

Value Creation, Distribution, and Integrated Financial Reporting

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ABSTRACT

This paper presents a theoretical rationale and framework for expanding or supplementing the current versions of financial reporting in various economies under the label of Integrated Financial Reporting (IFR) for business and non-business organizations. IFR, modeled on the lines of national income accounts (NIA), is distinguished from financial reporting in two key respects: (1) expanding its focus to include resource flows to and from shareholders as well as other participants, and (2) shifting the focus from gross resource flows to net (economic) surplus accruing to each participant or class of participants. The value of the firm to each participant would be the capitalized value of the net resource flows to each participant, and the value of the firm as a whole will be the sum of its value of all participants. Such an integrated system of reporting will furnish better data for corporate, governance, regulatory, and macro-economic decision making.

Key words : Factor income distribution, Extensive value, Surplus.
JEL Codes : D33, L21, M21, M41

1. INTRODUCTION

The development of national income accounting (NIA) was one of the most consequential contributions of economics in the twentieth century. It provided a quantitative basis for making and evaluating a vast variety of economic decisions; however, NIA, like other systems of socio-economic measurement, is far from perfect. Fortunately, its value derives from its systematic provision of admittedly imperfect measures of magnitudes which had heretofore remained unknown. Less than a century later, it is hard to imagine how we—governments, businesses, and even individuals—lived and worked without the information from NIA that we now take for granted.

The NIA framework that transformed our thinking and measurement of the wealth of an economy can also be applied to individual organizations in business, government, and society at large. For example, national income

may be defined (1) as the net total of commodities and services (economic goods) produced by the people comprising a nation; or (2) as the total of such goods received by the nation's individual members in return for their assistance in producing commodities and services; or (3) as the total of goods consumed by these individuals out of the receipts thus earned, or (4) as the net total of desirable events enjoyed by the same individuals in their double capacity as producers and consumers (Simon Kuznets, 1933). Further, "...National income is the end product of a country's economic activity, reflecting the combined play of economic forces and serving to appraise the prevailing economic organization in terms of its returns" (p. 205).

This paper proposes to extend this accounting and measurement perspective to individual organizations [under the label of integrated financial reporting (IFR)] and to outline why its framework, practical development and implementation will yield comparable, if not larger, benefits. In addition, IFR data can be aggregated for extending the coverage of NIA to include important magnitudes that have not yet been captured in the latter.

No system of measurement stands entirely on its own. National income account data intertwine with other sources such as data on population, labour, employment, education, financial, and economic development. Likewise, the data provided by IFR may find its applicability in conjunction with data from other sources.

IFR presents many new and difficult challenges. Deciding on who should prepare the reports calls for considering who has the information, potential for bias, time delays, and errors of measurement (Kendrick, 1968; United Nations, 1993). The preparation of NIA by a centralized government organization is rendered easier by its focus on economy-wide aggregate magnitudes. Data from a variety of sources including surveys can be used to estimate the aggregates, and statistical adjustments made for any identifiable biases. This is not done so easily for individual organizations, since the information about their resource flows and opportunity sets are more difficult to ascertain by similar methods. This initial proposal for developing an integrated financial reporting in individual organizations leaves this important step for future work.

2. THE FIRM

We can think of firms and other organizations as alliances among people embedded in the larger matrices of society and the natural environment. Their value depends on the perspective we choose to look at them. Let us examine the value of the firm from alternative perspectives and compare it to the benchmark concept of shareholder value. Let us also explore the accounting, managerial, and policy implications of these values. Social accounting, that came into vogue over the last quarter of the twentieth century, has been concerned with some but not all of these issues.

Simon (1952) compared the neoclassical economics and organizational views of the firm. Under the organizational or contract-theoretic view, based on Rousseau's social contract and developed by Barnard (1936), Simon (1947), and Cyert and March (1963), a firm is a set of contracts or alliances among agents. Each agent contributes factors of production to the firm, and receives compensation or inducement in the form of cash or other resources in exchange. Each agent chooses to participate in the firm if the value of inducements offered by the firm exceeds the opportunity cost of the resource contributions. All agents are located symmetrically in this simple scheme, labeled O-theory (for organization theory) in Simon (1952).

