last few hundred years of humanity's existence however, we have experienced the emergence of a market exchange system of prices and the private property rights on which they are based. This system for voluntary and decentralised coordination of human action has brought huge increases in the welfare of humans and in their freedom of action.

As Frederick Hayek points out, however, we are generally unaware of the functioning of these market systems because no single mind invented or designed them—and because they work in very complicated and subtle ways.

We are led—for example, by the pricing system in market exchange—to do things by circumstances of which we are largely unaware and which produce results that we do not intend. In our economic activities we do not know the

¹¹ Such stakeholder arguments for example, played an important role in persuading the US courts and legislatures to limit hostile takeovers through legalisation of poison pills and state control shareholder acts.

needs which we satisfy nor the sources of the things which we get. Almost all of us serve people whom we do not know, and even of whose existence we are ignorant; and we in turn constantly live on the services of other people of whom we know nothing. All this is possible because we stand in a great framework of institutions and traditions—economic, legal, moral—into which we fit ourselves by obeying certain rules of conduct that we never made, and which we have never understood in the sense in which we understand how the things that we manufacture function. (Hayek, 1988, p. 14)

Moreover, these systems operate in ways that limit the options of the small group or family, and these constraints are not well understood or instinctively welcomed by individuals. Many people are drawn to stakeholder theory through their evolutionary attachment to the small group and the family. As Hayek puts it:

Constraints on the practices of the small group, it must be emphasised and repeated, are *hated*. For, as we shall see, the individual following them, even though he depends on them for life, does not and usually cannot understand how they function or how they benefit him. He knows so many objects that seem desirable but for which he is not permitted to grasp, and he cannot see how other beneficial features of his environment depend on the discipline to which he is forced to submit—a discipline forbidding him to reach out for these same appealing objects. Disliking these constraints so much, we hardly can be said to have selected them; rather, these constraints selected us: they enabled us to survive. (Hayek, 1988, pp. 13, 14, italics in original).

Thus we have a system in which human beings must simultaneously exist in two orders, what Hayek calls the micro-cosmos and that of the macro-cosmos.

Moreover, the structures of the extended order are made up not only of individuals but also of many, often overlapping, suborders within which old instinctual responses, such as solidarity and altruism, continue to retain some importance by assisting voluntary collaboration, even though they are incapable, by themselves, of creating a basis for the more extended order. Part of our present difficulty is that we must constantly adjust our lives, our thoughts and our emotions, in order to live simultaneously within different kinds of orders according to different rules. If we were to apply the unmodified, uncurbed rules of the micro-cosmos (i.e., of the small band or troop, or of, say, our families) to the macro-cosmos (our wider civilisation), as our instincts and sentimental yearnings often make us wish to do, we would destroy it. Yet if we were always to apply the rules of the extended order to our more intimate groupings, *we would crush them*. So we must learn to live in two sorts of worlds at once. To apply the name 'society' to both, or even to either, is hardly of any use, and can be most misleading. (Hayek, 1988, p. 18, italics in original).

Stakeholder theory taps into this confusion and antagonism and relaxes constraints on the small group in ways that are damaging to society as a whole and (in the long run) to the small group. Such deeply rooted and generally unrecognised conflict

between allegiances to family and tribe and what is good for society as whole has a major impact on our evolution. And in this case, the conflict does not operate for the good.¹²

8. Enlightened value maximisation and enlightened stakeholder theory

There is a way out of the conflict between value maximising and stakeholder theory for those interested in improving management, organisational governance, and performance. It lies in melding together what I call enlightened value maximisation and enlightened stakeholder theory.

8.1. *Enlightened value maximisation*

Enlightened value maximisation recognises that communication with and motivation of an organisation's managers, employees, and partners is extremely difficult. What this means in practice is that if we tell all participants in an organisation that its sole purpose is to maximise value, we would not get maximum value for the organisation. Value maximisation is not a vision or a strategy or even a purpose, it is the scorecard for the organisation. We must give people enough structure to understand what maximising value means so that they can be guided by it and therefore have a chance to actually achieve it. They must be turned on by the vision or the strategy in the sense that it taps into some desire deep in the passions of human beings—for example a desire to build the world's best automobile or to create a movie or play that will affect humans for centuries. All these can be consistent with value maximisation.