In neoclassical economic theory (labeled F-theory in Simon), a firm is seen as an instrument of the entrepreneur or owner. In models of perfect or imperfect competition, all agents, other than the owner, are considered passive in the sense that their behaviour can be well represented by their respective functions. The owner, being the only active decision maker, works with production, supply and demand functions to maximize the value of the firm he owns. Value to the owner—the net present value of future benefits flows between the shareholder and the firm discounted at the owner's opportunity cost of capital—is the value of the firm. If the present value is zero, investment in the firm creates no value for the shareholder relative to the next best investment opportunity available to him.

Financial accounting reports as well as some aspects of NIA are directed to, and based on the value to the owner. Many approximations and compromises are made in moving from the economic concept to concrete measurements to produce financial and non-financial data, which we shall return to later. There have been lengthy debates about alternative specifications of the objective(s) of the firm (see Sunder, 2016). Still, shareholder value reigns supreme in theory, data, accounting practice and normative discussions of corporate functioning.

In contrast, contract theory of the firm treats all participating agents symmetrically. Agents contribute factors; the firm uses its production technology to convert them into products and distributes them as inducements to the agents. For example, a simple manufacturing firm with owner, labour, and customer as three agents, collects capital, labour and cash as factors; and distributes dividends, wages, and widgets as products to them.

The standard assumption in micro-economic theory of the firm is that the firm maximizes its profit by choosing its technology, production, and marketing. For a given output, factor costs (other than the cost of equity) are minimized. If the entrepreneur/owner makes all the decisions, cost minimization is, at least, a credible possibility. As decision-making is delegated to a hired manager who has asymmetric access to information and goals of his own, cost minimization does not survive, even as a theoretical possibility. The cost to the entrepreneur is the compensation sought by the manager who makes the decisions. As more levels of management are added to the corporate hierarchy, each with own ego, goals, and asymmetric access

to special information, cost minimization recedes to the background and becomes a remote ideal. In agency theory, this ideal is labeled the first-best solution; and the theoretical impossibility of attaining it gives rise to a new, second-best, benchmark that allows each participant a slice of the surplus or rent (compensation in excess of the participant's opportunity cost) in equilibrium contract with the superior. This excess is the (economic) income of the respective agent.

Sunder (1997a, pp. 65-66; 1997b) emphasizes the income streams—inducements minus contributions—each participant receives from the firm. He attributes the special status of the shareholder income as the income of the firm (and the associated capitalized shareholder value as the value of the firm) to the lowest priority shareholders have as residual claimants to a firm's resources. The residual character imparts special information and contractual properties to the shareholder income which is not shared with the income streams to other participants. Shareholder income carries, for example, information about the continued viability of the firm's contract set; if the income is, and is expected to remain negative, the firm is not viable.

The special nature of income to shareholders need not diminish the significance of income to the other participants. Corporations influence the lives of most people not only because they may own shares, but also because they may be customers, employees, vendors, neighbours, or citizens. These influences take many forms—direct and indirect, immediate and long run, local and global, through priced market transactions and externalities. Tracking these income (or loss) streams from corporations to various agents in society can affect both private as well as public decision-making. Matsumoto's work (2007) on accounting for distribution of wealth in Japanese corporations is a good example.

An intensive effort has been made over recent decades to broaden corporate reporting to include some of these elements under the label of social accounting (see, for example, AAA 1972, 1974; Estes 1972, 1976; Seidler and Seidler 1974 and Zadek and Tuppen, 2000). Let us take an overview of this literature before returning to discuss the value of the firm.

3. SOCIAL ACCOUNTING

Social accounting by business and other organizations is an attempt to measure and report efforts, achievements, and impact along "social" dimensions. Socioeconomic accounting, social responsibility accounting and social audit are used almost synonymously. Energy conservation, minority hiring, environmental preservation, sustainability, and support of community organizations are examples of such dimensions. *Appendix A* outlines a list of dimensions that may be encompassed by social accounting, although rarely all at once. Internet links to many such accounts are easily available. Social accounting reports can be descriptive, and may include financial or non-financial data. They may also include data and analyses of non-priced externalities; justification for social expenditures in terms of

long-term interests of the shareholders¹; development of acceptable and reliable ways of quantifying hard to measure costs and benefits; and for some public organizations, cost-benefit analysis of social interventions and policies.