There is a serious semantic issue here. Value maximising tells the participants in an organisation how they will assess their success in achieving a vision or in implementing a strategy. But value maximising says nothing about how to create a superior vision or strategy. And value maximising says nothing to employees or managers about how to find or establish initiatives or ventures that create value. It only tells us how we will measure success in the activity.

Defining what it means to score a goal in football or soccer, for example, tells the players nothing about how to win the game. It just tells them how the score will be kept. That is the role of value maximisation in organisational life. It doesn't tell us how to have a great defence or offence, or what kind of plays to create or practice, or

¹² It is useful here to briefly summarise the positive arguments (those refutable by empirical date) and normative arguments (those propositions that say what should be rather than what is in the world) I have made thus far. I have argued that firms that follow stakeholder theory as it is generally advocated will do less well in the competition for survival than those who follow a well-defined single-valued objective such as value creation. I have argued positively that if firms follow value creation social welfare will be greater and normatively that this is desirable. I have also argued positively that the self-interests of managers and directors will lead them to prefer stakeholder theory because it increases their power and means they cannot be held accountable for their actions. I have also argued positively that the self-interest of special interest groups who wish to acquire legitimacy in corporate governance circles to enhance their influence over the allocation of corporate resources will advocate the use of stakeholder theory by managers and directors. This leads to the normative conclusion that society will be worse off if they are successful. For a discussion of the role of normative, positive (or instrumental), and descriptive theory in the literature on stakeholder theory (see Donaldson and Preston, 1995).

how much to train and practice, or whom to hire, and so on. All of these critical functions are part of the competitive and organisational strategy of any team or organisation. Adopting value creation as the scorekeeping measure does nothing to relieve us of the responsibility to do all these things and more in order to survive and dominate our sector of the competitive landscape.

This means, for example, that we must give employees and managers a structure that will help them resist the temptation to maximise the short-term financial performance (usually profits, or sometimes even more silly, earnings per share) of the organisation. Such short-term profit maximisation is a sure way to destroy value. This is where enlightened stakeholder theory can play an important role. We can learn from the stakeholder theorists how to lead managers and participants in an organisation to think more generally and creatively about how the organisation's policies treat all important constituencies of the firm. This includes not just financial markets, but employees, customers, suppliers, the community in which the organisation exists, and so on.

Indeed, it is obvious that we cannot maximise the long-term market value of an organisation if we ignore or mistreat any important constituency. We cannot create value without good relations with customers, employees, financial backers, suppliers, regulators, communities, and so on. But having said that, we can now use the value criterion for choosing among those competing interests. I say competing interests because no constituency can be given full satisfaction if the firm is to flourish and survive. Moreover, we can be sure, externalities and monopoly power aside, that using this value criterion will result in making society as well off as it can be.

Resolving externality and monopoly problems is the legitimate domain of the government in its rule-setting function. Those who care about resolving monopoly and externality issues will not succeed if they look to firms to resolve these issues voluntarily. Firms that try to do so either will be eliminated by competitors who choose not to be so civic minded, or will survive only by consuming their economic rents in this manner.

8.2. Enlightened stakeholder theory

Enlightened stakeholder theory is easy to explain. It can take advantage of most that stakeholder theorists offer in the way of processes and audits to measure and evaluate the firm's management of its relations with all important constituencies. Enlightened stakeholder theory adds the simple specification that the objective function of the firm is to maximise total long-term firm market value. In short, changes in total long term market value of the firm is the scorecard by which success is measured.

I say long-term market value to recognise that it is possible for markets not to know the full implications of a firm's policies until they begin to show up in cash flows over time. In such a case the firm must lead the market to understand the full value implications of its policies, then wait for the market to catch up and recognise the real value of its decisions as they become evidenced in market share, employee loyalty, and finally cash flows and risk. Value creation does not mean succumbing to the vagaries of the movements in a firm's value from day to day. The market is inevitably ignorant of many managerial actions and opportunities, at least in the short-run. It is our job as directors, managers, and employees to resist the temptation to conform to the pressures of equity and debt markets when those markets do not have the private competitive information that we possess.

In this way enlightened stakeholder theorists can see that although stockholders are not some special constituency that ranks above all others, long-term stock value is an important determinant (along with the value of debt and other instruments) of total long-term firm value. They would see that value creation gives management a way to assess the tradeoffs that must be made among competing constituencies, and that it allows for principled decision making independent of the personal preferences of managers and directors. Importantly, managers and directors also become accountable for the assets under their control, because the value scorecard provides an objective yardstick against which their performance can be evaluated.

9. Measurability and imperfect knowledge

It is worth noting that none of the above arguments depend on value being easily observable. Nor do they depend on perfect knowledge of the effects on value of decisions regarding any of a firm's constituencies. The world may be complex and difficult to understand. It may leave us in deep uncertainty about the effects of any decisions we may make. It may be governed by complex dynamic systems that are difficult to optimise in the usual sense. But that does not obviate the necessity of making choices (decisions) on a day-to-day basis. And to do this in a purposeful way we must have a scorecard.

The absence of a scorecard makes it easier for people to engage in intense value claiming activities at the expense of value creation. We can take random actions, and we can devise decision rules that depend on superstitions. All of these are unlikely to serve us well in the competition for survival.

We must not confuse optimisation with value creation or value seeking. To create value we need not know exactly where and what maximum value is, but only how to seek it, that is how to institute changes and strategies that cause value to rise. To navigate in such a world in anything close to a purposeful way, we have to have a notion of 'better', and value seeking is such a notion. I know of no other scorecard that will score the game as well as this one. It is not perfect, but that is the nature of the world. We can tell (even if not perfectly) when we are getting better, and when we are getting worse.

If we are to pay any attention to stakeholder theorists, they must offer at least some way to tell when we are 'better' off other than by reference to their own personal values. In the meantime we should use their theory only in the form of enlightened stakeholder theory as I describe above. In this way it is a useful complement to enlightened value maximising (or value seeking or value creating, for those who argue the world is too complex to maximise anything).

10. The 'Balanced Scorecard'

The Balanced Scorecard is the managerial equivalent of stakeholder theory. Like stakeholder theory, the notion of a 'balanced' scorecard appeals to many, but it is similarly flawed. When we use the dozen or two measures on the balanced scorecard to measure the performance of people or units, we put managers in the same situation as managers trying to manage under stakeholder theory. We are asking them to maximise in more than one dimension at a time with no idea of the tradeoffs between the measures. As a result, purposeful decisions cannot be made.

The balanced scorecard arose from a belief by the authors, Kaplan and Norton, that pure financial measures of performance were not sufficient to yield effective management decisions. I agree with this conclusion. They have inadvertently confused this with the unstated conclusion that there should never be a single measure of performance. It is unlikely at lower levels of an organisation that a single pure financial measure of performance will be adequate to properly measure a person's or unit's contribution to a business. In the authors' words:

The Balanced Scorecard complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from an organisation's vision and strategy. The objectives and measures view organisational performance from four perspectives: financial, customer, internal business process, and learning and growth ...

The Balanced Scorecard expands the set of business unit objectives beyond summary financial measures. Corporate executives can now measure how their business units create value for current and future customers and how they must enhance internal capabilities and the investment in people, systems, and procedures necessary to improve future performance. The Balanced Scorecard captures the critical value-creation activities created by skilled, motivated organisational participants. While retaining, via the financial perspective, an interest in short-term performance, the Balanced Scorecard clearly reveals the value drivers for superior long-term financial and competitive performance (Kaplan and Norton, 1996, p. 8).

The measures are *balanced* between the outcome measures—the results of past efforts—and the measures that drive future performance. And the scorecard is *balanced* between objective easily quantified outcome measures and subjective, somewhat judgmental performance drivers of the outcome measures (Kaplan and Norton, 1996, p. 10, emphasis in original).

A good balanced scorecard should have an appropriate mix of outcomes (lagging indicators) and performance drivers (leading indicators) that have been customised to the business unit's strategy (Kaplan and Norton, 1996, p. 150).

Kaplan and Norton (1996, p. 162) contemplate that organisations will have scorecards consisting of a dozen to two dozen measures that are intimately related to the organisation's strategy. I would argue that ultimately for an organisation's strategy to be implemented in a powerful way each person in the organisation must know what he or she has to do differently, how their performance measures will be constructed, and how their rewards and punishments are related to those measures.