Interpretation of “social” in social accounting, as illustrated in *Appendix A*, tends to be construed narrowly; it leaves out the production, sale, and distribution of goods and services, and employment. The likely reason is not that these activities have no social impact or relevance. Instead, social accounting tends to focus on non-priced or unrecorded consequences of organizational activities with the presumption that the priced activities are already included in regular financial reports. A better interpretation of social accounting for an organization, it may be argued, should be to produce a comprehensive picture that includes priced as well as non-priced consequences of its existence and operations.

The implementations of social accounting places the responsibility for information production on managers of the firm (see Elliott, 1973). Managers can report only what they know. For many kinds of social consequences, managers have no such informational advantage. Information is inherently dispersed among agents in society; and it is difficult for one to know the preferences, knowledge, opportunity sets and certain actions of others. Social accounts prepared by corporate managers, or any other single party, suffer from this inherent limitation of information accessible to them. When well-functioning markets exist, they bring the dispersed information together, incorporate it into pricing, and make it available to all (Hayek, 1945). Since social accounting covers areas in which markets are weak or nonexistent, such solutions are not available in social accounting.

A second problem of corporate social accounting is that most proposals have taken the perspective of the firm, instead of the members of society at large—the principals. The traditional measure of value in business—value to the shareholder—and accounting directed to that end, have served their limited purpose well because the concept and its implementation take the consistent perspective of a principal. Attempts to broaden the shareholder perspective to a broader set of agents have been spent on the descriptive details of corporate activity, making the social accounting definition unclear and lacking focus. We may do better assessing corporate value creation from the perspective of each relevant class of agents and the sum of these values in IFR.

4. VALUE OF THE FIRM

All participants in a firm receive, or expect to receive, a stream of income—inducements minus contributions—from the firm. Accordingly, the

¹ Note that such justifications, by granting a superior status to the interests of shareholders, undermine the basic rationale for social accounting itself, and are therefore self-defeating.

value of the firm to the owner is but one component of the value of the firm to all its participants. The concept of value in the contract model is the difference between the inducements distributed from the firm to various agents, and the opportunity cost of resources contributed by them to the firm. In other words, the value of the firm is the sum of surplus the firm gives to all agents. Let us explore the properties and implications of this extensive concept of the firm's value in some detail.

Value to Investors

Setting market imperfections aside, the value of a firm to a prospective shareholder is the discounted present value of net cash flows (i.e., the difference between the cash returns from the firm and the cash investments or capital contributions to the firm). The discount rate is the opportunity cost of capital for the investor. If the internal rate of return (IRR) from a prospective investment is equal to the opportunity cost of capital, the value of the investment is zero; if the IRR exceeds the opportunity cost of capital, this value is positive. Presumably, investors would not make the investment when the IRR is lower. Skillful investment consists of finding investment opportunities where IRR is greater than the opportunity cost of capital.

After an investor buys the shares of a firm, the purchase price becomes sunk cost. The value of this investment now is the present value of cash returns from the shares discounted by the opportunity cost of capital. The value of the investment to prospective shareholder(s) is the cash return net of cash investments; the value to an existing shareholder is just the gross cash return, appropriately discounted. Stock prices are determined in the market place through the interaction of demand and supply based on these individual shareholder values.

Much of financial reporting is focused on the gross return from the firm from the investors' point of view—i.e., income and equity to investors. We suggest switching from gross to net return (after subtracting the opportunity cost of contributions) and then applying the same point of view to all participants in the firm. We shall then return to aspects of accounting that address, or could address, those points of view.

The Value of the Firm to Its Customers

The value of a firm to a customer can be calculated in a manner parallel to the value to a prospective investor. The customer "invests" in the firm in the form of research, learning, negotiation, payments and settlement of any disputes. These investments are made in the expectation that the present value of benefits generated from the goods or services received from the firm, discounted at the opportunity cost of the customer's capital, will exceed the opportunity costs of resources invested. Strictly speaking, this reckoning includes not only the transaction on hand, but also the consequences of this transaction for resource flows associated with likely subsequent transactions. A satisfactory transaction, for example, may increase the odds and cut the time to research, learn, and negotiate,

frequency of disputes, and perhaps even the price associated with subsequent transactions. These consequences, lumped together as customer goodwill, are reckoned in the “investment” decision associated with the transaction at hand.

The customer transacts with the firm if the reckoning of resource flows outlined above shows that the benefits of the transaction exceeds the opportunity cost of necessary sacrifices. The present value of this excess is the value of the firm to the customer. This value is also the customer’s share of the surplus generated by the firm. If the customer pays the firm in advance, the value of the firm to the customer increases by the amount of the advance (analogous to the change in the value of the firm to prospective and existing shareholders).

If multiple firms create conditions of perfect competition in the product market, a customer’s opportunity cost of buying from firm A is foregoing an identical product sold by its competitors at identical price. Therefore, the consumer’s share of the surplus from buying from firm A instead of its competitors is zero. An individual firm therefore creates zero value for the customers in a perfectly competitive market, and customer loyalty disappears. To create value for customers, firms differentiate themselves by offering products that their competitors don’t offer.

Yet, a competitive industry as a whole may generate a positive surplus for its customers. In the absence of the industry’s product, the customer may have to buy a less satisfactory substitute, possibly at a higher price. Therefore, the sum of customer value generated by individual firms in an industry is less than or equal to the sum of customer value generated by the industry as a whole. For example, even if all competing airlines offer the same quality of travel at the same fares to their passengers, the airline industry as a whole may generate surplus for its customers if their next best alternatives to flying, say a bus or train or car, may be less convenient or more costly in time and money. A similar argument is applicable to factor markets we discuss next.

The Value of the Firm to Its Vendors

This value is defined analogously to the firm’s value to its customers, except that the vendors’ contributions take the form of goods and services, and they tend to receive cash from the firm. If the market for the factor is competitive, an individual firm generates no value for a vendor who can always sell his resource at the same price elsewhere. Following the argument from the preceding section, buyers of the resource may yet, collectively, create value for the vendors. For example, in the absence of coal-burning power plants, the demand for coal may be negligible, and coal mines may not exist; the coal-burning power plants create value for coal miners by generating demand for their product at prices higher than what they could get for coal elsewhere.

The Value of the Firm to Its Employees

Labour is a factor of production and the value to the employee can be evaluated in a manner outlined for other factors of production. In this reckoning, resources expected by an employee include wages, benefits, satisfaction, relationships, human interaction, and reputation over the employment horizon. The employee's opportunity cost of skills and effort contributed to the firm is subtracted from the value of resources received to arrive at the value of the firm. Again, unless the expectation of this value is non-negative (benefits are not exceeded by the opportunity cost), there is no reason for the employee to take the job. In a perfectly competitive job market, an individual employer generates no surplus for the employee, making him indifferent among competing employers. Perhaps this surplus also should be reckoned on the industry level – for example, surplus value captured by a welder in an automobile industry compared to his income when such industry does not exist.

The Value of the Firm to the Government

Governments at various levels contribute resources to firms, mostly in the form of non-priced public services, such as, health, education, public safety, courts, and laws, etc. They also receive resources from firms in the form of taxation on corporate income, payrolls, property, sales, and vehicles, etc. In addition, governments contribute resources to firms in the form of priced goods and services, such as, highway tolls, passports, and driving or fishing licenses. The value of a firm to the government can be reckoned as the sum of values from priced and non-priced services. Since priced services are mostly private goods, the value to the government of providing such services to a firm can be handled analogously to valuation by other vendors. Valuation of non-priced services, (mostly public goods), is an important challenge we shall discuss in the section on externalities. When a government receives a net contribution from a firm (taxes and fees exceed the opportunity cost of resources spent on providing services to the firm), the firm has a positive value to the government. Indeed, it is this value that provides, when appropriate, the basis for government concessions to locate business in their jurisdictions.²

The Value of the Firm to the Community

Community, like governments, can be considered at different levels—local, national or global. Most exchanges between firms and community take the form of positive and negative externalities—i.e., uncompensated benefits conferred on, and costs imposed on others. Firms may create employment and attract visitors, name recognition, and related businesses to its neighbourhood, as well as add pollution and congestion. They may also contribute directly to civic and charitable organizations. The value of the firm to the community is the net result of all these resource flows. We

² We do not imply that such concessions are always justified. Political exigencies may well prevent such concessions even when they are justified, or create them when they are not.

will return to the difficult problems of estimating externalities in a later section.