Just as in the case of multiple constituencies, or the multiple goals represented in Figure 1, a decision maker cannot make rational choices without some overall single dimensional objective to be maximised. Given a dozen or two dozen measures and no sense of the tradeoffs between them, the typical manager will be unable to behave purposely, and the result will be confusion.

Kaplan and Norton generally do not deal with the critical issue of the weighting of the multiple dimensions represented by the two dozen measures on their scorecards. In effect, without specifying what the tradeoffs are among these two dozen or so different measures there is no 'balance' to their scorecard. They conclude their discussion of the incentive issues in an agnostic way:

Several approaches may be attractive to pursue. In the short term, tying incentive compensation of all senior managers to a balanced set of business unit scorecard

measures will foster commitment to overall organisational goals, rather than suboptimisation within functional departments ... Whether such linkages should be explicit ... or applied judgmentally, ... will likely vary from company to company. More knowledge about the benefits and costs of explicit linkages will undoubtedly continue to be accumulated in the years ahead (Kaplan and Norton, 1996, p. 222).

There are two issues being confounded here. One is performance measurement and the second is how rewards and punishments are linked to the performance measure. The point that the authors' miss is that their system does not provide a scorecard in the traditional sense of the word.

Let me push the sports analogy a little further. A scorecard in any sport yields a single number that determines the winner among all contestants. In most sports the person or team with the highest score wins, (obviously there are those like golf, where the lowest score wins). Very simply a scorecard yields a score, not multiple measures of different dimensions like yards rushing and passing, etc. These latter drivers of performance affect who wins and who loses, but they do not themselves determine the winner.

The Kaplan-Norton system does not yield a score as a scorecard would. Their system is better described, not as a scorecard, but as a dashboard or instrument panel that can tell managers many interesting things about their business. But it does not give a score for the organisation's performance or for any unit's performance.

As a senior manager at a large financial institution that spent considerable time implementing a balanced scorecard system explained to me: 'we never figured out how to use the scorecard to measure performance. We used it to transfer information, a lot of information, from the divisions to the senior management team. At the end of the day, however, your performance depended on your ability to meet your targets for contribution to bottom line profits.'

Thus, because of the lack of a way for managers to think through the difficult task of determining an unambiguous performance measure in the Balanced Scorecard system, the result in this case was a fall-back to the single inadequate financial measure of performance (in this case profits) that Kaplan and Norton properly wished to change.

The lack of a single dimensional means by which an organisation or department or person will score their performance means these units or people cannot make purposeful decisions. They cannot do so because if they do not know the tradeoffs between the multiple measures they cannot know whether they are becoming better off (except in those rare cases when all measures are increasing in some decision). I argue for all the same reasons as in my above analysis of stakeholder theory, that the appropriate measure for the organisation is value creation. But, I hasten to add that as the performance measures are cascaded down through the organisation, value creation is unlikely to be the proper performance measure at all levels.

The proper measure for any unit of the business will be determined by the strategy the company is executing, and the actions that the person or division can take to contribute to the success of the strategy. There are two general ways in principle that this score or objective can be determined, a centralised way, and a decentralised way.

To see this let us distinguish clearly between the measure of performance (single dimensional) for a unit or person, and the drivers that the unit or person can use to affect the performance measure. In the decentralised solution, the organisation

determines the appropriate performance measure for the unit, and it is the person or unit's responsibility to figure out what the performance drivers are, and how they influence performance. The distinction here is the difference between an outcome (the performance measure), and the inputs or decision variables. And those at higher levels in the hierarchy may help the person or unit to understand what the drivers are. But this can only go so far because the specific knowledge regarding the drivers will generally lie not in headquarters, but in the operating unit. Therefore, in the end it is the accountable party who will generally have the relevant specific knowledge and therefore must determine the drivers and their changing relation to results, not headquarters.