Adding Them Up

The value of the firm is the sum of its value to all its participants—the excess of total resources generated and distributed over the opportunity costs of all the resource inputs. Much has already been written about the shareholder value and there is little to be added here. In the measurement section below, we focus our attention on the sum—the total value of the firm, its other components, and their implications for accounting and management.

5. MEASUREMENT OF VALUE

J. M. Clark (1936) points to three fundamental challenges to determining the value of private enterprise.

One is that the problem of the collective efficiency of private enterprise involves quantities and qualities, of which actual market prices are not the only measure, and, I would add, some of which command no market price at all under present conditions, although with changes in law and custom, they might perhaps come to command one. Another is that measures of value which may be less exact than those of the market are also much more fundamental. And a third is that our most fundamental concepts would be independent of institutions of competitive exchange; they should be such as would hold even in a socialistic state (p.44).

Resources flow to and from the firm under a variety of conditions. Some resources, of which equity capital in large publicly traded companies is perhaps the best example, have well organized liquid markets that are closer to perfection than others (see Sunder, 1999a, 1999b, 2000). Price is easy to observe and approximates opportunity cost well. At the other extreme, markets do not exist for clean air and safe streets, raising difficult problems for value measurement. As Clark rightly points out on the following page:

“Or, let us take the statement that the rental value of land tends to equal the excess of the (competitive valuation of the) goods and services produced upon it above the (competitive) expenses of production. This becomes quite indefinite the moment we realize that the net product in question may or may not include robbing the neighbors of their light and air, obstructing the streets, fouling streams, increasing or destroying the beauty of the landscape or the business character of the neighborhood, admitting tenants whose very presence destroys the value of other real estate in the adjoining blocks, etc.” (p. 45).

Let us explore the links between market conditions and measurement of firm value.

Markets and Value of the Firm

If all factors of production and all products were private goods traded in perfect markets, and the counterparties in market were homogeneous (i.e., all customers had the same value for what they bought, and all vendors had the same opportunity costs for all they supplied to the firm), the value of the firm to all its participants, and therefore its total value, would be zero. The prices prevailing in the respective markets are the opportunity costs/values for the marginal agents for their marginal units, and under this assumption all agents are marginal agents and all their units are marginal units. Individual and aggregate surplus could arise from one or more reasons : (1) vendors selling multiple units whose opportunity cost rises with volume or customers buying multiple units whose opportunity value declines with volume; (2) heterogeneity within each class of buyers of products and suppliers of factors which allows sub-marginal buyers and vendors to earn a surplus, and (3) imperfection or absence of some markets.

In a perfect labour market, there is only one wage rate available for the skills an employee has to offer, and this wage is available to him from many different firms. Thus, a perfect market makes sure that the value of the employee's wage is equal to the opportunity cost making the value of the firm to the marginal employee for his marginal unit of labour zero. Similarly, if the market for the product of a firm were perfect, one price for the product would prevail, driving the value of the firm to the marginal customer for his marginal unit to zero. Similar arguments would apply to other agents, including the shareholders.

The existence of value for any agent requires the presence of heterogeneity or imperfection in the respective product or factor markets. Heterogeneity is normal and can be taken for granted because not every customer values a TV set the same and not every vendor has the same cost function.

While perfection is the tendency of competitive markets under classical conditions, it is not the goal of any participants. Agents seek value for themselves by looking in the crevices of market imperfections. Each effort to exploit any imperfections they may discover tends to diminish or eliminate the imperfections in the process of seeking profits. In search of profits, agents not only seek out but also create market imperfections.

Even in otherwise perfect markets, agents specialize to create little local monopolies of their own, and seek to exploit them in bargaining with others. A special skill, special knowledge, special product, special service, patent, are all ways to create and exploit such monopolies. The creation of each monopoly makes the market a little less perfect, opening a gap between the sale price and opportunity cost of the resource. This gap is the value. Agent's exploitation of the value created through specialization begins to close the gap and diminishes the value for the future. To stay ahead, the agent must continually and dynamically seek other ways of distinguishing the resource he/she has to offer to create new values, exhausting it in the

process of capturing it. In this sense, creating value is more like a treadmill than a ski lift.