In the extreme centralised solution, headquarters will determine the performance measure by giving the functional form to the unit that lists the drivers and describes the weight that each driver receives in the determination of the performance measure. The performance for a period is then determined by calculating the weighted average of the drivers for the period.¹³ This solution transfers the job of learning how to create value at all levels in the organisation to the top managers. If the specific knowledge necessary to understand the details of the relation between changes in each driver and changes in the performance measure lies higher in the hierarchy, this can make sense. But I believe this will generally be an unusual situation.

In summary, the Kaplan-Norton framework is a specification tool to help managers understand what creates value in their business. This is useful because one of the biggest problems in firms arises from the fact that managers often do not understand what creates value in their business. I enthusiastically endorse their exhortation for managers to do the hard work necessary to understand what creates value in their organisation. As they put it:

Thus, a properly constructed Balanced Scorecard should tell the story of the business unit's strategy. It should identify and make explicit the sequence of hypotheses about the cause-and-effect relationships between outcome measures and the performance drivers of those outcomes. Every measure selected for a Balanced Scorecard should be an element in a chain of cause-and-effect relationships that communicates the meaning of the business unit's strategy to the organisation.

But managers are almost inevitably led to try to use the multiple measures of the Kaplan-Norton scorecard as a performance measurement system. And as I've explained above, as a performance measurement system it is highly counterproductive; it will generally lead to confusion, conflict, inefficiency and lack of focus. This is bound to happen as managers guess at what the tradeoffs might be between each of the dimensions of performance, and this leads to conflict with their managers who inevitably will have different tradeoffs. This conflict leads to disappointments, and confusion about what to do. Moreover, there is no logical or principled resolution of the resulting conflicts unless all the parties come to agreement about what they are trying to accomplish—and this means specifying how the score is calculated—in effect figuring out how the balance in the Balanced Scorecard is actually attained.

Indeed, the Towers Perrin (1996) survey of scorecard implementation found that 70% of companies using a scorecard also used it for compensation and an additional

¹³ And of course I do not mean to imply that the functional relationship between the value drivers and the performance measure will always be a simple weighted average. Indeed, in general it will be more complicated than this.

17% were considering doing so. They also found that 40% of the respondents believed that the large number of measures weakened the impact of the measurement system. In their empirical test of the effects of the balanced scorecard implementation in a global financial services firm, Ittner *et al.* (1997) conclude that the first issue their study raises for future research is ‘... defining precisely what “balance” is and the mechanisms through which “balance” promotes performance’. This question cannot be answered because ‘balance’ is a term used (inadvertently I’m sure) by Kaplan and Norton to substitute for careful analysis of one of the difficult parts of the performance measurement system. They and others have been seduced by this hurrah word (who can argue for unbalanced?) into avoiding careful thought on the issues. The sooner we get rid of the word balance in these discussions, the better we will be able to sort out the solutions. Balance cannot ever substitute for having to deal with the difficult issues associated with specifying the tradeoffs among multiple goods and bads that determine the overall score for an organisation’s success. We must do this to stand a chance of actually creating an organisational scoreboard that gives a score—which is something every good scoreboard must do.

11. Discussion

The first version of this paper was given at the conference on Breaking the Code of Change sponsored by the Harvard Business School in August of 1998. Peter Senge was the discussant of this paper and his comments entitled ‘The puzzles and paradoxes of how living companies create wealth: why single-valued objective functions are not quite enough’, (Senge, 2000) appear with an earlier version of this paper in the conference volume (Beer and Nohria, 2000). Senge makes many points in his comments, and I agree with virtually all of them, including the one in the title of his paper. Yes, a single-valued objective function is ‘not quite enough’ to insure the success of any organisation. Since Senge raises many issues that people commonly have in reaction to the concept of value maximisation, it is useful to summarise and discuss them here.

Senge classifies his concerns as ‘instrumental’ (the operationalising of value maximisation) and ‘objective’ (the aim itself). He discusses at length what it means to ‘optimise’, and I agree with virtually all of what he has to say on this topic—except the notion that these difficulties mitigate the importance of having a single-dimensional scorecard for evaluating whether we are doing better or worse. I say ‘scorecard’ here because I think some of the difficulty is caused by the term ‘single-valued objective function’ and by the implication that something is being optimised in a classical sense. It matters not whether a perfect model can predict in a complicated dynamic setting. We still have to have a definition of ‘better’ in order to behave purposely.