Of course, markets are hardly perfect. Even without conscious and explicit efforts to specialize and create value, various kinds of transaction costs create gaps in which value exists. For example, my existing job retains its value for me because it is costly for me to find another job that compensates me at the level I believe my skills deserve. I am paid my current compensation because it is costly for my employer to find a worker with even better skills to do the job. The cost of a job search lowers the employee's opportunity cost of keeping the present job; the costs of search, recruitment, and training make it cheaper for my employer to retain my services than to find a replacement.

Values rise as markets become less perfect. In more perfect markets, valuation is easier but values are smaller. In extreme cases, markets disappear altogether, providing no assistance in valuation, as Clark (1937) suggested in the quote given earlier.

Externalities in Value of the Firm

Difficult problems of measurement arise when goods and services are not priced even in relatively imperfect markets. With zero marginal cost and the impossibility of excluding non-payers from their benefits, pure public goods are inherently incapable of supporting a price. Most organizations produce and consume some public goods. Building an auto assembly plant in a rural area improves skills, employment, retail stores, property values, roads, entertainment and public schools. They are externalities to the extent there is no direct way for the firm to extract a price from individuals who benefit from these public goods. The extensive concept value of the firm in IFR includes the value of these benefits bestowed on individuals or the community.

Pollution and congestion are examples of negative externalities a firm may impose on others without compensating them. This imposition is counted negatively in valuing the firm from the point of view of uncompensated parties. The National Accountants Association's social performance measures included in *Appendix A* list both positive and negative externalities.

The Difficulties of Valuing Externalities

Absent transaction prices, externalities necessitate alternative methods for valuation. As an example, consider complementary rides provided by a firm to transport employees between nearby subway stations and the factory. The cost of the service to the firm, say X , is easily measured by the accounting system, and treated as an expense in calculating net income to the shareholders. If we stop here, the extensive income of the firm to all agents is understated because net income to shareholders ignores some of the benefits of the service to agents other than shareholders. A part of benefits of the service flows back to the shareholders in the form of lowered

costs of employee parking, absenteeism, fatigue, etc. This benefit, say Y_1 , to the shareholders is included in net income through lowered labour costs and higher productivity.

A second part of the benefit accrues to the employees in the form of avoided cost of alternative transportation, saving in commuting time, fatigue, etc. These benefits, say Y_2 , must be added to other components of compensation in calculating their income stream from employment. The saving in the cost of alternative transportation can be estimated reasonably well in terms of money if there is a market for such services. Savings in time, fatigue, etc., vary across people, make it difficult for the firm to approximate reasonable estimates. The benefits of less fatigue may be subjective, difficult to estimate quantitatively and even more difficult to state in terms of money. In any case, there is little chance that the firm can come up with a better estimate of Y_2 than the employees who use the transportation service. Whether such estimates can be reliably solicited from the employees as inputs to IFR is an implementation challenge.

A third part of the benefit of the transportation service accrues to fellow commuters by train (lowering the cost of mass transportation through higher utilization), commuters by road (less rush hour traffic), transport companies (additional customers), local government (less spending on roads and parking), and fellow citizens (less pollution). One could take this argument further and identify progressively to diffuse second and third order consequences of the complementary transportation service.

Perhaps it is best to group these agents together into a "community" and estimate its value to the firm by identifying various positive and negative externalities in a lump sum. Tools of social cost-benefit analysis are widely employed for this purpose (e.g., Pearce et al., 2006), though rarely in social accounting reports produced by corporations. Being based on judgments and assumptions, estimates can be quite sensitive to the interests of the party who prepares them. Cost-benefit analyses produced to support or oppose public expenditures on stadiums for sports teams are a good example of this perennial problem.

What is the appropriate discount rate for valuing the net cost-benefit stream to the community? The social discount rates, lower than private discount rates, is used for this purpose. Voluminous literature already exists on the topic (see Caplin and Leahy, 2000).

6. IFR FOR ASSESSING POLICY : MERGERS, ACQUISITIONS AND CORPORATE VALUE

Consider the debates surrounding the consequences of corporate mergers and acquisitions. There have been numerous studies (see Ruback, 1983; also literature reviews by Jensen and Ruback, 1983, and Jarrell, Brickley and Netter, 1988) of the effect of mergers and acquisitions on shareholder value. On balance, findings of stock market event studies,

predicated on the assumption of stock market efficiency, report that, on average, there is a transfer of wealth from the acquiring firm shareholders to the shareholders of the acquired firms; and there is a small gain, at most, in shareholder value overall. Scherer (1988) on the other hand concludes that, while some mergers may increase shareholder value and others decrease it, on the whole the effect of mergers on shareholder value is about even.

An interesting feature of these debates, especially those oriented to public policy, is that they are focused on the consequences of mergers and acquisitions for shareholder value; only occasionally including the value to the holders of debt securities and taxes to the government (see Dhaliwal and Sunder, 1988). The effects of these mergers on labour are rarely examined (see Brown and Medoff, 1987 and Shleifer and Summers, 1987 for two exceptions) and the effects on other classes of agents are generally ignored.

One way of making sense of this state of affairs is to assume that the debaters assume the standard neoclassical firm perspective in which all factors of production except the equity capital earn their opportunity costs from the firm, and get no share in the surplus generated by the firm. The economic profit accruing to the suppliers of all these other factors of production being zero, the value of the firm for them is also zero; both before as well as after the merger or acquisition. Under this perspective, changes in the value of the firm are confined to the shareholder value; therefore, it makes sense to carry on the debate on consequences of mergers on the basis of empirical evidence on shareholder value alone.

But this explanation runs into a difficulty. As we discussed in earlier sections of the paper, agents who transact with the firm through relatively perfect markets for factors or products should expect to get close to their opportunity cost—the price that is well-defined in these markets—and nothing more or less. In the U.S., markets for equity capital are frequently cited to be efficient, at least more efficient than others. If a firm generates a surplus (value of output in excess of the sum of opportunity costs of factors of production), holders of equity capital are least likely to capture any significant piece of that pie. Most of the surplus ends up with the agents who transact with the firm through less perfect markets.

Shareholders have the only open-ended contract in the firm; all others are negotiated periodically. Labour, customers and vendors have frequent opportunities to renegotiate the terms of their transactions with the firm, and try to capture a share of the surplus whenever possible. Given the short-term nature of their contracts, they have an option value that the shareholders, tied into long-term contract as a group, lack. Agents with short-term contracts can quit when confronted with having to absorb a negative surplus. Employees with unvested pension benefits and shareholders do not have this option.

An assessment of the consequences of mergers and acquisitions

require an analysis of not only the shareholder values, but also of values accruing to other participating agents as suggested in this IFR proposal. Being tied into an indefinite term contract and the imperfections of corporate governance, shareholders may not be able to capture all or even most of the ex-post benefits of value-enhancing mergers and acquisitions; these benefits leak out to corporate managers through holes in corporate governance, and to other agents through periodic negotiations under uncertainty and market imperfections. Yet, the shareholders are left holding the bag when a merger turns out to be value depleting. Corporate executives, labor, customers, vendors and the community may capture significant shares in value enhancements from mergers, and bear only a smaller fraction of value depletions. Perhaps we cannot know for sure without careful empirical analysis of the extensive value of the firm and implementing IFR.

7. CONCLUDING REMARKS

This paper presents a theoretical rationale and framework for expanding or supplementing the current version of financial reporting systems in various economies under the label of Integrated Financial Reporting for business and non-business organizations. IFR, modeled on the lines of national income accounts (NIA), is distinguished from financial reporting in two key respects : (1) expanding its focus to include resource flows to and from shareholders as well as other participants, and (2) shifting the focus from gross resource flows to net (economic) surplus accruing to each participant or class of participants. The value of the firm to each participant would be the capitalized value of the net resource flows to each participant, and the value of the firm as a whole will be the sum of its value of all participants.

Such an integrated system of reporting will furnish better data for corporate, governance, regulatory, and macro-economic decision making. Since the value of organizations to participants other than shareholders is not a part of the current system of reporting, many corporate and policy decisions are less efficient since they are based on unnecessarily incomplete information. The development of NIA during the first half of the twentieth century helped make a quantum jump in macro-economic management. Similar gains can be expected from IFR in corporate, regulatory as well as macro-economic domains.

Much remains to be done beyond the theoretical framework outlined here. Expansion for the reporting perspective to a broader class of resource flows, including externalities, presents many challenges of measurement and estimation. National income accounting deals with similar difficult challenges, and the development of IFR should not be hindered by letting the pursuit of perfection become the enemy of good.