Indeed, Senge emphasises the importance of learning, and I agree with this emphasis. But learning cannot occur if we do not, as he says, ‘understand the longer-term consequences of alternative policies’. But doing so means we must understand what better is. Learning is important; indeed value-seeking behaviour requires learning.

I also agree with his observation that people commonly want to take actions prompted by their intuition that will move them in the opposite direction of their real desires. But again, this is a problem of learning, not of the scorecard we use to determine whether people are moving in the right or wrong direction. Indeed, the

absence of such a scorecard combines with people's defensive behaviours to inhibit learning about the counterproductive effects of their actions.

Senge raises concerns about the tendency of human beings to resort to short-term value-destroying actions in the name of value creation. I share these concerns. I would point out that the absence of a clear-cut value scorecard facilitates this behaviour. This again is a learning problem: how do people learn when they have incorrect causal theories about the relation between actions and results. Senge's example of the insurance company managers and their mistaken belief about the relation between litigation costs, profits and value describes an all-too-common situation. Those managers were engaged in value-destroying activities and did not want to learn otherwise. The absence of clear-cut measures of value destruction are important to the continued survival of such fallacious theories.

I recall years ago a meeting of a board compensation committee on which I served. We were about to award the management of the company large bonuses for the 'tremendous job' they had done in the previous year. I pointed out that the actions of the management had been associated with the destruction of half of the entire company value in the previous year. My fellow directors were stunned. They asked, 'How did you calculate that?' I explained, but the committee, with one abstention, awarded the bonuses anyway. I must say that the discussions about value continued over the years and eventually did have an effect on policy matters at the board level. All this occurred in a company whose managers and board espoused allegiance to value creation, but never calculated or used value to measure their performance.

I share Senge's allegiance to Deming's exhortations to 'eliminate numerical goals for the work force and numerical goals for management'. See Jensen (2001). In most cases these goals have value-destroying effects, yet they survive, and often people argue that they are there to create value. Theories can be wrong, and these are. But that does not invalidate the necessity to have a single-dimensional scorecard.

Senge raises what he calls objective problems with value maximisation. He raises issues associated with the metaphor of a company as a living system rather than as a machine for making money. I like the analogy and would like to take it one step farther. Living organisms in the end have to find, capture and consume enough calories to enable them to survive. They evolve in miraculous ways to do this. They emerge rather than being designed. But the grim reaper of death and extinction is always there to select out those organisms that fail the value-creation test of nature: namely organisms that expend more calories than they reap do not survive.

Companies, management systems, and economic systems are also like organisms, but the survival test often operates with a long time lag. It took 70 years for the misguided communist and socialist experiments of the twentieth century to fail. General Motors has been on the road to extinction since the 1970s, and still it continues. We can do better—and here I disagree with Senge. Having the value-creation score front and centre in every organisation will help, not hinder progress. I have watched the alternative approach in countless companies, and the result is not pretty. ITT, Westinghouse, and many other fine companies are gone because they did not watch the value-creation/destruction score closely enough.

Finally Senge offers reference to 'A road map to natural capitalism' (Lovins *et al.*, 1999), which, he argues, suggests new ideas about capitalism and the redefinition and redesign of the function of corporations. When I read the article, what I see is the authors arguing that corporations are missing opportunities to increase value that are associated with husbanding natural resources. The tagline of the article says it quite

well: 'business strategies built around the radically more productive use of natural resources can solve many environmental problems at a profit' (p. 145). The authors argue that 'some very simple changes to the way we run our businesses, built on advanced techniques for making resources more productive, can yield startling benefits both for today's shareholders and for future generations' (p. 146). They point to ignorance of opportunities by firms, and misguided tax, accounting and regulatory policies as explanations for why value-creating opportunities are being missed by companies on a grand scale.

I find nothing in the Lovins *et al.*, article or in what they advocate that is inconsistent with value-creation and value-seeking. Whether the authors' recommendations for creating value are accurate is another issue, but the authors are not arguing that companies are being misled by the effort to create value. In fact, the authors are arguing that companies must take these opportunities for value creation. In their words: 'the companies that first make the changes we have described will have a competitive edge. Those that don't make that effort won't be a problem because ultimately they won't be around' (p. 158.).

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