APPENDIX A

**Excerpted from the Report of National Association of Accountants
Committee on Accounting for Corporate Social Performance****IV. Major Areas of Social Performance***A. Community Involvement*

- a. General philanthropy—Corporate support of educational institutions, cultural activities, recreational programs, health and community welfare agencies and similar eleemosynary organizations
- b. Public and private transportation—Alleviating or preventing urban transportation problems, including the provision of mass transportation of employees
- c. Health services—Providing health care facilities and services and the support of programs to reduce disease and illness
- d. Housing—Improving the standard of dwellings, the construction of needed dwellings and the financing of housing renovation and construction
- e. Aid in personal and business problems—Alleviation of problems related to the physically handicapped, child-care, minority businesses, disadvantaged persons, etc.
- f. Community planning and improvement—Programs of urban planning and renewal, crime prevention, etc.
- g. Volunteer activities—Encouraging and providing time for employees to be active as volunteers in community activities
- h. Specialized food programs—The provision of meals to meet the dietary needs of the aged, the infirm, the disadvantaged children, and other groups
- i. Education—The development and implementation of educational programs to supplement those of the public and private schools such as work study programs; and employee service on school boards, school authorities and college university trustee and advisory boards

B. Human Resources

- a. Employment practices—Providing equal job opportunities for all persons, creation of summer job opportunities for students, and recruiting in depressed areas
- b. Training programs—Providing programs for all employees to increase their skills, earning potential and job satisfaction
- c. Promotion policies—Recognizing the abilities of all employees and providing equal opportunities for promotion
- d. Employment continuity—Scheduling production so as to minimize lay-offs and recalls, maintaining facilities in efficient operating condition so that they would not have to be abandoned because of deterioration and exploring all feasible alternatives to closing a facility

- e. Remuneration—Maintaining a level of total salaries and wages plus benefits which is in line with others, in either the industry or community
- f. Working conditions—Providing a safe, healthful and pleasant working environment
- g. Drugs and alcohol—Providing education and counseling for employees to prevent or alleviate problems in these and similar areas
- h. Job enrichment—Providing the most meaningful work experiences practical for all employees
- i. Communications—Establishing and maintaining two-way communication between all levels of employees to secure suggestions, to provide information as to what the company is actually doing and how each department's activities relate to the total corporate activity, and to inform employees' families and friends of corporate activities

C. *Physical Resources and Environmental Contributions*

- a. Air—Timely meeting of the law and going beyond the law in avoiding the creation of, alleviating, or eliminating pollutants in these areas
- b. Water—Timely meeting of the law and going beyond the law in avoiding the creation of, alleviating, or eliminating pollutants in these areas
- c. Sound—Timely meeting of the law and going beyond the law in avoiding the creation of, alleviating, or eliminating pollutants in these areas
- d. Solid waste—Disposal of solid waste in such a manner as to minimize contamination, reduce its bulk, etc., and the design of processes and products which will minimize the creation of solid waste
- e. Use of scarce resources—The conservation of existing energy sources, the development of new energy sources, and the conservation of scarce materials
- f. Aesthetics—The design and location of facilities in conformance with surroundings and with pleasing architecture and landscaping

D. *Product or Service Contributions*

- a. Completeness and clarity of labeling, packaging, and marketing representation—Assurance that labeling and representation as to methods of use, limitations on use, hazards of use, shelf-life, quantity of contents, and quality *cannot be misunderstood*
- b. Warranty provisions—Adherence to all stated and implied warranties of a product with implementation through timely recalls, repairs or replacements
- c. Responsiveness to consumer complaints—prompt and complete responses to all complaints received
- d. Consumer education—Literature and media programs to keep consumers informed of product and service characteristics, methods and areas of use of products, and of planned product changes and discontinuances

- e. Product quality—Assurance through adequate control—“quality assurance”—that quality is at least equal to what customers may reasonably expect on the basis of company representations
- f. Product safety—Design or formulation and packaging of products to minimize possibilities of harm or injury in product use
- g. Content and frequency of advertising—Giving full consideration to the omission of any media material which may be adverse or offensive; and the avoidance of repetition to the extent that it becomes repugnant
- h. Constructive research—Orienting technical and marketing research to meet defined social needs and to avoid creating social and environmental problems or to minimize such problems: e.g., energy consumption

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